The Immediate Impact of COVID 19 on Students during Enforced Distance Learning

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Abstract

The purpose of this study was to examine the reported perceptions of the COVID-19 pandemic on students during enforced distance learning. An author developed 33-question survey was sent via email to all students attending a four-year college during the fifth week of enforced distance learning. 1167 students completed the survey. Seven hundred and thirty seven students (64%) reported the pandemic had negatively impacted their learning, and many shared they experienced heightened anxiety and depression. One third of students reported not liking online courses. Issues with online courses included: technical issues, lack of interaction with faculty and classmates, not enough time to complete assignments, and distractions within the home. Students' educational experiences were highly disrupted by the COVID 19 pandemic. While it is impossible to replicate the in-class experience through online teaching, we owe it to our students to rethink online teaching across programs so that we, as educators, are better prepared to deliver quality education in a variety of formats. However, one positive aspect of the situation reflected in the qualitative responses was the appreciation of increased time to spend with family and more time for self-care and domestic responsibilities (e.g., exercise, home cooking etc.)

Keywords: 1: Covid; 2: pandemic; 3: learning style; s 4: mental health; 5: stress.

The recent COVID 19 pandemic has produced an historic situation where, in the period of one week students (and faculty) were forced into a distance-learning environment. This unusual situation raised a great deal of discussion among educators regarding the impact this dramatic change would have on the students learning experience. The data presented in this study came from a survey designed to elicit students' immediate responses to the situation, the impact on their lives, and their perceptions of distance learning. Given that the situation affected the students' academic and home lives, it is of particular interest to those who teach and research in the area of human development and social dynamics. The Family and Consumer Sciences program at our own institution is designated an online degree by our state's Board of Regents because all courses in the program have an online class option. Our own FCS program focuses on human development and family systems and child life education so we were specifically interested in two aspects of the survey, the responses relating to preferences and challenges of distance learning, and the responses relating to how the COVID 19 situation had affected students' lives generally. As FCS classes are a popular elective option with students from many other degree programs we were not just interested in our own students responses, we felt it important to collect data from students in a variety of degree programs.

Student opinion of distance learning

Research has shown that one of the negative aspects of distance learning reported by students is a lack of meaningful interaction with their professors (Croxton, 2014; Hannay & Newvine, 2006; Jaggers, 2014).

The importance of an interactive component in distance learning has been noted in the literature for over two decades (Billings, Connors, &Skiba, 2001; Boyle & Wambach, 2001; King & Doerfert, 2000; Meyen & Lian, 1997; Moore & Kearsley, 1996; Muirhead, 2001a, 2001b; Tuovinen, 2000). However, Thurmond and Wambach (2004) noted that while interaction in an online class is obviously different to a traditional classroom setting, defining what is meant by interaction can be problematic when reviewing the literature.

Thurmond and Wambach (2004) provide a detailed discussion of the issues surrounding the term interaction that have arisen in the literature on distance learning. Their own definition suggests the term interaction encompasses several factors including "…the learner's engagement with the course content, other learners, the instructor, and the technological medium used in the course" (Thurmond & Wambach, 2004, pg.10). Although an online environment often lacks traditional face-to-face interaction, in the past five years most institutions have gained access to a Learning Management System (LMS) that provides the ability to hold virtual classrooms or video conferencing. Thus, distance learning in 2020 has the capability for more interactive content. However, despite research clearly showing the importance of interaction it is notable that some studies (e.g., Restauri, 2001) concluded that it is not so much the face-to-face factor that is important, rather that the students' interactional needs are more dependent on the frequency and personalization of the contact they receive. Stocks and Freddolino (1998) showed that the quality of communication between student and instructor is a strong predictor of higher grades, while other research suggests that timely feedback and regular (personalized) contact is important (Berge, 2002; Billings et al., 2001; Boyle & Wambach, 2001; Sciuto, 2002).

The research supports the notion that a high level of social presence in an online course is paramount to a successful online learning environment. Often the absence of visual cues and real time interaction may lead to students feeling isolated and cut off from both their peers and the instructor (Atack & Rank, 2002; Billings et al., 2001). However, as Shin (2002) noted social presence can extend beyond the boundaries of a traditional classroom. For example, Schoenfield-Tacher, McConnell, and Graham (2001) found evidence to suggest that class lecture settings could equally lack social presence if the instructor simply delivered a lecture with no discussion or in-class activity. Their results also suggested that if an online course included a high level of activities such as chat sessions and group projects the students' levels of interaction might be higher than in a traditional face-to-face class. What is apparent from the literature is that high levels of social presence, personal interaction, timely feedback, and contact with an instructor appear to lead to both student satisfaction and perhaps higher assessment outcomes.

