"I feel like me as a person has been put on pause": undergraduate student experiences of online learning

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Abstract

The COVID-19 pandemic transformed the landscape of higher education, compelling institutions worldwide to swiftly adopt remote learning modalities. This study delves into the lived experiences of undergraduate students amidst the unprecedented shift brought on by the pandemic. The aim was to explore undergraduate students' experiences of remote learning during the COVID-19 pandemic. Data were collected in two focus groups with nine undergraduate students from a London university recruited as part of a larger, mixed methods study exploring the effects of COVID-19 on undergraduate academic stress, motivation and coping over time. Students described the effect of lockdown and the shift to online learning on academic stress, motivation and student experience. Findings showed that both individual and contextual factors influenced students' perceived adaptation to online teaching and learning stemming from the closure of higher education institutions. Institutions will want to take note of the importance of (in-person) interaction on campus between students and staff, alongside the role of potentially positive aspects of online teaching when used in addition to face-to-face teaching. These insights may be of particular interest in the context of the wider ongoing transformation of higher education provision.

Keywords

Learning, wellbeing, motivation, academic stress.

Introduction

The COVID-19 pandemic occasioned a sudden, rapid pivot to online learning in Higher Education Institutions across the globe (Marinoni, Land & Jensen, 2020). This experience was enormously challenging for students (Aucejo et al., 2020), with significant detrimental impact both academically, on student learning and motivation (Zwiener-Collins, Fridkin & Bover-Fonts, 2020), and on wellbeing (Cao et al., 2020; YoungMinds, 2020). Specifically, research has highlighted a range of negative psychological outcomes, such as increased levels of reported anxiety (Gómez-García et al., 2022), loneliness (Essadek & Rabeyron, 2020), academic stress (Capone et al., 2020) and poorer life satisfaction (Gómez-García et al., 2022). Similarly, studies reported attention problems (Masalimova et al., 2022), decreased motivation (Fridkin et al., 2023), and poorer concentration (Bashir et al., 2021). These findings demonstrate that some students in higher education experienced the pandemic in a variety of negative ways. The impact of the pandemic remains relevant for Higher Education research not only because it had lasting impact on delivery modes, forms of assessment and the integration of technology, but also because of possible sustained psychological distress (Allen, Kannangara & Carson, 2023), as well as potential wider negative consequences, such as delayed graduation, fewer job opportunities and reduction in future earnings (Aucejo et al., 2020).

Given this range of long-term implications, continued research exploring student, faculty and institutional responses to the pandemic can support our understanding of how these impacted, and continue to impact, student learning, and wellbeing. This need is further amplified by the observation that the pandemic has altered operating modes in some institutions, which continue to deliver at least some sessions remotely, as well as the likelihood of future pandemics, and the broader context of economic, environmental, educational and technological uncertainty (Bauman, 2007; Devlin & Samarawickrema, 2022).

Understanding, therefore, how students and institutions experienced teaching and learning during this time remains hugely relevant as academic institutions continue to navigate the 'post-pandemic' landscape, and what this means for higher education provision in the future (Boshoff-Knoetze et al., 2022; Brink, 2023). Our study aims to develop this understanding by drawing on students' personal accounts of their experiences as undergraduate students having to manage the extraordinary switch to online learning against the backdrop of a global pandemic. As such, it contributes to the literature by providing a rich, in-depth account of students' experiences, expressed in their own words.

Literature

Motivation

The relationship between academic motivation and achievement is well-documented, where high motivation is typically understood to lead to academic success (e.g. Taylor et al., 2014; Wigfield, Tonks & Klauda, 2009). Indeed, self-determination theory informs us that our wellbeing and our motivation are at their best when there is harmony across our basic needs of autonomy, relatedness and competence (Deci & Ryan, 1985). The Covid-19 pandemic disrupted these three areas: students were forced to learn via an unfamiliar method centred on technology, and were cut-off from

traditional university life with its connections to peers and academic staff. Moreover, this novel situation, arguably instigated a need for higher levels of intrinsic motivation and self-efficacy in learning approach (Chiu & Hew, 2018).

Even during 'normal' learning situations, academic motivation is sensitive to a range of factors, such as agency (Patall, Cooper & Robinson, 2008), negative emotion (Pekrun et al., 2017) and self-efficacy (Walker & Greene, 2009), and undergraduate students already report high levels of anxiety, depression and stress (e.g. Wang & Zhou, 2020). Unsurprisingly, evidence shows that academic motivation was significantly negatively associated with factors triggered by the Covid-19 pandemic, such as anxiety (Baloran, 2020; Camacho et al., 2021), loss of sense of belonging to the university and social disconnection (Ang et al., 2022; Marler et al., 2021). However, the effects on motivation fluctuated (Fridkin et al., 2023) and therefore a more nuanced understanding of the factors that affected motivation during this time can help us understand when and why students are most likely to need support.

