How Online Learning, During Covid-19, has Affected Compassion in Teaching and Subsequently Impacted Student Satisfaction

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ABSTRACT

Goetz [1] defines compassion as 'the ability to notice physical or social distress in others and take action to address it', with active listening, empathy, desire to help, inclusivity, understanding emotions, promoting silence, and creating a safe space being the main components of compassion in a teaching environment [2]. To understand the importance of compassion in teaching for student success, this study focusses on how an increased use of online teaching has negatively affected compassionate teaching and how that relates to student satisfaction. The present study uses a self-developed survey measure, in which, 44 undergraduate psychology students from each year group anonymously rate the use of the compassionate components. The results showed a significant correlation between hours of face-to-face teaching and compassionate scores and compassionate and enjoyment scores. Future research should consider how implementing compassion pedagogy in online learning affects enjoyment scores.

KEYWORDS

COVID-19, Coronavirus, Online Teaching, Compassion, Higher Education

1. INTRODUCTION

1.1. Use of Compassion Pedagogy

Compassion in the pedagogical sense refers to "the ability to notice physical or social distress in others and take action to address it." [1]. Further to this definition by adding key components of compassion; active listening, empathy, desire to help, inclusivity, understanding emotions, promoting silence, and creating a safe space [2]. With this clear criterion for a compassionate learning environment, teaching staff have been able to investigate the use and effect of a compassionate learning environment. In a study promoting the use of compassion, Gilbert introduced the compassion focused pedagogy [2]. Students were asked to share work, pay attention to other group members, use eye contact and mimic vocalisations. The findings from this study showed that eye contact was extremely important, and students felt responsible for theirs and others' learning.

Furthermore, Caddell and Wilde [3] conducted a narrative review study, in which, 24 interviews with academic staff were conducted. The interview structure focussed on the use of kindness and collegiately within the classroom. The findings from this study found that teachers and students must have a working relationship for the learning to be effective. Additionally, ensuring a

compassionate learning environment by addressing the key components [2] showed a positive relationship with student success i.e., students received higher grades.

Carson and Johnston [4] comment on the use of compassion pedagogy for teachers discussing sensitive topics. The example used in their study looks at how racism and discrimination can be discussed within the classroom. The pedagogical approach aims to build trust in the classroom whilst recognising the need to learn about other's realities and acknowledge the differences within the classroom. This approach was found to be productive for starting student conversations on difficult topics.

1.2. Impact of Online Learning in Student Satisfaction and Learning

Interestingly, a study conducted by the Office for National Statistics entitled Student Covid Insights Survey asked students in May 2021 [5] about their experience of university. The questions focussed on the style of teaching, mental health, and satisfaction with their course. Six out of 10 students reported that their studies were mostly remote, with 65% of students experiencing zero hours of face-to-facecontact within a 7-day period prior to the survey and 21% having 1-5 hours of in-person contact time during the semester. The findings showed that 53% of students were dissatisfied with their social experience and 29% dissatisfied with their academic experience. Moreover, 44% of undergraduate level 5 and 6 students were satisfied with their experience compared to 55% level 4 students. Unsurprisingly, 84% of students stated that there were limited opportunities to meet other students. The final questions asked the students what they would do if online learning continued to be the main method of teaching. The results from this question found that 58% of students would defer the academic year until in-person teaching resumed, 31% of students would drop out of university, 14% of students would transfer to another university that offered more in-person teaching or was closer to home and 20% of students would leave university to find a job.

A study which considered the effect of online learning during the Covid-19 pandemic [6]. The study used the format of an interpretative case study, with 27 EFL (English as a foreign language) teachers. The most prominent results found that a lack of direct interaction with learners strongly affected the teacher's own learning process. Specifically, the analysis showed that the teacher's found an increase in anxiety and decrease in motivation when teaching through an online environment. To add, 48% of the teacher's disagreed with the statement 'my home environment allows me to do my online classes', with poor internet, home distractions, lack of working devices or lack of laptops with working mics and cameras being the cause of this difficulty [6].

