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'We all sort of struggled through it together': students' lived experiences of university life during the pandemic

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ABSTRACT

The COVID-19 pandemic led to significant changes to the student experience. Thus, there is a need to centre students' lived experiences in pedagogical research which explores the effects of the pandemic on student life. The current study aimed to explore how the COVID-19 pandemic impacted undergraduate students, with a focus on students' educational experiences, social interactions, and mental wellbeing. Open-ended questionnaires were disseminated to undergraduate students across the UK ($N = 53$). A student-centred reflexive thematic analysis identified four dominant themes that each relate to students' lived experiences of Higher Education during COVID-19. These were: *variations in motivation* during the pandemic, the *importance of personal connection*, a *disconnect between university and the student*, and students' *development through adversity*. These themes broadly demonstrate the variability in student experiences during the pandemic and, crucially, highlight the need for future education provision to centre personal connections, including between students and their institutions. Lack of interaction with staff and peers, as well as barriers to support, led to feelings of detachment from university. Implications for policy and practice are discussed.

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The COVID-19 pandemic dramatically impacted undergraduate students' experiences, particularly online teaching. Research demonstrates how online learning during COVID-19 received mixed feedback from students (Cranfield et al. 2021; Dost et al. 2020). Interestingly, while student opinions towards online learning and the effects of the pandemic on education seemed to be mixed, Gonzalez et al. (2020) compared a control group of students from the academic years 2017/18 and 2018/19, to an experimental group of students affected by the pandemic. There was a significant positive effect of COVID-19 isolation/confinement on students' performance, with students utilising more continuous learning habits and strategies, and therefore increasing their efficiency. However, despite the plethora of recent literature that highlights the impact of COVID-19 on the Higher Education sector (Besser, Flett, and Zeigler-Hill 2022; Maatuk et al. 2022; Marinoni, Van't Land, and Jensen 2020), it is important to explore the effects of online learning and the pandemic on student satisfaction and wellbeing, in order to foster a positive, inclusive, and student-centred university experience.

It is well documented that mental wellbeing of university students was negatively affected by the pandemic (e.g. Chen and Lucock 2022; Lischer, Safi, and Dickson 2022). For example, Mittal, Su, and Jain (2021) reported increased levels of anxiety, stress, and exhaustion among students. Longitudinal studies provide further insight into the mental health outcomes for students. Frazier et al. (2021) compared the mental health ratings of 362 American university students from 2017

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and April 2020. After controlling for differences between the two samples, researchers found that symptoms of depression and stress were higher in April 2020 compared to pre-pandemic levels. However, some studies have noted that mental health remained the same or improved in some samples, and participants also reported some unexpected benefits, including improvements in daily activities (e.g. more exercise) and/or strengthening of social bonds (Hamza et al. 2021). This produces a more comprehensive description of the student experience and may illustrate useful coping strategies, but these factors did not seem to completely offset the negative mental health symptoms reported.

Social and interpersonal aspects of the student experience were affected by the pandemic. Maintaining existing relationships and creating new ones during university is important for students, as these can be sources of support during the transition into and throughout university life (see Pownall, Harris, and Blundell-Birtill 2021). Relationships with both peers and tutors is a highly valued part of the university experience (Shin 2002). However, social interaction was significantly limited by the pandemic in UK and most other countries, with the public being advised to stay home and not mix with other households (Health Protection Regulations 2020). The lack of face-to-face/in-person communication has had a negative impact on students and their experience of university, including links to poor physical and mental wellbeing (Szczepańska and Pietrzyka 2021). Furthermore, Mulrooney and Kelly (2020) found that lockdowns during COVID-19 reduced feelings of belonging for both staff and students. These findings highlight some of the key negative effects of the pandemic on students' social life and interpersonal connections, and how this can impact the student experience.