Mental health

Even prior to the COVID-19 pandemic, concerns surrounding the mental health of young people have been increasing (Keshoofy et al., 2023; Pedrelli et al., 2014). Students in higher education have been identified as groups particularly vulnerable to psychosocial problems (Sharp & Theiler, 2018). A 2022 Student Minds survey reported that 57% of respondents self-reported a mental health issue, while 36% reported poor mental wellbeing, and 27% said they had received a formal diagnosis for a mental health condition (Student Minds, 2023). The evidence of the pandemic's substantial impact on student mental health is therefore not surprising. In the UK, 74% of students reported that the pandemic had negatively impacted their mental health (Frampton & Smithies, 2021). The COVID-19 International Student Well-being Study carried out across 110 institutions in 26 countries in 2020 reported that education and workplace closures, and lockdown restrictions, were correlated with students' depressive symptoms during the COVID-19 pandemic (Buffel, 2022). It has also been argued that academic stress might intensify during severe and unforeseen external events, like the COVID-19 pandemic (Mosanya, 2021). Indeed, emerging research suggests that many students experienced increased academic stress and feelings of lack of control and loneliness induced by enforced social isolation (Ellard, Dennison & Tuomainen, 2022). These negative impacts were particularly prevalent among women, mature students and groups typically underrepresented in higher education, such as BAME, LGBTQ+, and care-experienced students, and those from lower SES or migrant backgrounds (De Bruyn & Van Eekert 2023; Paton et al., 2023; Robertson, Mulcahy & Baars, 2022).

Social connection

The period of enforced social isolation also triggered a time of loneliness (a subjective feeling associated with a perceived lack of time spent with others (see e.g. Peplau & Perlman, 1982)) and social disconnection (typically an objective paucity of meaningful, social relationships (see e.g. Poscia et al., 2018)). Loneliness and social disconnection are significantly detrimental in many ways, and potentially pose a risk for university students as they are linked to high levels of stress and anxiety (Santini et al., 2020), maladaptive coping styles (Fuente, Chang, Cardenoso & Chang, 2018)

and impaired cognitive function (Lim, Eres & Vasan, 2020). Moreover, the relationship between loneliness and depression is reciprocal, such that each amplifies the other, and so can have a potentially long-term harmful effect (Hawkley & Cacioppo, 2010). It is also likely that the effects of loneliness and isolation were specifically amplified for university students during the pandemic. For example, young adulthood is a time associated with identity formation through social connection and independent exploration (Arnett, 2000) and this was abruptly curtailed.

Whilst university students are already at higher risk of experiencing loneliness compared to others (Ellard, Dennison & Tuomainen, 2022), international students are a particularly vulnerable group. Evidence indicates that international students are at risk of social disconnect due to feelings of loneliness on arriving in a new country to study (Danbon et al., 2023), that they often experience periods of anxiety, homesickness and depression (Mesidor & Sly, 2016) and already experience difficulty in establishing cross-cultural friendships (Bryne et al., 2019). A clearer insight into how social connections or lack thereof relates to other variables and therefore their potential longer-term effects is central to our understanding of student wellbeing. Furthermore, such knowledge of who experienced prolonged loneliness and disconnection, can also help universities and similar institutions understand who may be at risk and where to target support.

Institutional support

Institutional support for students is vital for both wellbeing and academic success, particularly in the context of COVID-19 and its aftermath (Plakhotnik et al., 2021). However, a report published by the Sutton Trust (Montacute & Holt-White, 2021) indicated that student satisfaction with institutional support was relatively low, with only half of students happy with the pastoral support offered by their institution, and almost a third of students (28%) unsatisfied with support available. Nonetheless, where high-quality university facilities such as study spaces, financial support and peer support systems were available during the COVID-19 pandemic, these are known to be beneficial for students' mental wellbeing (Van Eekert et al., 2023).

The quality of institutional support, therefore, is a key tenet of student welfare and will be significant in the transformative impact of COVID-19. Given that students enrolling at HEIs 'post-COVID' have completed secondary level education under significant restrictions and disruption, and may be substantially less prepared for the transition to tertiary education (Pownall, Harris & Blundell-Birtill, 2022; Spears & Green, 2022), it will remain significant in the future.

In summary, mental health has been a growing issue within this group (Campbell et al., 2022): Existing literature suggests that these issues were exacerbated by the restrictions and disruption of the COVID-19 pandemic, and calls have been made for research exploring impacts on educational progress and mental health, as well as the ways in which students are attempting to adapt to the new learning environment (Chen, Wang & Yang, 2024; Grubic, Badovinac & Johri, 2020). It is important therefore that we aim to understand who is affected and in what ways, and to ensure institutions understand how to best support their students both in this and broader contexts.