Schwenck and Pryor [7] conducted a qualitative study in which 15 preservice teachers engaged in a phenomenological interview to discuss their views on engagement, connectedness, community, and accountability. The study found that there were issues with engagement during online classes with awkward interactions caused by technological difficulties and lack of non-verbal cues such as not knowing when to speak. Further, there were issues with connectedness with both teachers and students feeling a disconnect between them. This disconnect wasn't just surrounding the use of online lessons but also due to a decrease in mental health and difficulties with meeting up with classmates due to social distancing.

1.3. Use of Compassion in Online Learning

In the current climate, research into the use of online learning has increased, with some focus on the use of compassion. A study by Sukhera and Poleksic [8] explored the adaption of compassion education through technology-enhanced learning. This was a qualitative study which used semi-structured interviews to gather health professionals' insights into the use of compassion education

and technology. Most responses revealed concerns about the lack of human interaction but noted the inevitable need for technology. Other outcomes of the interviews found suggestions for enhancing compassion education with the use of technology such as increasing accessibility and learner comfort with vulnerability [8]. However, the study focussed on the issues that arose using compassion education online and suggests the following to help eradicate these, ensuring a balance of face-to-face and online learning and addressing digital poverty. This study suggests further research into the use of compassion education to address the uncertainties mentioned in the interviews about adapting compassion education through technology-enhanced learning.

Furthermore, a study by Lindecker and Cramer [9] considered the relationship between student self-disclosure and faculty compassion in online classrooms. Student self-disclosure was defined by the researchers as students disclosing personally traumatic events with faculty to receive support and extensions [9]. Compassion fatigue is a well-documented issue among professions, especially those working in social service fields such as health care and education. Faculty compassion is the use of compassion pedagogy in learning, with a lack of compassion pedagogy being named faculty compassion fatigue by the researchers [9]. The study found that 96% of faculty surveyed said that student self-disclosure was common, and that there was a relationship between student self-disclosure and faculty compassion fatigue, with higher levels of faculty compassion fatigue leading to higher levels of student self-disclosure. This study clearly presents the concept that a lack of compassion in education can lead to a lack of student satisfaction, resulting in student self-disclosing to receive more support.

The aim of this study is to distinguish whether the online learning environment supports compassion pedagogy and whether a supposed lack of compassion in education [9] [8] leads to a lack of student satisfaction.

2. METHOD

The present study uses a self-developed survey which will be completed anonymously by undergraduate psychology students (all year groups). This study does not need ethical consideration as it falls under the protocol for reflective practitioner work by academic staff.

The survey begins with an introduction to the study's aims and explains the purpose of the study. Further, it informs the students that ethical consideration was not needed as this survey looks only to improve their experience and not for research purposes. Students are also told that they do not need to take part but taking part consents to their anonymous data to be used and shared within the department of psychology, with possible expansion to the rest of the school and university following the results. Students are told that they are free to withdraw at any time without explanation.

The survey was posted internally using the psychology undergraduates' research methods Canvas page, in which an announcement was made explaining the aims of the survey and included the link to the survey.

The survey started with two initial questions asking students to state their year group and how many hours of in-person teaching they had received so far that semester. The study then progresses to a Likert scale requiring students to rate the components of compassion (active listening, empathy, desire to help, inclusivity, understanding emotions, promoting silence, and creating a safe space) on how often they experience them. The scale went from 1 (never) to 5 (always), with the total score across all 7 components representing the level of compassion within the learning environment, the higher the score indicating that compassion pedagogy is present.

The second part of the survey focusses on student satisfaction, asking students to rate 5 statements with how much they agree with what is said. The scale is from strongly disagree to strongly agree, with strongly disagree scoring -2, strongly agree 2 and neither agree nor disagree 0. A negative overall score shows a lack of student satisfaction, and a positive score shows student satisfaction. The survey used can be found in Appendix A.

3. RESULTS

In total there were 51 responses, however due to invalid completion of the survey (not all questions being answered), there were only 44 valid responses.

The participants studied undergraduate psychology at the University of Hertfordshire, table 1 shows the number of participants from each year group, with year 1 being level 4 students and year 3 level 6 students.

Table 1. Participant Year group demographics.

Year	Frequency	Percent (%)
1	19	43.2
2	15	34.1
3	10	22.7

The greatest number of responses (43.2%) came from first year students, followed by second year (34.1%) and then third year students (22.7%). A statistical analysis on the descriptive statistics of this variable shows the standard deviation to equal 1>, thus determining the participants to be representative of all 3 year groups.