The present study

While there has been much literature which investigates the impact of COVID-19 on students, there is a lack of student-centred research in this area, which centres the student lived experience. Therefore, the aim of the current study was to explore university students' experiences of educational experiences, social interaction and student wellbeing during the COVID-19 pandemic, using a student-led, qualitative, reflexive study design. This research project was student-led, i.e. the lead researcher (and the lead author) is an undergraduate student, who designed the survey instruments and led the analysis of the qualitative data. This offers a unique perspective, which crucially differentiates this study from other analyses of student experiences during the pandemic. Our core research question was '*what are the lived experiences of being an undergraduate student during the pandemic?*' with a specific focus on educational experiences, social interaction, and student wellbeing.

Method

Participants and design

We used online qualitative methods in order to explore the research question: *what are the lived experiences of being an undergraduate student during the pandemic?* Participants were 53 undergraduate university students from a range of universities across the UK, aged between 18 and 35. Data collection occurred from the 6 December 2021 to 9 December 2021. Most participants self-identified as White British (49.1%), 4 participants self-identified as White Other, 4 as Asian, and 2 as Black, and 32.1% withheld their ethnicity. The sample was mostly female (84.9%), with 39.6% of participants in their second year of study, 32.1% in final year, and 28.3% in first year. The study was advertised through a variety of online means, including a recruitment advert posted on social media sites (namely Facebook and LinkedIn) and the local student survey participation pool. Participants were invited to participate in a prize draw for a shopping voucher in return for their participation. A participant recruitment site designed for researchers, Prolific, was also used. Participants recruited

via Prolific were reimbursed at a rate of £6.50 per hour for their participation. Ethical approval was granted by the University of [Leeds] Ethics Committee, Ethics Reference: PSYC-374.

Procedure

Data were all collected online, via a questionnaire created on Qualtrics XM. In the study, participants answered six open-ended qualitative questions (see Table 1). We decided to use online data collection, given how textual data gathered from online surveys can be a rich source of information, offering a 'wide-angle lens' on a topic (Toerien and Wilkinson 2004). As Braun et al. (2020) discuss, online surveys that collect textual responses also have the benefit of wider inclusivity and accessibility, by reaching more people and allowing research to go beyond the 'usual suspects' (p. 4), i.e. groups of participants who are typically 'heard' in pedagogical research. In this way, we felt that online survey data collection would enable us to reach students who differ from often-heard student voices, and thus offer a more nuanced and insightful account of students' lived experiences. Questions aimed to explore participants' experiences and attitudes towards the use of online learning during the pandemic, as well as the pandemic's impact on their social life and mental wellbeing while at university. The prompts were designed not to *lead* participants, but rather to encourage them to consider wider aspects of their experiences. These questions and prompts were designed by the lead author [undergraduate psychology student] and discussed and clarified with the rest of the research team. Participants were encouraged to write a few sentences per question and were given topic suggestions in the form of 'prompts' that accompanied the questions (Table 1), to encourage depth of response and reduce ambiguity of the question wording.

Analytical approach

Participant responses to the six open-ended questions were analysed using a reflexive approach to thematic analysis (Braun and Clark 2019). Thematic analysis was chosen to analyse the data, due to its flexibility and ability to generate a detailed and comprehensive account of the data, without being constrained by a strict theoretical framework (Braun and Clarke 2006). An inductive or 'bottom up' approach was assumed, in that analysis was data driven. This allowed a more exploratory approach to analysis, rather than constraining findings to themes already present in existing literature, or to what was expected to emerge. In line with the thematic analysis method, as outlined by Braun and

Table 1. Question wording, online qualitative question wordings and prompts.

Question wording	Prompts
(1) Please tell us about your experience of online learning during the COVID-19 pandemic.	Points you may wish to include: how it compares to in person teaching, effect on workload, effects on revision and examination, changes you would make.
(2) Please tell us about how online learning and the overall pandemic restrictions affected your social life at University.	Points you may wish to include: experiences of freshers events, extra-curricular activities, societies and clubs, how online social events compare to in-person events, any social events you found particularly useful, how making new friends and maintaining existing relationships (family, platonic, romantic etc.) was affected.
(3) Please tell us about how your overall mental wellbeing has been affected by the pandemic and subsequent restrictions at University.	Points you may wish to include: effects on your motivation to complete daily tasks, effects on your energy levels, effects on stress.
(4) Please tell us about how your mental wellbeing impacted your learning during the pandemic.	Points you may wish to include: how your approach to studying was affected by your mental wellbeing, effects on your motivation to study
(5) Please tell us about the mental wellbeing resources or interventions offered by your university, and whether these supported your mental wellbeing.	Points you may wish to include: why you found certain resources helpful compared to others, how you would improve mental wellbeing resources at university over the pandemic.
(6) Are there any other ways in which the pandemic affected your university experience?	