We contribute to the existing literature in two main ways: Firstly, we conducted in-depth qualitative research exploring experiences of online learning with students as part of a larger, mixed-methods

study exploring the effects of COVID-19 on undergraduate academic stress, motivation and coping over time (Fridkin et al., 2023). The approach allowed us to collect complementary data allowing us to build a picture of the in-depth experience of students, as well as patterns of wellbeing across a broader cohort (Almalki, 2016). Secondly, this qualitative study was conducted at a time when students had experienced online learning across a full academic year. This allowed them to reflect on a range of aspects of the learning experience, including teaching, assessment, and institutional support, their responses to these, as well as how these may have changed over time.

Method

The current paper outlines the qualitative element of a larger, mixed-methods study exploring undergraduate students' experiences of remote learning during the COVID-19 pandemic (see also Fridkin et al., 2023 for analysis of the quantitative element of this study). Researchers adopted a social constructivist perspective for data collection and analysis which supported a bottom-up, inductive approach to identifying themes within the data. This approach allows for social construction of knowledge and the shaping of experiences through the prism of social and cultural environment, and facilitates rich, context-dependent narratives (Creswell, 2013). A COREQ (Tong, Sainsbury & Craig, 2007) has been completed and is included in Appendix 1.

Setting and participants

Qualitative data were collected from students attending a large urban university in London. This study focused on one faculty with 5 UG programmes in the disciplines of social sciences and education. The faculty has a large international intake (77% overseas) of predominantly (83.1%) female students. All courses were fully online from March 2020. The sample comprised nine female-identifying (two white British, one white European, one South East Asian, two white American, and three East Asian) students across two focus groups, held in May of 2021. Participants were all aged between 19 and 22 years old. The sample size was not selected with ideas of data saturation or information redundancy in mind, but with the more pragmatic aim of conducting an exploratory study to capture, in a non-exhaustive way, the lived experiences of students at a particular point in time (Braun & Clarke, 2021). The researchers involved in the study were, at the time of the study, lecturers at the same faculty. All three researchers are female, white (British /European), and hold PhDs in the Social Sciences. Although they were employed at the same faculty, they did not know any of the participants prior to the focus groups.

Data collection and analysis

Data were collected in two focus groups with undergraduate students from across the faculty. Focus groups were chosen over interviews as they provide a unique opportunity to facilitate exploration of the beliefs and perceptions of participants (Greenbaum, 2003). They allow for the collection of rich data in a social environment, the interactive nature of which can uncover additional insight in a less threatening environment than one on one interviews (Morgan, 1998; Onwuegbuzie et al.,2009)

Participants were recruited as part of a larger, mixed-methods study. Students were invited via email by programme administration teams, the faculty's well-being newsletter, and their virtual learning

environment to participate in a survey administered online at the end of the Autumn Term. In the survey, students were asked to indicate their interest in participating in a focus group, and ten students were randomly selected and invited to participate in the focus groups. Of the ten students invited, nine decided to take part. Participants were provided with an information sheet outlining the aims and focus of the study, and asked to provide informed consent for participation. Topic guides for focus groups (Appendix 2) were developed drawing on both research questions and findings from the second wave of a repeated cross-sectional quantitative survey administered across the academic year 20-21 as part of the larger study. Focus groups were carried out via a secure online platform[1] (Zoom, using an institutional licence), each lasting approximately 60 minutes, and were digitally recorded (audio only) and transcribed verbatim using the automatic transcription facility in Zoom, and checked and corrected manually. Groups were led by the first and second authors, with the third author and a further associate attending as observers, all authors had prior experience in conducting focus groups.

Transcripts were pseudoanonymised prior to analysis and participants were differentiated using year of study and pseudoinitials. Transcripts were not returned to the participants for comments or correction. Transcripts were uploaded for analysis in NVivo 14 software. Data were analysed using inductive reflexive thematic analysis (Braun & Clarke, 2006; 2012; 2022). Reflexive thematic analysis allows researchers to organise data and identify, examine and interpret patterns within their data, whilst acknowledging the active role and subjectivity of the researchers as an integral part of this process (Braun & Clarke, 2006; 2022). It focuses on capturing commonalities within a broader dataset rather than on individual experience, enabling researchers to explore shared meaning and experience amongst groups of participants, and recognising that the researchers necessarily bring their own interpretation to the data (Braun & Clarke, 2012; 2022). Specifically, we acknowledge the role of our own experience teaching online and interacting with students during the pandemic in shaping our interpretation.

Inductive thematic analysis is a data-driven or bottom-up approach, whereby themes are derived from the data itself rather than coding the data using a priori structures or concepts (Braun & Clarke, 2012). Following careful reading of the transcripts, initial semantic coding was carried out by the first author, and codes were then discussed and refined with the second author. Themes were then generated adopting a latent approach to coding, in which semantic codes were used to develop themes which captured the underlying meanings within the data (Braun & Clarke, 2021). We drew on the assumption that reflexive thematic analysis is about interpretation, rather than a positivist approach to 'discovering' themes which objectively exist.

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[1] Although there is a possibility that non-participants were present in the same space as the participants during the focus group, there was no involvement or interference of non-participants in the discussion.