The participants were also asked to detail how many hours of face-to-face teaching they had experienced so far that semester, the survey was sent in the final week of semester A. The responses to this question were variable with the highest percentage (20.5%) of students stating they had received zero hours of face-to-face learning. The next highest response (15.9%) was that 15 hours of face-to-face teaching had been received. The responses to this question ranged from zero hours to 40 hours. A one-way ANOVA was performed in the software SPSS to establish whether the participants year group determined the amount of face-to-face teaching received. This test was not significant, $F_{(2,41)} = 0.651$, $p > 0.05$, therefore the number of hours of face-to-face teaching received during the semester is not dependent on the participants year group. Table 2 below shows the responses to this question.

Table 2. Reponses to the question 'How many hours of face-to-face teaching have you received this semester?'

Hours

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	9	20.5	20.5	20.5
	2	1	2.3	2.3	22.7
	5	1	2.3	2.3	25.0
	8	1	2.3	2.3	27.3
	12	2	4.5	4.5	31.8
	14	3	6.8	6.8	38.6
	16	4	9.1	9.1	47.7
	18	2	4.5	4.5	52.3
	20	7	15.9	15.9	68.2
	22	3	6.8	6.8	75.0
	24	2	4.5	4.5	79.5
	27	1	2.3	2.3	81.8
	29	1	2.3	2.3	84.1
	30	2	4.5	4.5	88.6
	32	1	2.3	2.3	90.9
	34	1	2.3	2.3	93.2
	36	1	2.3	2.3	95.5
	40	2	4.5	4.5	100.0
	Total	44	100.0	100.0	

The aim of this study was to determine whether the use of online learning affected the use of compassion pedagogy in teaching and whether this had negatively impacted student satisfaction. The survey contained two Likert scales; the first to determine the presence of compassion in teaching and second the level of student satisfaction. A Pearson product-moment correlation coefficient was performed in SPSS to calculate whether there was a relationship between the compassion scores and student satisfaction scores. The correlation was significant $r=0.387$, $p=0.009$ ($p<0.01$) with compassion scores accounting for 15% of variability in satisfaction scores. Although a correlation does not show cause and effect, the scatter graph below (figure 1) shows that as compassion scores increase so do student satisfaction scores, hence we can assume that a lack of compassion pedagogy in the learning environment, has a significant negative effect on student satisfaction.
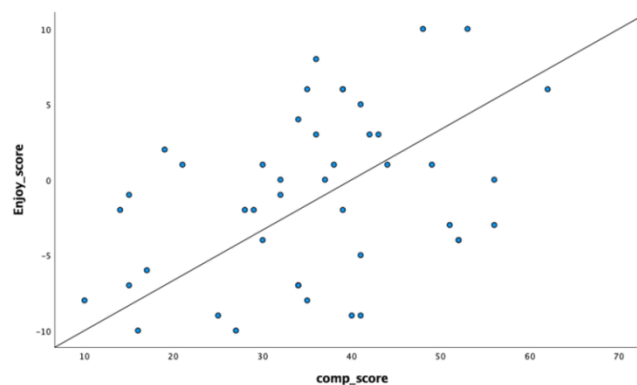

Figure 1. Scatter graph to show the relationship between compassion scores and student satisfaction scores

Further investigation into student satisfaction with online lessons found that in response to the 5 statements (Question 4, see appendix A) only enjoyment of the online lessons and being able to make friends had a positive response. Figure 2 shows the overall scores for each statement. The