Clarke (2006), responses to all questions were first read through several times. Notes were made throughout this process, including initial thoughts and potential interpretations. These notes facilitated the discovery of patterns in participant responses. We aimed to complete this analysis in a way that was attentive to diversity of participants' experience and were therefore interested in understanding broad patterns of experiences that share a common meaning, rather than generating themes based of frequency of participants' comments. These patterns were then collated into a range of potential themes. To develop these themes further, specific quotations were extracted from participant responses to support each theme. Themes were selected based on their relevance to the research question and the quality of their quotation support. Four themes were developed and finalised.

Researcher positionality. At the time of writing, the lead researcher (*[initials anonymised for review]*) is an undergraduate student at a large, Northern research-intensive university in the UK and their studies were impacted by the COVID-19 pandemic. Participant's perspectives were, therefore, interpreted considering the lead researcher's own experiences, which affects the lens through which the data were viewed. We approached the study reflexively, i.e. by aiming to centre and celebrate these subjectivities, rather than diminish 'bias' (see Lazard and McAvoy 2017). It could be argued that a student-researcher's perspective is particularly useful in this instance, as this could highlight aspects and nuances of university life that an outsider (i.e. an academic) may not notice or may not deem significant. The rest of the research team (*[initials anonymised for review]*) are supervisory academics in the same department as the lead researcher. They each have experience of the challenges and possibilities of teaching online during the pandemic and have conducted research examining student attitudes to online learning. The supervisory team were responsible for discussing and overseeing the analysis as it evolved, providing oversight of the analytical and writing process.

Results

Our thematic analysis of participant's free-text responses generated four dominant themes: These were: the *variations in motivation* prompted by COVID-19, *the importance of personal connection*, a reported *disconnect between university and the student*, and students' *development through adversity* during COVID-19.

Theme 1. Variations in motivation

The first theme we identified centred around students' variability in their reports of work ethic and study motivation during the pandemic. This was largely dependent on whether participants valued the flexibility of online learning, or whether they preferred having a more structured work ethic. Indeed, there were stark differences in student's experiences of motivation during the pandemic. Some students in the sample, for example, reported difficulties in staying motivated during the pandemic:

Due to online learning, I sometimes fall behind on my lectures as I have no motivation and no routine in order for me to stay on top of things ... I believe I would definitely benefit from being on campus as I think that'll motivate me to get things done as and when they happen as opposed to doing my pre-recorded lectures whenever I feel like it.

The lack of motivation affected students' ability to '*stay on top of things*'. In this case, the freedom afforded by pre-recorded lectures, was not suited to some participant's self-motivation strategies. This participant also mentions that they would '*benefit from being on campus*', which may allude to the issues with work-life balance brought about by learning from home and having no structure. Many participants voiced their problems with this, with

statements such as *'there was no split between working and relaxing'* and this may be related to students being unable to exercise choice about their place of study. Relatedly, some participants also reported valuing the structure that in-person learning provides, with statements like *'it was up to me to manage [my workload] effectively'*, suggesting a pressure to create a structure that would normally be present by default in higher education. On the other hand, a similar proportion of participants appreciated the freedom that accompanied online learning, and thrived with the added flexibility of online lectures, for example:

My energy levels have been lower since the pandemic but I find it easier to complete University tasks as I have more spare time and am able to complete things at my own pace so long as deadlines are met which I prefer than having a set routine or plan.