Findings

This section presents the findings from the focus groups, split into five overarching themes each divided into subthemes. Themes are: 1. Effects on academic motivation (subthemes: Changes in motivation; Factors associated with motivation; Environment); 2. Impact on mental health (subthemes: Feelings of missing out; Perception of constant pressure; Anxiety becoming less acute; Online learning or technology; Competing stresses); 3. Feelings of disconnectedness (subthemes: Loss of interaction with the academic community; Physical distance / location); 4. Positive factors around remote learning (subthemes: Technology; Work-life balance), and 5. Perceptions of institutional and staff support (subthemes: Positive institutional experience; Negative institutional experience; Staff relationships and support).

Theme 1: Effects on academic motivation

The first theme identified related to student academic motivation and how students perceived their engagement in the context of the pandemic and online learning. Three key subthemes were generated: 'Changes in motivation' levels across the academic year; specific 'Factors associated with motivation', and the role of the 'Environment' in which students found themselves.

Changes in motivation

Changes in motivation was a key theme of the focus groups. In discussion of motivation, all students described shifts in their experience over the course of the academic year. Students spoke of the relationship between novelty and motivation at the start of the academic year, with enthusiasm for online learning starting at a relatively high level.

> *"I was quite optimistic because it seemed like there was a lot of work and a lot of effort put into making things online and I was a bit excited and I was bit into it" (AJ, Year 2)*

However, as the year progressed, this subsided and gave rise to a drop in engagement, brought on by various factors. Students spoke of the change experienced as the year progressed and online learning continued, describing it as "*taxing*" (*AJ, Year 2*), "*disheartening*" (BK, Year 3), and noting that *"it's dragged on"* (DM, Year 2). Several participants described this as a progressive process.

> *"I was really unproductive like few days in a week and, like and would be efficient, efficient doing things like the first few weeks at each term and like not being very productive in the following weeks" (CL, Year 3)*

For many participants, this decline in motivation meant that they were unable to keep on top of workload and had to avail of facilities such as extensions, often for the first time.

> *"I've missed a few deadlines for the first time in my life" (EN, Year 2)*

Factors associated with motivation

Students identified some specific factors behind these shifts in motivation. Workload and the perceived monotony of online learning were common concerns. Students reported struggling to manage workload due to lower motivation, so that maintaining progress became more effortful.

> *"there's definitely this aspect of monotony and of like having all of these responsibilities online, everything's online" (EN, Year 2)*

Students also reported a negative impact on their perception of academic ability, particularly in terms of their ability to assess their performance. Those reflecting on their experience in the first year, particularly, had no track record at university level to use as a touchstone, and felt most adrift.

> *"I didn't kind of know what my performance level was… I didn't receive enough feedback overall to know what I could expect for work of this level... I was just very anxious and stressing out even like thinking catastrophically that I won't pass" (HQ, Year 2)*

Environment

Surroundings often played a role in motivation decline, with students citing screen fatigue and being stuck in the same place as issues affecting ability to engage. Others were grappling with time zone differences, or being forced to move as travel restrictions changed, which made working more difficult.

> *"It just makes everything so much harder when you have to adjust to a new place… because the obligation is still there, no matter what you're doing" (EN, Year 2)*

These findings all reflect an underlying theme of motivation for study fluctuating over time, as students experienced a range of levels of necessary effort and engagement to keep on top of their studies. This manifested in various ways including disengagement, struggling to meet deadlines, and feeling confined by the physical environment.

Theme 2: Impact on mental health and wellbeing

A common thread in discussions was the impact of the situation on participants' mental health and wellbeing. While all participants reported experiencing low mood at times across the year, some also spoke of how the pandemic and its consequences had led to more significant psychological challenges.

> *"My mental health has been suffering this year because I'm a social person and I just felt like yeah it was definitely tough, and I felt very stressed" (BK, Year 3)*

Four subthemes were generated under this theme of impact on mental health and wellbeing. These were 'Feelings of missing out', 'Perception of constant pressure', 'Anxiety becoming less acute', the role of 'Online learning and technology' in mental health and wellbeing, and experience of 'Competing stresses'.

Feelings of missing out

For many, these struggles were closely tied to perceptions around what they had missed out on.

> *"When you start comparing your experience to what it should have been. That's just so depressing" (AJ, Year 1)*

Participants grieved for the ideal university experience, the expectations of freedom and independence which were taken away by the pandemic. Many were forced to return home to study

remotely, and all were denied the opportunity to participate in university life in the way they perhaps expected.

> *"It just feels like University is supposed to be this process where you kind of grow into yourself and you, like a lot of self-growth and development, and like, experiences and social experiences, especially, um and it just feels like that's been put on pause and like me as a person has been put on pause" (EN, Year 2)*

Perception of constant pressure

Participants referred to feeling overwhelmed, being unable to concentrate, and even dreaming about their studies. The blurring of the distinction between work and leisure caused participants to perceive work as 'looming' over them constantly, resulting in both mental and physical impacts. This perceived relentless pressure and inability to disconnect from academic studies contributes to a sense of overwhelm reflected in poor mental and physical wellbeing, with students experiencing low mood as well as physical manifestations of stress.