range of scores being from -23 to 1 shows that most students disagreed with each of the statements. In particular, 'I feel that my learning hasn't been affected by the use of online teaching' scored the lowest with -23 and was a particular issue for students, affecting their satisfaction. Students also felt that there were no opportunities to interact with their peers outside of lessons and that they didn't learn as well in the online setting.
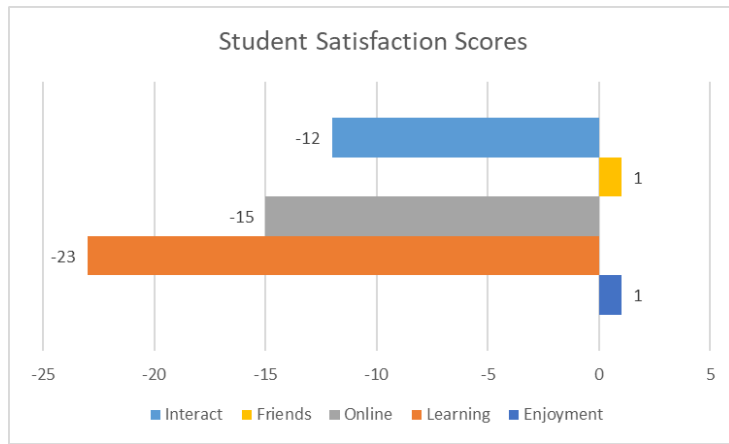

Figure 2. A bar chart to show the overall scores for student satisfaction.

In addition, to find out whether a change to online learning has affected the use of compassion pedagogy, a second Pearson product-moment correlation coefficient was conducted to distinguish this relationship. The correlation between compassionate scores and hours of face-to-face teaching received was significant, $r=0.855$, $p<0.01$, with the amount of face-to-face contact hours accounting for 73% of variability in compassion scores. The scatter graph (figure 3) below shows a distinct positive correlation between face-to-face hours and compassion scores, with the more face-to-face contact having higher scores of compassion.
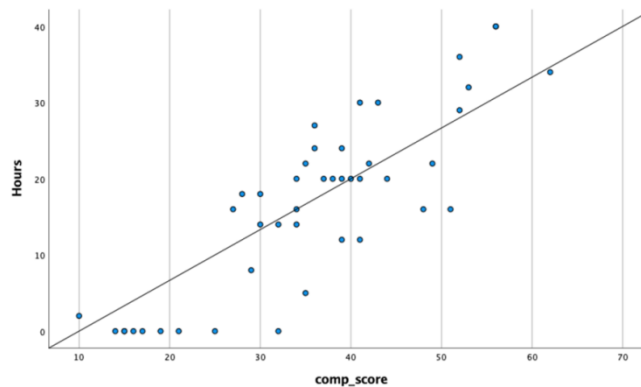

Figure 3. Scatter graph to show the relationship between hours of face-to-face teaching and compassionate scores.

4. DISCUSSION

The results show that there are significant relationships between online learning and the use of compassion pedagogy and that there is a significant relationship between compassionate and enjoyment scores. From the results we can see that the online learning environment has a lack of compassion, and this lack of compassion has had a negative impact on student satisfaction.

Henceforth, this article will discuss ways to address this lack of compassion pedagogy in the online learning environment to help improve student satisfaction.

Firstly, it would be over simplistic to assume that a lack of compassion in the online learning environment is the sole reason to the changes noticed in student satisfaction. Other factors such as digital poverty, personal circumstance, and mental health will have also been a factor in this change. The use of online learning, in place of in-person teaching, was caused by a pandemic which also in itself will bring numerous obstacles impacting on student's satisfaction.

There are known inequalities within education, with the pandemic showing how digital poverty has affected numerous students with the move to online learning [10]. Digital poverty refers to the lack of digital understanding or resources, with this study [10] reporting that only 51% of households earning between £6000-£10,000 have access to WIFI at home, compared to 100% of those earning over £40,001. As well as a lack of WIFI, access to suitable electronics for working are scarce for households with low income.

To add, another study has found a significant decrease in mental health caused by the 'stay at home' measures [11]. Those who experienced 'lockdowns' have a mental health rate, 0.0085 standard deviations lower than those who did not. Mental health in this study is measured using the WHO-5 mental health index, which also found the effect of lockdown to impact on women more than men, widening the existing gender gap by 66% [11].

Though, a third Pearson product-moment correlation coefficient was performed investigating the relationship between hours of face-to-face learning and enjoyment scores. The correlation was not significant, $r=0.246$ $p=0.108$ ($p>0.01$) which means that the hours of face-to-face learning received has no effect on the enjoyment scores. This finding sways our understanding to believe that it is purely the lack of compassion pedagogy in the online learning environment which has led to poor student satisfaction (see scatter graph in appendix B). Further research would be suggested to understand this relationship better.