This participant, and many others, refer to being able to do work *'at [their] own pace'*, or *'organize [their] own time'* as a benefit of the more flexible work schedule. There seems to be a major contrast between the participants preferring structure and those preferring flexibility, in that where the former seemed to feel pressure and stress as a result of lacking structure, the latter seemingly appreciated the control over their schedule. Where those preferring structure struggled with work-life balance and feeling like *'there was no switch off'*, those preferring flexibility referred to having *'more spare time'*. While participants overall struggled with motivation, those preferring flexibility had a more positive attitude towards this issue: *'if one day motivation is not so good then I know I can do this the next day whereas I wouldn't have this opportunity normally'*. Participants also mentioned adapting their schedule to personal preference, e.g. *'if I want to do something one day, I can do my lectures earlier or later'*, while others found it beneficial to their health, e.g. *'due to suffering from chronic migraines, being able to choose when I can study helped a lot'*. Overall, the differences in students' motivation for studying are vast, and affect participants' enjoyment of their course, but also their ability to work effectively. The change to online learning, therefore, impacted students in different ways, depending on motivation and approaches to studying. This demonstrates the importance of centring student experiences within educational provision planning, as there are stark differences in student preferences for modality, depending on students' ability to self-manage and self-motivate, as well as other student characteristics e.g. health, caring responsibilities etc.

Theme 2. Significance of personal connection

We identified a theme that students value and appreciate the chance to forge 'personal connections' in their university experience. This theme was present regardless of whether the survey question concerned learning, social life or mental wellbeing, and thus came through strongly in our analysis. In this theme, participants discussed their strategies for 'making friends' and reflected upon the importance and significance of personal connections in their university experience. For example:

I haven't attended any online social events and didn't join any societies in my first year due to them all being online. I feel in terms of making friends, I just made friends with people who lived close to me. I was very lucky in that I got on with everyone I lived with. However, if this hadn't been the case I don't know how I would've made friends last year ... I think in person social events are so crucial to university life, more crucial than in person teaching because it allows you to make friends and without friends you won't want to continue studying at uni

This response highlights the crucial points felt by most participants. This participant mentions the lack of desire to join clubs and societies due to their online, impersonal nature – this is mentioned by other participants: *'societies[were online] so I could not get the full experience'*, or because social events were cancelled, participants felt that they were *'not getting the full experience of uni'*. Participants also had difficulties making friends outside of their student houses or in their local area. Participants mention that it was *'impossible to meet new people'*, or that *'trying to do anything collaborative on zoom just isn't the same'*. The above participant highlights the significance of personal connections in relation to university education, in that without a sufficient social aspect to university, *'you won't want to continue*

studying'. It could be implied that social life and bonding at university is essential for the motivation to study, and the enjoyment of university, but often cannot be achieved through online communication.

Participants often mentioned the benefits of a more personal connection with staff, e.g. *'I think being able to talk to staff has been beneficial'*. One-to-one meetings with 'personal tutors' were particularly valued due to their personal nature; *'my personal tutor . . . meets with me weekly, which is extremely helpful as it is a more personal contact'*. It could be implied that these more personal interactions with staff could supplement the need for social interaction, which was otherwise lacking. Those who did not receive sufficient personal connection expressed the negative effect this had on them and their learning: *'my learning greatly suffered, due to the reduced participation and impersonal feel of online learning'*. Participants found pre-recorded lectures much less engaging due to the lack of live interaction with lecturers, and even found the lack of personal interaction affecting their mental wellbeing: *'not being able to talk in-person to [staff] to ask questions definitely made me more stressed'*. This also extended to online live lectures; one participant mentioned that *'when the tutor is only on the screen they cannot monitor that you are staying engaged'*. Therefore, it seems that the need for personal connection was significant for many students throughout the pandemic, and its presence (or lack thereof) had a great impact on their experience of university. Online interaction with friends seems to be insufficient in fulfilling the need for personal connection, but meetings with staff were found to be beneficial for both learning and mental wellbeing.