> *"My problem has been maybe depression, mostly and there's just so much guilt that racks up because you can always be doing something, but you're not and you just start feeling bad about yourself in a way, for you know not putting that tiny little effort in to open your laptop and put the tab open" (GP, Year 2)*

> *"Sometimes I would feel really, really anxious and then I would have like a breakout you know it's really dramatic I would have even like hyperventilate, I would burst into tears" (FO, Year 3)*

Anxiety becoming less acute

Some participants felt their anxiety was declining over time. However, this decline was not described as reflective of an improvement in wellbeing, but rather that they had become habituated to a chronic state of anxiety.

> *"Maybe the anxiety levels are just I've been living with them for so long now that they don't seem as bothersome or like it's just part of the normal so they're not as acute but they're definitely still there" (GP, Year 2)*

For others, the lessening of anxiety was related to disengagement from their studies.

> *"I definitely think my anxiety is getting better now compared to the last term, but also, I feel like I'm kind of withdrawing from the work so that maybe that's the reason why I'm feeling a bit less anxious" (FO, Year 3)*

Overall, students tended to report a substantial negative impact on mental health, whether this be exacerbation of existing issues, or emerging ones. These feelings were often overwhelming, interfering with both academic work and day to day functioning. While for some, issues decreased over time, this appeared to be more reflective of detachment from the causes of stress rather than adaptation.

Online learning or technology

Engaging with the technology associated with online learning was also a source of stress. For some, this stemmed from being thrust into what they saw as socially awkward situations with peers they had rarely, if ever, met face to face. Students reported feeling self-conscious about how they might present in these settings, and taking steps they would not have previously to try to alleviate this.

> *"I feel like attending … online classes is more anxiety-inducing for me than attending the regular ones. I'm more self-conscious about the way I look, for example" (HQ, Year 2)*

Being asked to contribute to discussions in these settings was also a source of anxiety and breakout rooms were particularly unpopular:

> *"Every time like I was afraid of being wrong like with stranger or the things I don't know" (CL, Year 3)*
>
> *As soon as you hear the word breakout rooms my heart just sinks to the bottom of my soul" (DM, Year 2)*

Students did not report any particular issues with accessing online learning, or use of technology, and as noted earlier, often appreciated the opportunity to revisit content, but rather found the disconnection of the medium itself a source of stress.

Competing stresses

A major issue for participants was balancing the various aspects of their lives with their studies in the context of online learning. Not all stresses were directly related to online learning, but all stemmed from circumstances resulting from the pandemic and bled into participants' university experience.

Some of the stress for participants resulted from balancing various academic pressures. A common observation was how difficult this was to manage the various threads of academic work without the structure of attending university classes in place.

> *"I didn't really have mental breaks since September, because there's always stuff to do" (HQ, Year 2)*

Aside from the academic pressure, participants were also dealing with myriad issues outside university life with work, home, family, and world events.

> *"because of like other stuff that's happened, which isn't really related to academics [...] makes you focus your attention on other stuff and maybe your priorities lie elsewhere for a while" (AJ, Year 1)*
>
> *"When I went to the UK there was quarantine and the hotel and then also finding a new place so two new changes there so with every new place I moved to it just felt like a whole process of getting myself used to like a new schedule and new time zone, even though it wasn't a new time zone but kind of like readjusting to everything" (EN, Year 2)*

Students also spoke of the challenges of managing academic pressure and workload alongside a sense of stress around the pandemic itself. Together, these examples reflect the diverse sources of stress that students were experiencing and the complex issues participants were navigating both

inside and outside academic life. All of these contributed to increasing stress levels and made engaging with studies challenging.

Theme 3: Feelings of disconnectedness

Perhaps unsurprisingly, as well as the loss of academic interaction, loneliness and detachment more generally were commonly reported. Participants felt adrift without a sense of connection to the university community.

> *"I felt like I had no reference like, am I going the right way? Is this what is expected from me?" (BK, Year 3)*

Two key subthemes were generated in this area – 'Loss of interaction with the academic community' and 'Physical distance / location'.

Loss of interaction with the academic community

A key concern was the difficulty engendered by the loss of opportunities for both formal and informal in-person interaction, with peers and teaching staff.

> *"Not having that kind of cooperative learning environment, you know, being in the library with your friends and 'how have you done this? yeah I've done it that way', and kind of helping each other" (BK, Year 3)*

The absence of interaction with staff also impacted on learning as opportunities for informal contact were unavailable or more difficult to access

> *"I feel like when you're in seminar, and [...] there are questions that pop into your head [...] they're not really big questions, but it makes sense for you to ask them and kind of get more of a background on the material and you feel more confident about what you're learning" (BK, Year 3)*

These findings suggest that the shift to online learning might have broader implications for students' sense of belonging and ability to build relationships with the academic community. Where students experienced an acute loss of informal interactions and opportunities to develop relationships and engage in collaborative learning in a physical space.