Palvia et al. (2018) suggested that online education will become main stream by 2025. However, they also note that educators face many challenges in providing quality, distance education programs that meet students' needs. Distance learning, particularly true online courses where students can work at their own pace is one of the driving factors making distance education an inevitable part of the future of higher education. Students often cite flexibility, lower cost, reducing the need to commute, and home life (child-care or other domestic responsibilities) as major reasons for preferring distance education (Palvia et al., 2018). The COVID 19 situation has given us a unique opportunity to examine the immediate impact on our students' live, consider some of the challenges of distance learning, and more importantly begin to explore the dynamics of how work, family and social systems affect education choices. This paper focuses on how students reported: (1) the positive features associated with distance learning (2) the negative features associated with distance learning, (3) any changes in anxiety levels, and (4) the impacts of the COVID 19 situation on the participants' social and family lives.

Method

The Survey

The survey was designed to collect a basic 'snapshot' view of the situation at a particular point in time, rather than collect retrospective accounts post-lockdown. Therefore, rather like a political or market survey, it was a means to assess what the most pressing problems were during this situation. We were not creating an instrument that would be used in future research projects nor was the survey designed to collect data that would be used for extensive statistical or predictive analysis. Rather, as stated above we intended to collect the students' first impressions of distance learning in a pandemic situation, and the impact it had on their lives generally.

We developed a 33- question survey (23 multiple choice, 6 using a Likert scale, and 4 open-ended) to assess students' experiences throughout the COVID-19 pandemic in relation to their education and interaction with faculty. A large number of the questions (15) related to demographic details. Obtaining background information was important when analyzing the responses because this goal of the survey was to assess which students were struggling, and whether particular groups of students were disadvantaged.

In a needs based assessment it is important to know the characteristics of the respondents; whether for example, they had work and/or family obligations that might influence their responses, or whether their sociocultural background might influence their response to the situation. The survey was pilot tested for clarity before distribution, and received approval by the Southeastern Louisiana University Institutional Review Board. In the instructions to the students the survey was described as a "needs assessment" on behalf of the university to elicit challenges the students were facing.

Participants

Of the participants 985 (85.4%) were between the ages of 18 and 25; 106 (9.2%) were between the ages of 26-34; and 29 (2.5%) were older than 35 years of age. The majority of participants were female (n= 919; 77.6%) and were of Caucasian decent (n= 862, 74.7%). With the exception of gender, the demographic of the participants was representative of the university's general population.

Demographic characteristics of the study's participants included gender, age, ethnicity, and major.The majority of participants were female (n= 919; 77.6%) and were of Caucasian decent (n= 862, 74.7%). There were a variety of majors represented (n= 31). The top three majors were Kinesiology and Health Studies (n= 146, 12.7%); Teaching and Learning (n=129, 11.2%); and Accounting and Finance (n=106, 9.2%). Most of the participants do not live on campus (n= 883, 76.5%), and the majority of those participants live at least 20 miles from campus (n = 547, 47.4%). Prior to the pandemic, most students reported having a paid job (n = 897, 77.7%), however, since the pandemic, 693 students reported that they were no longer able to work (n = 693, 60%). When asked about having children at home, 135 students said they do have at least one child at home, and 137 students said they were responsible for "homeschooling" at least one child during this time. (Table 1).

Procedures

Faculty and administrators emailed the online survey to 14,260 university students. The survey was open for a 2- week period, at the end of which 1158 responses had been submitted and the survey link was closed. The decision was, as noted above because we were interested in how the students would respond while they were experiencing the lockdown conditions. The survey was emailed to students via the university's online learning platform, Moodle. Students received at least one reminder email asking for their participation before the data collection period closed. After the close of the study period, data was coded and entered into SPSS for analysis.

Results

Learning experiences during COVID 19

When asked about experience with online learning, most students had completed an online course in previous semesters (n = 805, 69.8%). A third of students reported not liking online courses (n =339, 29.4 %), while 815 students (70%) reported either liking online courses, or preferring online courses only in certain situations (i.e. theory based courses, experienced faculty in online teaching). During the pandemic, most students had not participated in synchronous courses (n= 916, 79%), but reported having interactions with their instructor (n =1149; 99%) and interactions with their classmates (n=947, 99%). Very few students shared they had not had any interaction with their instructors or classmates (n=5, .4%). Students tend to prefer face- to face classes over online courses (n=943; 81%), and 758 students reported experiencing some technological problems during the pandemic (66%). The majority of technological issues identified were lack of computer, outdated computer with no camera, and spotty or no WIFI access. (Table 2).