Theme 3. Disconnect between the university and student

Third, we identified that many students in the sample observed a disconnect between themselves and their respective universities, which, in some cases, prompted a 'student vs the institution' narrative. This disconnect seemed to be exacerbated by a lack of communication between universities and students, for example:

They didn't tell us what was happening with their plans regarding teaching, and still give little away now-days as to when our lectures will return to in person. The university really disappointed me with their lack of resources to help students cope during the pandemic

This lack of communication seems prevalent across participants and universities. This led to increased stress among participants: *'it was scary to not fully know what university expected from me'*. Furthermore, some participants seemed to feel resentment towards their respective universities, and a theme of betrayal was also present – *'my university literally didn't care', 'they were completely inadequate'*. The above participant seemingly expresses frustration with the communication from their university during the height of the pandemic but mentions that this has continued as restrictions continue to ease. This may suggest that communication issues are a long-term problem in some academic institutions. Relatedly, the lack of communication was also prevalent with regards to both academic and mental wellbeing support. Participants often mentioned difficulties in receiving academic support by email: *'waiting ages for help via response on emails'*. However, mental wellbeing support seemed to be impacted most significantly: *'there are some wellbeing resources . . . but I wasn't sure where to find them'*. Participants often expressed a lack of *'clear direction'* and not knowing *'where to look'* to find support. Some participants felt *'like there was nobody to reach out to'*. Therefore, while support may have been available, participants found it difficult to locate and, therefore, use.

Theme 4. Development through adversity

While participants expressed difficulties in university as a result of the pandemic, we also identified a prominent theme of both social and self-development through the hardship of the pandemic. For example, despite difficulty in educational engagement, some participants seemed to have gained an appreciation for the time they spent in lockdown. For example, one student explained that:

As much as the pandemic had negative effects on university, I also wouldn't have changed my year last year. I don't know if I'd be as close to all of my house as I am now had it not been for the pandemic and they are some of my best friends so I'm thankful for that

This participant was grateful for the bonds they were able to create as a result of being at university during the pandemic and, despite issues they experienced, would not change their experience. Other participants echoed this positivity; for example, one participant also discussed how the pandemic helped them forge connections with their friends at university '*I had good housemates to spend lockdown with*'. There seemed to be a theme of 'shared' hardship among participants. In this sense, experiencing the pandemic together brought comfort and encouraging connections between students: '*we all sort of struggled through it together*'. It could be inferred that spending time with certain people during the pandemic enhanced and developed these bonds. Furthermore, the development and maintenance of these bonds may have served as a protective factor against the negative effects of the pandemic. For example, one participant stated '*my mental wellbeing was strong ... thanks to my partner*', and so social bonds seem to be highly valued by participants in times of struggle.

Participants also experienced self-development as a result of adversity. Some participants expressed that, while their time at university during the pandemic was difficult, they learned about themselves as a result of it. For example:

I think my wellbeing has declined in some ways as I have spent a lot of time alone and doing work alone. However it has taught me how strong and resilient I can be with work when pushing through these conditions

Despite feeling lonely, and perhaps lacking social bonds, this participant learned how 'resilient' they can be in the face of adversity. This experience was shared by other participants, for example, in regards to stress: '*I have ... learnt a lot about myself and how I best deal with stress*'. Participants seemed to not only develop their own ways of coping, but also learned about themselves, and potentially how these newly developed skills could be applied in the future. For some participants, their experience of the pandemic encouraged them to learn and engage in more positive health behaviours, with some mentioning a newfound motivation to '*go outdoors more*' or '*get active*'. Furthermore, while a lot of participants struggled with motivation in all aspects of university life, some participants developed motivation as a result of the pandemic. One participant was motivated to '*take part in more extra-curricular activities to make up for the loss of last year*', while another mentioned that '*it has spurred me on to be more productive as I have realised time is short*'. These participants seemed to have gained an appreciation for their time at university, and while this was seemingly negatively affected by the pandemic, they are now driven to make the most of their experience. Therefore, while participants in general struggled at university during the pandemic, many also developed themselves and their social bonds as a result. There seemed to be a sense of appreciation, and even gratitude, towards experiencing the pandemic while at university. Both self-development and the development of social bonds seemed to be important positive outcomes of the pandemic for participants.