> *"It would make me feel better to know that other people are struggling [...] that just makes me feel like I'm not alone" (GP, Year 2)*

Physical distance / location

Finally, participants' sense of disconnectedness was exacerbated by the physical distance. For some students, this was being in the UK, but at home, whereas for others they were distanced by continents and time zones.

> *"I'm in China at the moment, so there's eight hours' time difference. I feel like it wouldn't be a huge problem as I'm pretty much a late night person, but then it just it gets to you and you're just couldn't live like this anymore" (FO, Year 3)*

Theme 4: Positive factors around remote learning

Nonetheless, it was not all negative - some students coped very well and even reported enjoying some aspects of online learning, particularly opportunities to revisit lecture content which enabled students to feel more able to engage with learning. Positive factors were identified in two main areas – 'Technology' and 'Work-life balance'.

Technology

Technology was found to be particularly helpful in terms of consolidating learning, and something that many participants hoped might persist post-pandemic to complement traditional in-person teaching.

> *"Being able to revisit the content was actually quite helpful, so that's the other side of things" (HQ, Year 2)*

Work-life balance

A number of students also highlighted how the shift to online learning could facilitate a better work life balance and enjoyed being able to balance university commitments with other activities.

> *"I'm quite an introverted person anyway so staying like being at home for this year I haven't actually minded that much and, and I feel like I have a lot of motivation to do things I enjoy so now that I'm not going out, I'm not going into uni" (DM, Year 2)*
> *"I got more time with my family and friends" (CL, Year 3)*

However, some participants felt that the lack of distractions or distinction between university work and other activities, meant that academic anxieties were heightened and that there was no escape from work.

> *"because of like everything being online, when something stressful happens, it feels like it can take over your whole life because your life is stunted" (AJ, Year 1)*

Theme 5: Perceptions of institutional and staff support

The final theme generated was the support students received from individual staff members and the wider institution. Participants touched on a range of issues within this theme, from how workload was managed, to communication and interactions with individual staff members. Three key subthemes were generated from student perceptions of institutional and staff support. These were 'Positive institutional experience', 'Negative institutional experience', and 'Staff relationships and support'.

Positive institutional experience

Students had many positive experiences to report, and some noted they were happy with the university response to the pandemic:

> *"I mean the uni responded really well, I think I felt really supported last time, even though it was already quick changes" (BK, Year 3)*

Several students also expressed gratitude for mitigations put in place by the university, such as changes made to extenuating circumstances policies, synchronous teaching sessions, and remote extra-curricular activities.

Negative institutional experience

Nonetheless, students also had various negative experiences to report. Some felt that there was insufficient acknowledgement of the issues students were facing outside of study:

> *"I got really frustrated with the university, even though you know they're doing their best they can, but I was like 'how am I supposed to, you know, how is anyone expected to do all of this uni work next to what is actually happening in the world'" (BK, Year 3)*

Capacity in pastoral provision provided at an institutional level was also subject to criticism. Although students acknowledged the enormity of the task facing support teams, they felt that often their needs were not being met which was a source of frustration and anxiety:

> *"On the student support and wellbeing team I'm sure that they are completely overwhelmed with the amount of requests that they're getting, but I've reached out when the depression was getting tough and … scheduling was not easy, I mean the whole process was not easy…it just didn't seem like a very supportive environment to tell you the truth." (GP, Year 2)*

Staff relationships and support

However, while students expressed frustration with some of the wider university policies, their perceptions of staff support at an individual level were overwhelmingly positive.

> *"If you explain your situation, people were always very welcoming and like happy to help, which was really nice" (BK, Year 2)*

Although they felt it could be at odds with the demands of the programme, which leads to frustration:

> *"feels like there's a rift so the lecturers, are all really, really willing to help and really happy, but then there's this overall system, which means that you still have to do the readings and you still have to do everything… we can tell that everybody's trying really hard and I think that's also something that kind of makes us a little more frustrated because it feels like you know I don't have anyone to blame" (EN, Year 2)*

Overall, students felt that both the university and individual staff were doing all they could to support them. However, they were concerned that gaps in support infrastructure and conflict between maintaining academic progress and dealing with external stress occasioned by the pandemic had added to the difficulty they were experiencing.

Discussion

The sudden and unprecedented changes to Higher Education teaching during the Covid-19 pandemic have had a substantial impact on students' academic motivation, stress, and mental health. This study set out to explore students' personal experience of online teaching and learning to develop an enriched understanding of how they were affected by this switch through first-hand accounts recorded at that time. Our thematic analysis has highlighted how students perceived these changes. We have identified a number of key findings which contribute to our understanding of the student experience based on insights from their own perspectives, and how institutions might work to address these issues. We find that increased levels of stress and feelings of disconnectedness appeared to be key themes of the discourse. While students also reported on positive aspects of online learning, such as the possibility to revisit content and support of teaching staff (Gajardo, Lobo

de Diego, Campos Cancino & Díez-Gutiérrez, 2024), they experienced the implications as predominantly negative: the participants described how the monotony of online learning led to fatigue and that they were overwhelmed by the competing stresses of studying amidst a pandemic. Heightened levels of stress and its negative impact on motivation were particularly evident during the second term. This is perhaps not surprising given that it coincided with both the reintroduction of restrictions and release of summative feedback and grades where students were beginning to see impacts on academic success.