Regarding anxiety related to online courses and grades, 750 students reported little or mild anxiety, 221 reported moderate anxiety, and 182 reported high levels of anxiety. On a scale of 1-5 (1= has affected me negatively and 5= has not affected me at all), 737 students (64%) reported a 1 or 2. Types of problems related to learning experiences with online courses included: lack of self-motivation (n=844), lack of instruction or guidance (n= 696), too much busy work (n= 661), not enough time to complete assignments (n= 560), and lack of timely feedback (n=454). Positive aspects of online learning included: flexibility and pacing (n=375), no commuting/parking (n=83), and easier/ less stressful (n= 103). (Table 3)

Although, we do not intend to fully discuss the qualitative data here, it is worth noting that the responses to open-ended questions suggested several common themes in relation to students' preference for teaching modes. Three hundred and sixty students wrote comments that cited convenience, flexibility, and the opportunity to work at one's own pace as being the most important positive aspects of online learning. As one student's comments summed it up,

"I can do school on my own time when I'm ready. I can pause lectures to take notes so I don't miss anything, or rewind if I didn't catch what the professor said. I can re-watch lessons if needed. All of my work for all of my classes is in one space; I don't need to quickly pack up and shove things in my bag when class is over. Easier to be more organized. Can sometimes be easier to focus when taking a test (don't have people around me shuffling around and clacking their calculator buttons)".

However, in regards to what they were actually learning many students' were highly concerned that many of their online classes contained "too much busy work" lacked instructor guidance, real-time discussion, and feedback. For example, the following comments were representative of many similar remarks across the whole group and within all disciplines, "There is a lot of busy work and it is hard to get clear direction for the complicated assignments";"No communication from instructors";"The time consuming videos and the overwhelming amount of homework"; "lack of feedback".

Social and family experiences during COVID19

Overall, 791 students (69%) reported the COVID 19 pandemic has greatly affected their lives. 760 students (66%) reported their views on social interaction had changed considerably. Most students (1002) indicated their interaction with classmates was reduced significantly, with 448 sharing they no longer had much contact with their peers. When asked what they missed most about being a student on campus, 459 students miss interactions with others and seeing their friends, 115 prefer in-class instruction with immediate feedback and faculty dialogue, 81 missed having someplace to go (outside the home) to study and complete school work, and 18 reported missing campus activities. While at home, nearly 500 students reported having less time to complete schoolwork due to more distractions, and other responsibilities such as child care and monitoring their child's education from home, and chores. Eighty-seven reported a lack of motivation, with 35 expressing feelings of depression and anxiety.

However, a common positive theme in the qualitative data was that distance learning had allowed the participants to spend more time with their families, and address issues of self-care such as healthier life habits. "I am able to stay home and be with my family during school hours";

"I can home school my brother during the day and get my school work and work done at night"; "Online allows me to help at home more"; "More free time, really enjoy the time to spend with family and time to exercise and get outdoors - feel healthier mentally and physically"; "Being home with my family and being able to do things at my own pace"; "More family time, more pet comfort time, healthier home cooked meals, etc."; "I get to see my family and pets more"; "Some of the major positive effects would be seeing my family a lot more often".

Discussion

The data collected in this study suggests that the students' educational experience was highly disrupted by theCOVID 19 situation and, as would be expected, their experience of online classes was not optimal. The stress of finding themselves in a learning environment that they had not signed up for and a potential fear of the virus may have resulted in increased anxiety levels that added to the difficulties they had transitioning to online classes. Additionally, many of them may have been dealing with loss of income, sick family members, and home schooling siblings or children. This was compounded by the fact that faculty had a very narrow window to convert their classes to an online format and had little experience of running an online course.

TheCOVID 19 transfer to remote education highlights the fact that online teaching is very different to face-to-face. The literature has noted that students appear to do better academically and report higher levels of satisfaction when the class includes high degrees of social presence and student-instructor interaction. However, much of the literature does not appear to tease out what students actually mean when they refer to social interaction and there needs to be further research to explore this aspect of online teaching.

Based on the comments in our survey we would suggest that the students are referring to interaction that replaces both the traditional in-class guidance of the instructor and the aspects of in-class teaching that help to structure pedagogy. For example, during face-to-face instruction students experience the openings and closings of a class. Those 'small informal moments' when an instructor engages with them, gives them a recap of what happened in the previous class and orients them to what is about to be covered. Additionally, at the end of a lesson the Instructor will ask for questions and remind students of any upcoming assignments. These small often-overlooked moments are crucial to traditional teaching models; they anchor the teaching process and create a relationship between the instructor and students. These moments also help segue students into the classroom environment and trigger the learning process.