Discussion

The current study aimed to explore the effects of the COVID-19 pandemic on university student experience of education, social interaction and mental wellbeing. Participants reported mixed experiences of online education during COVID-19, which seemingly depended on their work ethic. Personal connection was valued in both life and university work, and the need for it was present in a large majority of responses. Furthermore, participants felt disconnected from their universities, which seemed to affect their motivation to study and overall satisfaction. However, while difficulties were prevalent over the pandemic, some participants developed themselves and their social bonds as a result. The *variations in motivation* theme demonstrates the mixed experiences of learning and education throughout the pandemic. Some participants preferred and praised the online learning

approach, mainly due to its freedom and flexibility, while others preferred the more structured in-person lecture approach.

These findings support those present in recent pedagogic literature. For example, online learning is valued by students due to its flexibility and the opportunity to work 'at your own pace' (Dost et al. 2021; Bączek et al. 2021; Harris et al. 2021), but lacks the social aspects and the structure of in-person teaching (Chaturvedi, Vishwakarma, and Singh 2021; Gjerde et al. 2021). Both structure and flexibility seem important to students. For example, Scott-Clayton (2011) suggests that students are more likely to succeed in more structured learning programmes. However, flexibility provides students with the opportunity to self-motivate and organise their own study without an externally provided structure (Deci and Ryan 1987), which can bolster learning. For example, Reeve and Jang (2006) found a .45 correlation between degree of learning autonomy and student success. These findings further support the need for both flexible and structured learning approaches, not just during COVID-19 (and any future events of this kind), but as standard practice.

There are practical implications from this study, which may be useful to stakeholders including HE institutions, students, and academic practitioners. For example, our study can provide evidence-based recommendations for the future of Higher Education. As the qualitative data show, a combination of both in-person and online teaching would be the most optimal method to suit the range of work ethics exhibited by students in the current study and in previous literature. Indeed, prior to COVID-19, this approach had already received promising research support. Wanner and Palmer (2015), for instance, found that over 70% of participants found a blended learning approach useful and enjoyable, which included both in-person and online lectures, as well as virtual tutorials and activities. The qualitative component of this study revealed that students appreciated the structure and social aspects of the live teaching, but also valued the flexibility of the pre-recorded components. This could apply to all education programmes in the future but could be especially useful in the use and creation of online and distance learning programmes. These programmes can be especially advantageous to those pursuing other life goals at the same time as an academic qualification (Borstoff and Lowe 2007), or those unable to access fully in-person education due to disability or chronic illness (Newell and Debenham 2009). Future research, therefore, should focus on examining the unique lived experiences of students with disabilities during the COVID-19 pandemic, to fully understand the affordances and limitations of online teaching methods. Further, future research could also investigate the experiences of other groups of students, including students with caring responsibilities, who may particularly benefit from the flexibility afforded by online teaching and learning (e.g. see Andrewartha and Harvey 2021).

The *significance of personal connection* theme expands upon the social difficulties experienced by students. Participants highly valued personal connection, and presented it as essential for the university experience, with links to their motivation, satisfaction and mental wellbeing. This supports recent research. For example, Gonzalez-Ramirez et al. (2021) found that, after the move to online learning, most students reported their connections to peers (87%), staff (64%) and their community (89%) decreased, as well as their motivation (81%). While this does not demonstrate a causal relationship, it does highlight the severe impact online learning had on both social interaction and motivation. Further research should be conducted to examine the causality of these findings. Student satisfaction also seemingly deteriorated, with participants in the current study disliking the impersonal nature of online education and citing it as a reason for poor learning. However, the relationship between social interaction, student satisfaction, and learning is not clear in the literature. Eom, Wen, and Ashill (2006), for instance, found social interaction to significantly influence student satisfaction, but not perceived learning. However, Kim, Kwon, and Cho (2011) found that interactivity predicted social presence, but not learning satisfaction. While existing quantitative research seems inconclusive, social interaction was still deemed significant by participants in affecting both satisfaction and learning in the current study. Future research should be conducted to clarify the value of peer-to-peer social interaction, as this could be an important consideration when designing both in-person and online courses.