However, perhaps even more poignant were the feelings of loneliness and disconnectedness from their peers and their studies described by the students. The informal interactions on campus that help students navigate their studies and contextualise their experiences during normal times were not possible during online learning, a finding echoed elsewhere (Gajardo et al., 2024). The focus groups showed how students struggled to make meaningful connections with their peers and that they found it more difficult to assess their own performance. These findings reflect existing research that has identified loneliness and social disconnection as an immediate outcome for university students during the pandemic (e.g. Leal Filho et al., 2021; Lee et al., 2021; Weber et al., 2022; Werner et al., 2021). Such decreased social interaction and isolation has been highlighted as a source of anxiety and stress for university students (Son et al.,2020) as well as lowering resilience (Chen & Lucock, 2022). Overall, students felt they missed out on the "normal" university experience, which impacted both their academic motivation and their mental health. Indeed, the findings suggest, in line with existing research, that student mental health was at risk during the pandemic (Cao et al., 2020; Kaparounaki et al., 2020; Li et al., 2021; Odriozola-González et al., 2020), particularly for those with existing mental health vulnerabilities. At the same time, the support offered by the institution to help students cope was not always enough: Although the students appreciated the efforts of individual members of staff, some felt that institutional support structures were insufficient.

It should be noted that participants were drawn from one faculty that is both disproportionately female, and international, so we suspect that the findings underestimate the actual impact. Furthermore, those students who were able and willing to participate in the focus group are likely amongst the more motivated and proactive students. In addition, whilst the purpose of this study was to better understand the student experience of the switch to online learning during the pandemic, it should be acknowledged that other potential factors which did not emerge in our data might contribute to anxiety, academic stress and motivation and mental health. A study which captured for example the views of male and/or LGBTQIA+ students, for example, may offer additional insights. Existing research suggests that, for example, gender or sexual minority stress has exacerbated mental health issues for LGBTQIA+ students during the pandemic and beyond (Salerno et al., 2020).

We do not suggest that these findings should be considered as capturing an exhaustive picture of student experience of online learning during the pandemic. Rather our data provides an insight into the lived experience of an international and ethnically diverse group of undergraduate students and remote learning, which may be valuable in highlighting ways in which we might better support students in the future. Even with the end of pandemic restrictions and a return to face-to-face teaching, these findings reflect issues which will continue to be relevant post-pandemic in terms of student experience, wellbeing and motivation - in particular, as some institutions continue to deliver at least some sessions remotely. They show the importance of (in-person) interaction with teachers

and peers as part of their university experience and that being on campus, at least for some of the learning, is vital for many students. At the same time, the experience highlights the positive aspects of online teaching/ interaction when used in addition to face-to-face teaching. Students enjoyed the ability to revisit content in their own time, and some also valued the flexibility of online interaction, a mode which arguably lowers the barriers that might keep students with competing responsibilities (e.g., childcare), disabilities, or those with mental health issues from attending otherwise. Our findings also highlight questions which will continue to be relevant even post-pandemic in the rapidly changing setting of education. Researchers and policymakers must consider where the pandemic-related changes necessitated by the situation might sit within the wider ongoing transformation of higher education provision (El-Azar & Nelson, 2020).

Conclusion

This study has explored the experiences of remote learning during the COVID-19 pandemic of undergraduate students in one faculty of a large university in London. The findings show that both individual and contextual factors influenced students' perceived adaptation to online teaching and learning stemming from the closure of higher education institutions. We found a substantive negative impact of the pandemic on student motivation, stress, and mental health, but also some positives in terms of how students perceived staff and institutional response

Mindful of the era of uncertainty in which we exist (Bauman, 2007), the fact that the effects of the pandemic affected schooling for all age groups, and alongside the wider ongoing transformation of HE provision, we posit that the findings of this research can inform how best institutions might improve the student experience and support students better in the future.

Firstly, the study highlights the importance of clear channels of communication and adequate support as necessary for a successful and supportive student experience. We recommend that institutions be mindful of the impact of the pandemic on those coming from a disrupted school experience who may need additional support with their mental health, developing social bonds and to facilitate integration. Similarly, those joining from an international setting may need further support with making the transition to UK study and with their language skills. We also suggest that staff may need training to support awareness of mental health issues and highlight the need to be proactive in managing academic stress, and draw attention to the fact that these needs may be higher for specific groups.