They also provide a space where the instructor can answer questions regarding the class content, assignments, and tests, clarifying information that may be unclear to students. In an online classroom students often face a learning unit on the class website that presents them with a list of tasks that might include multiple videos to watch, PowerPoints to view, and numerous chapters or articles to read. As educators, we often forget students are not in the same place academically as we are and although we think we have given straightforward instructions they are often far from clear for the students we are teaching. Without those small moments of instructor guidance and feedback, it is no wonder that, as many of the students in this survey noted; they feel they were"teaching themselves".

However, despite many of the negative experiences that were reported concerning education, the qualitative data revealed that a positive aspect of the lockdown that was of relevance to those who study family systems. Many of the participants noted that they were able to spend more time on self-care and socializing/interacting with their families. The time saved through not commuting and having to be on-campus allowed many students more time to exercise, cook more healthily, and spend time relaxing with immediate family. One student noted that the lockdown had made her realize she needed to spend more time with her parents and other family members.

Strengths and Limitations

The strengths of this study are (a) the number of respondents who completed the survey, (b) the fact that at the time of taking the survey all participants had experienced an online class (albeit by necessity), and (c) they were all at the same institution so therefore were subject to the same educational resources. The limitation of the survey was the fact that theCOVID 19 situation had forced students to stay at home and complete online courses. This may have created a negative bias in the students' responses particularly as (a) they may have been anxious about their own or other family members' health, (b) they may have been home schooling their children, and (c) all family members were at home technology had to be shared.

Conclusions

Although students expressed a preference for face-to-face classes and a social presence on campus, their comments also suggest that the convenience and flexibility of online education is something that will become increasingly attractive to students. The changing demographics of our students (e.g., non-traditional students, deployed members of the military, students who have to work full-time, and particularly students who are also parents) is going to make online more learning appealing and as in the case of COVID 19 may be the only option available. Many of the comments from this survey suggested students appreciated the added family time gained from working remotely and this might add a greater interest in taking online classes in the future. Students appear willing to take online classes that allow them flexibility and the opportunity to work at their own pace, they are less fond of synchronous online classes via Google meet and Zoom. It is impossible to replicate the in-class experience through online teaching but we owe it to our students to rethink online teaching to encompass teaching methods that recreate in new ways those 'small moments' of classroom interaction that underpin teaching and learning.

However, another consideration when designing degree programs is to be aware that family life, self-care, and work responsibilities play a major role in students' lives and should be part of the discussion in the way we design education programs of the future. Family and Consumer Sciences as a discipline has the knowledge base to play a major role in this conversation and begin to explore the dynamics of distance education and family life.

Table 1.Descriptive characteristics of the participants.

	N/%
Age, y	
18-25	985/85.5
26-34	106/9.2
35-40	29/2.5
41+	31/2
Female	919/79.6
Male	215/18.6
Other	20/1.7
Race	
Caucasion	862/85.4
Black/African American	201/17.4
Asian	15/1.3
Latino	10/.9
Hispanic	32/2.8
Other	7/.6
*Major	
#KHS	146/12.7
Teaching & Learning	129/11.2
Accounting & Finance	106/9.2
Biological Sciences	95/8.2
Social Work	87/7.5
Management	79/6.8
+CSD	75/6.5
Psychology	73/6.3
Working P/C	
Yes	439/38
No	693/60
Children/Homeschool	
Yes	137/12
No	997/86

Notes.Only majors reporting 73 or higher students included in table.
*Kinesiology and Health Studies. +Communication Sciences and Disorders.

Table 2. Transition to online learning

	N/%
Completed online course P/C	
Yes	805/69.8
No	347/30
Like online courses	
Yes	339/29.4
No	611/52.9
Depends	204/17.7
Synchronous experience	
Yes	916/79.4
No	235/20.4
Interaction with instructor	
Yes	1149/99
No	5/.4
Interaction with classmates	
Yes	947/99
No	5/.4
Prefer face to face course	
Yes	943/81.7
No	97/8.4
Depends	114/10
Issues with technology	
Yes	758/65.7
No	389/33.7

Notes: P/C stands for post-covid instruction

Table 3. Issues with online learning

	N
Anxiety	
Little/mild	750
Moderate	221
High	182
*Lack of motivation	844
Lack of guidance	696
Busy work	661
Not enough time	560
Lack of timely feedback	454

Notes: Students were able to select multiple issues

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