Interestingly, both Eom, Wen, and Ashill (2006) and Gray and DiLoreto (2016) found instructor interaction to have a significant impact on student satisfaction. This was also present in the current research, with participants valuing social interaction with staff, especially personal tutors. The *significance of personal connection* theme describes the benefits of these connections, with one-to-one meetings being appreciated from a social perspective, but also in the context of mental well-being. This also has strong links to the *disconnect between university and student* theme, in which the lack of connection with staff and the university instigated feelings of detachment. This seems to reflect the importance of the teacher-student relationship, and how this was hindered by the pandemic and online learning. The teacher-student relationship can have positive effects on university student satisfaction, knowledge retention and achievement (see review by Hagenauer and Volet 2014). In earlier years of education, positive student-teacher relationships can also support student mental wellbeing, particularly with regards to stress regulation (Anhert et al. 2012). Future research should investigate this in higher education contexts. Additionally, it may be especially important to foster these connections in more impersonal educational contexts. Online learning seems to require more active support from educators (Mandernach, Hudson, and Wise 2013) – frequent interaction with educators increases student satisfaction (Ladyshevsky 2013). Therefore, this relationship should be particularly supported and cultivated post-pandemic, but also in online education contexts.

The *disconnect between university and student* theme not only continues to highlight the importance of student-teacher interaction, but also presents the issues arising from the lack of communication between universities and students. Students felt alienated from their universities and courses and began to feel that their learning no longer mattered. This is particularly evident in the findings of Mulrooney and Kelly (2020), with students reporting insufficient communication and guidance from their university, as well as increased feelings of detachment, and a decreased sense of belonging. Furthermore, the disconnect from the importance of learning reported in the current study may be closely related to the level of social interaction students experienced. For example, Thoman, Sansone, and Pasupathi (2007) found that social interaction can increase interest while engaging in an activity but can also impact interest and motivation after completion of the activity. This may suggest that social interaction could promote motivation and interest in students' area of study, which may explain the difficulties students experienced in feeling connected to their universities, and with regards to the significance of their study. Therefore, dialogue around students' respective areas of study should be encouraged both within lessons and other learning contexts, but also outside of these sessions to increase interest and, therefore, connectedness to both course and university.

The final theme, *development through adversity*, describes the positive, and perhaps unexpected, outcomes of the pandemic and its restrictions. Some participants reported creating stronger social bonds as a result of isolation (e.g. with family, roommates etc.), while others reported self-development and self-reflection. The enhancement of social bonds through the pandemic supports previous research. In a study by Filho et al. (2021) the increased time spent with family, roommates and/or friends was rated as positive by over 60% of participants. These findings could be linked to the desire for social bonding in response to emergency. Walker (2020) suggests that emergencies promote cooperation and bonding, even between strangers, and increased togetherness and belonging in response to emergencies is associated with lower academic stress (Procentese et al. 2020). Therefore, the social bonding experienced by the participants in the current study may be explained by the need for social bonding and community shown to occur in response to emergency situations. This need serves to protect against negative affective experiences.

Participants in the current study also experienced self-development during the pandemic, including learning about themselves, or working to improve their health and work. Self-development during the pandemic has been previously reported in the form of taking up new hobbies or learning new skills (Rahiem 2021), as well as improving self-care and/or health (Jenkins et al. 2021). While few participants of the current study reported new hobbies or skills,

some engaged in positive health behaviours, namely physical activity. This supports previous research into coping strategies used by students during the pandemic. Wasil et al. (2021), for instance, found that 50% of students reported physical activity as a common coping strategy. This links to the large body of research showing that physical activity can help attenuate negative emotion (Bernstein and McNally 2017), and prevent poor mental health (Purnomo et al. 2017). Physical activity can be a valuable coping strategy for students during stressful periods like the pandemic, but also during exam periods (Wunsch, Kasten, and Fuchs 2017). Furthermore, participants reported increased adaptability, self-awareness, ability to overcome adversity and greater appreciation of life. This highlights the important role of self-reflection and personal growth in coping, but also in moving on from the pandemic. Self-reflection could be a simple coping strategy for students (Hathaway and O'Shields 2021).