Although we are now past the most obvious, immediate, impacts of the pandemic, we should not underestimate the longer-term effects on our institutions, students and ways of working. We must be aware that students both incoming and established have and continue to experience significant impacts from the disruption caused by the pandemic. There are lessons to be learned both from this disruption occasioned by the pandemic, and the broader context of economic, environmental, educational and technological uncertainty in which our students will study and work.

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Appendix 1: Consolidated criteria for reporting qualitative studies (COREQ) - 32-item checklist

No. Item	Guide questions/description	Reported on Page #
Domain 1: Research team and reflexivity		
Personal Characteristics		
1. Interviewer/facilitator	Which author/s conducted the interview or focus group?	P.6 - the first and second authors conducted the focus groups, and the third author was present as an observer
2. Credentials	What were the researcher's credentials? E.g. PhD, MD	P.6 - all researchers hold PhDs
3. Occupation	What was their occupation at the time of the study?	P.5 - all researchers were lecturers at the time of the study
4. Gender	Was the researcher male or female?	P.5 - All researchers are female
5. Experience and training	What experience or training did the researcher have?	P.6 - all researchers had prior experience in conducting focus groups
Relationship with participants		
6. Relationship established	Was a relationship established prior to study commencement?	P.5 - the researchers did not know the participants prior to the study
7. Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	Participants were aware of researchers as lecturers within the faculty
8. Interviewer characteristics	What characteristics were reported about the inter viewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	P.6 - potential biases through own experiences teaching online
Domain 2: study design		
Theoretical framework		
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content	P.6 - Content analyses, specifically inductive thematic analysis. A social

	analysis	constructivist stance was adopted by the researchers
Participant selection		
10. Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	P.5 - all students of one faculty were invited to take a survey, participants could indicate interest in focus group, 10 were randomly selected
11. Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email	P.5 - email, newsletter, virtual learning platform
12. Sample size	How many participants were in the study?	P.5 - nine students
13. Non-participation	How many people refused to participate or dropped out? Reasons?	P.5 one student did not attend – reason unknown
Setting		
14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	P. 6 - online focus group via Zoom
15. Presence of non-participants	Was anyone else present besides the participants and researchers?	P.6 and footnote - third author and associate present; possible presence of non-participants
16. Description of sample	What are the important characteristics of the sample? e.g. demographic data, date	P.5 - gender, ethnicity and age described
Data collection		
17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	p.5 - describes the development of the topic guides
18. Repeat interviews	Were repeat inter views carried out? If yes, how many?	Not applicable
19. Audio/visual recording	Did the research use audio or visual recording to collect the data?	p.6 - digital audio-recording
20. Field notes	Were field notes made during and/or after the interview or focus group?	Brief contextual field notes were taken by the first and second authors
21. Duration	What was the duration of the inter views or focus group?	p.6 (60 minutes)
22. Data saturation	Was data saturation discussed?	Not applicable given exploratory nature of the study

23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	p.6 (transcripts were not returned)
Domain 3: analysis and findings		
Data analysis		
24. Number of data coders	How many data coders coded the data?	p. 6 - first and second authors
25. Description of the coding tree	Did authors provide a description of the coding tree?	p. 6
26. Derivation of themes	Were themes identified in advance or derived from the data?	p.6 - inductive reflexive thematic analysis was conducted, themes were derived from the data
27. Software	What software, if applicable, was used to manage the data?	P. 5 NVivo 14
28. Participant checking	Did participants provide feedback on the findings?	Participants did not provide feedback on the findings
Reporting		
29. Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	p.7-15 - quotations presented and identified by pseudo-initials
30. Data and findings consistent	Was there consistency between the data presented and the findings?	Yes, there was consistency between the data presented and the findings.
31. Clarity of major themes	Were major themes clearly presented in the findings?	p.7-15 - five main themes were identified and presented
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	p.7-15 - minor themes within the main themes are discussed.

Appendix 2: Topic Guide for Focus Groups

A: Self-efficacy and coping

How confident have you felt about your studies this year?

What (educational) factors have affected this?

Has this been stable across both terms / if you aren't in Year 1 how does it compare to past years?

Do you think your academic motivation has been impacted by online learning?

Have there been any specific positive effects? or negative effects?

Has this changed over the course of the year?

Have you used any coping strategies to maintain your confidence and motivation?

Has anything specific boosted this?

Do you recognise anything done by either staff members or the university generally that has supported this aspect of your learning? Is there anything you feel they should or could have done?

B: Anxiety and coping

Do you feel the online learning environment has affected your anxiety levels? In what way?

Has it changed at all over the course of the year? How?

What have you done to cope with your learning anxiety?

Has there been any way that either staff members or the university generally has eased or exacerbated this anxiety?

C: General

What have been your biggest challenges this year?

Do you think there have been any academic advantages to online learning?

Thinking about your experience in general in terms of your online learning experience, is there anything else you would like to add?

Are there any examples of good practice that you would like to share that we haven't covered that would have helped you have a more positive experience overall?

Do you have any recommendations for how the online learning experience can be improved?