To help improve student satisfaction whilst online learning remains the dominant form of teaching methods, below lists the 7 known components of compassion pedagogy [2] and ways to ensure that these are present within the learning environment. These approaches act as a baseline for teaching staff, as it is known that approaches to teaching vary, meaning compassion can manifest differently [12].

Active listening is a way to show that you value what the other person is saying and increases empathy [13]. To show that you are actively listening, you should; ask open-ended questions, reflect another's feelings, clarify, and summarise what you hear [13]. Although, these tasks are easy in an in-person environment, whilst teaching online it is easy for the teacher to clarify what students are saying and summarise what they have heard. In fact, by doing so it will help other students in the room to acknowledge what has been said in case of poor sound quality and buffering in the video. Teachers should also respond to student comments using open-ended questions and reflect their feelings to achieve this, other students should also be encouraged to ask open-ended questions to benefit each other's understanding within the discussion.

Empathy is a complex concept that has been defined as perspective-taking in which we put ourselves in another shoes [14]. Again, this can be achieved more easily in a face-to-face environment due to the use of non-verbal body language which is more visible in person. However, the use of cameras by the teacher and student speaking would help show the mimicking of emotions with either party using the same facial expressions, open or closed body language and gestures visible on camera.

Desire to help is an automatic reaction associated directly with compassion, it is in one's nature to want to help those suffering especially when it is someone who is valued [15]. It has been noted that the desire to help can collapse if a person promotes self-affirmation [16]. Within the online learning environment, where so much more is unknown to the individual, self-affirmation can increase causing the desire to help to diminish. Again, the lack of cameras during the video call can cause an individual to self-affirm and lack the desire to help, thus the teacher should facilitate the learning environment by encouraging the use of cameras. Moreover, the teacher could promote the student's desire to help by supporting students to help their peers by answering questions and asking them to explain their answers.

Inclusivity is a vital component of learning which should be endorsed no matter the learning environment. To promote inclusivity in an online environment, support and flexibility have been found the most effective [17]. Support should be offered to all students such as having frequent communication with students outside of the online lessons e.g., via email, face-to-face or telephone calls. Flexibility such as designing different tasks for students to complete should be offered, as well as encouraging group work.

Understanding emotions can be defined as the ability to share the feelings of another person which can also be referred to as emotional empathy [18]. This can be experienced by feeling the same emotion as the other person, feeling distress in response to another's pain or feeling compassion towards the other person [18]. The use of self-reflection at the end of the teaching session, with prompting questions by the teacher can address whether students have understood emotions within the session.

Promoting silence allows for critical thinking to take place, by pausing after a question for around 10 seconds to entice students to respond [19]. Additionally, the use of silence has a compassionate quality in which the silence conveys mutual respect and understanding [20]. This promoting of silence can be used in an online setting but to ensure its use is clear to students, teachers can use phrases like 'I'll give you time to think' or 'I'll wait for somebody to respond' so that they know the pause has meaning and isn't a technical glitch.

Creating a safe space can be achieved by accepting and acknowledging mistakes will be made, model empathy, maintain honesty, build trust, and share learning [21]. In an online environment it is important that the teacher outlines some rules at the beginning of each session to create a safe space for students to learn. Rules can be simple and should ensure student confidentiality, trust, honesty, acceptance, and empathy.

With directions for how staff can implement the seven components of compassion within an online learning environment discussed and with the results of the present study, future research should consider how ensuring a compassionate online learning environment can help improve student satisfaction. In addition, gaining an insight from students on the above suggestions would be beneficial in helping to understand how student satisfaction can be increased.

5. CONCLUSION

In conclusion, this study looked at the use of compassion pedagogy in an online learning environment and how this can affect student satisfaction. The results of the study showed a clear relationship between online learning and compassion, as well as compassion and student satisfaction, with a strong trend showing that a lack of compassion is found within the online learning environment which has negatively impacted student satisfaction. The discussion of the article addresses how teaching staff can implement the seven components of compassion; active

listening, empathy, desire to help, inclusivity, understanding emotions, promoting silence, and creating a safe space. Future research should consider how introducing the above suggestions in an online learning environment can help to improve student satisfaction and could start with gaining students views on the adapted approaches.