Overall, social factors seem to underpin a large majority of the findings in the current study. This may give insight into the aspects of university students value the most. However, it could also reflect the unique circumstances created by the COVID-19 pandemic. When considering the three areas of interest in the current study, social factors seem to have been the most drastically affected. Education at university continued over the pandemic despite undergoing rapid and drastic changes. Mental wellbeing did decline in some (e.g. Frazier et al. 2021), but remained the same, and/or improved, in other samples (e.g. Hamza et al. 2021). Meanwhile, social interaction was majorly restricted by pandemic restrictions. Most universities restricted access to campuses and learning was entirely conducted online with limited interaction with peers. Social isolation restricted interaction with those outside of the household. Interestingly, the pandemic may have highlighted an aspect of the university experience that is usually always present, and so when removed, it severely impacts student life. The significance of social aspects of university, including social support (e.g. Wilcox, Winn and Fyvie-Gauld 2005), belonging (e.g. Meehan and Howells 2018), and friendship (e.g. Buote et al. 2007) has a plethora of existing research support, with links to overall student wellbeing, satisfaction and learning. The restriction and/or removal of these factors over the pandemic, therefore, emphasised their significance in the university experience. Social events and opportunities for social interaction should be facilitated by universities as the pandemic diminishes to, at least partly, compensate for its negative effects on student social life.

Limitations

While the current study does contribute to the existing literature by supporting previous research and providing novel directions for future investigation, its limits should also be acknowledged. As is the case with many studies exploring the effects of the pandemic, the responses of participants are retrospective and rely on participant memory. There was an attempt to counteract this by providing topic suggestions and encourage participants to write a few sentences per question, but nevertheless the reliance on memory remains. For instance, many responses pertaining to mental wellbeing in particular seemed to only reference the prompts provided, and few participants expanded their responses beyond the topics suggested. This may have also been due to the questionnaire format of the current study. Interviews allow a more flexible and adaptable method of questioning, in that participant responses can be followed up on and expanded (Stroh 2000). However, the use of questionnaires allowed for a large sample of data to be collected, with participants from multiple universities contributing. This produced a larger, richer and broader data set, allowing for a more comprehensive and nuanced analysis. Nevertheless, interviews could be conducted to follow up on the findings of the current study. This may also be useful, again, to expand upon the mental wellbeing factor.

Furthermore, a second limitation is the influence of demographic factors on students' experiences. While we collected demographic details such as gender and ethnicity, other demographic factors, such as whether a student is a home or international student, whether the student has a disability, and the type of course and year of study, may have influenced

students' experiences of online learning. Future research, therefore, could explore the influence of additional demographic factors to fully understand the potential benefits of online learning.

Conclusion

The current study aimed to explore student experiences of education, social interaction and mental wellbeing over the COVID-19 pandemic, using a reflexive and student-centred methodology. Findings revealed mixed experiences of online education and highlighted a combination of in-person and online learning as a useful method to cater to the range of student needs, both during the pandemic but also in the future. The importance of social interaction and personal connection was evident, and social aspects of university were presented as essential to a positive university experience. Social interaction seems significant in impacting both learning and mental wellbeing, most notably with regards to motivation and stress. However, the relationship between social interaction, satisfaction, and learning should be clarified in future research. The teacher-student relationship was an important factor in supplementing the lack of personal connection and supporting student mental wellbeing. However, university communication and support seemed to be insufficient and ineffective, leading to feelings of detachment and disconnect from the university. The interaction between university communication and mental wellbeing should be explored further. Universities should also consider collaborating with students in creating support resources. Finally, the hardship experienced over the pandemic did result in some benefits for students, including the development of social bonds, as well as development of self-awareness, resilience and coping. Social interaction and bonding may be a useful coping strategy for students during times of difficulty, as well as an effective protective factor against poor mental wellbeing.

Finally, our paper also evidences the value of student-centred pedagogical research, which responds to the notion that students should be more *involved* in the creation of university policy and practice, especially around education (Cook-Sather 2002). Therefore, there may also be a need for academic institutions to consider the student perspective and collaborate with students in creating support resources, especially during turbulent experiences, such as the pandemic.

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