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APPENDIX A

Copy of the self-developed survey measure

Start of Block: Default Question Block

Q1   Thank   you   for   agreeing   to   complete   this   quick   4   question   survey.
By completing the survey you are consenting to the use of your anonymous data for academic improvement use within the department, school and University. The questions do not require you to state your name, contact details or any other identifying factors but it does ask for your year of study.

It is not mandatory to take part and you are free to withdraw, without reason, at any time.

As this survey is for the use of academic improvement, it is in line with the Protocol for Reflective Practitioner Work By Academic Staff and therefore, does not require ethical consideration.

The purpose of this survey is to determine whether the use of online teaching has reduced the use of a compassionate learning environment, affecting student satisfaction and learning.

Page Break

Q1 Please state your year of study:

○ Year 1 (Level 4) (1)

○ Year 2 (Level 5) (2)

○ Year 3 (Level 6) (3)

Q2 How many hours of face to face teaching have you received so far this semester?
Please put the number of hours:

_____

Page Break

Q3 For each of the following, please indicate how often you experience these in your online teaching sessions:

	Never (1)	Sometimes (2)	About half the time (3)	Most of the time (4)	Always (5)
Creation of a safe space (the teacher outlines rules such as confidentiality and non-judgement when promoting student discussion) (1)	○	○	○	○	○
Active Listening (you feel that the teacher and other students are listening to discussions, this can be indicated by nodding and agreements) (2)	○	○	○	○	○
Empathy (you feel that you have been understood) (3)	○	○	○	○	○
Desire to help (you recognise when others need help, and offer support) (4)	○	○	○	○	○
Inclusivity (you feel included within the lesson) (5)	○	○	○	○	○
Understanding emotions (emotions within the class are recognised and discussed) (6)	○	○	○	○	○
Promotion of silence (the teacher uses silence to aid discussions) (7)	○	○	○	○	○

Page Break

Q4 For the following statement, please indicate how well you agree with them:

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I enjoy attending online teaching sessions (1)	○	○	○	○	○
I feel that my learning hasn't been affected by the use of online teaching (2)	○	○	○	○	○
I learn just as well in an online environment as in-person teaching (3)	○	○	○	○	○
I have made friends within my course (4)	○	○	○	○	○
I interact with course mates outside of teaching sessions (5)	○	○	○	○	○

Page Break

Q6 Thank you for taking part in this quick survey. If you have any further questions or any concerns you wish to discuss, please email l.mackintosh@herts.ac.uk

For further support please visit the Academic Support Unit (lms.asu@herts.ac.uk) or contact Wellbeing (StudentWellbeing@herts.ac.uk)

If you need immediate wellbeing/emotional support, financial, legal, non-urgent medical advice or grief support call: 0800 028 3766 and use:

Username: wellbeing
Password: LakeMindCard1
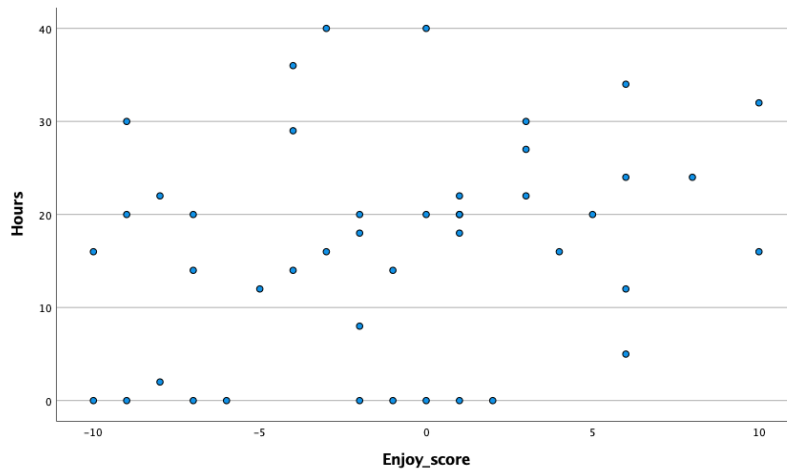
APPENDIX B

Figure 4. Scatter graph to show the relationship between face-to-face hours and enjoyment scores.