Title: A qualitative exploration of the psychological impact of COVID-19 lockdown measures on Irish university students

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Abstract

The outbreak of coronavirus disease 19 (COVID-19) has caused significant mental health challenges across various populations but the psychological impact on university students, who represent a population particularly vulnerable to psychological distress, are yet to be understood. Using a socio-ecological lens, this qualitative research used online interviews to explore university students' experience of COVID-19 lockdown and the psychological impact of these measures. Coping strategies used by students to deal with these circumstances were also identified. Semi-structured interviews were conducted with 15 Irish students during the third wave of COVID-19 (January 2021) and the strictest lockdown measures. Thematic analysis identified three themes which highlighted how students were 'negotiating change' (theme 1), both in terms of lifestyle, academic life and social interactions. As a result of these major shifts in lifestyle, many experienced 'feelings of loss' (theme 2) at an intrapersonal, interpersonal and organizational level. Despite these challenging experiences of change and loss, participants also reflected on the positive aspects of lockdown, such as personal growth and improved social and family relationships (theme 3). Close relationships, goal setting, and self-care were identified as key coping strategies. These findings expands existing research on the psychological impact of the COVID-19 pandemic and highlighted the important role of third level institutions in promoting students' self-efficacy and personal development along with academic achievement.

Keywords: COVID-19, university students, psychological wellbeing, socio-ecological model, online education, lockdown

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1. Introduction

The public health measures and restrictions that have been implemented globally in response to the recent Coronavirus disease 2019 (COVID-19) pandemic have been vital in reducing the spread of the virus (WHO, 2020); however, they have resulted in the emergence of mental health challenges across various populations (Khan et al., 2020). While the impact of COVID-19 on public mental health is not yet fully understood, research conducted following past epidemics, including the outbreaks of severe acute respiratory syndrome (SARS) and equine influenza, have highlighted the devastating psychological consequences that can result from containment measures associated with a pandemic, especially in relation to lifestyle changes and financial uncertainty (Reger et al., 2020; Sprang & Silman, 2013). During the SARS outbreak, the experience of prolonged quarantine was associated with increased rates of anxiety, depression and suicidality amongst the general population (Hawryluck et al., 2004). Research during this time identified financial stress, social withdrawal and substance misuse to be amongst the most widely experienced consequences of restrictions. Similarly, during the 2009 swine flu pandemic, there was a significant increase in psychological distress, in particular anxiety and feelings of loneliness (Wheaton et al., 2012).

Recent research shows similar negative psychological effects of COVID-19 lockdown measures on public mental health (Brooks et al., 2020). Initial research in this area has indicated increased levels of psychological difficulties amongst the general population (Wang et al., 2020). COVID-19 lockdown measures, including social distancing and self-isolation, have been linked to feelings of low mood, helplessness and loneliness (Arslan et al., 2020a). Studies have identified fear of infection, separation from friends and family, loss of independence, financial difficulties and the provision of inadequate or conflicting information

to be amongst the major stressors impacting psychological wellbeing in the current pandemic (Ahorsu et al., 2020).

University students have been identified as a population particularly vulnerable to psychological distress (Bruffaerts et al., 2018). During a normal academic year, university students are under considerable stress, as a result of academic pressure, future planning and navigating social pressures (Reddy et al., 2018). A multitude of research has identified the presence of low psychological wellbeing amongst university students, with many experiencing an increased number of psychological difficulties when compared to the general population (Barrientos et al., 2017; Stallman, 2010). While the evidence on the impact of the COVID-19 pandemic on these difficulties is still limited, various stressors have been identified as contributing to the deterioration of mental wellbeing; these include a close relative being infected (Cao et al., 2020), a student's living environment (Peng et al., 2020) media exposure (Liu & Liu, 2020) and reduced social interactions (Xiao et al., 2020). In addition, university students have experienced increased stress and anxiety due to the uncertain nature of their future, further impacting their psychological wellbeing (Satpathy & Ali, 2020).

This accumulating evidence highlights the complexity of understanding psychological wellbeing among university students during public health emergencies and supports the need to understand the impact of students' experiences on their wellbeing through socio-ecological lens (Travia et al., 2020). Using a socio-ecological perspective can provide a more comprehensive understanding of the influence that intrapersonal, interpersonal, organizational, and community factors can have on students' everyday lives, and help identify strategies to cope with challenging circumstances (Turner et al., 2017).

Viewing psychological wellbeing from an intrapersonal standpoint, COVID-19 lockdown measures have been shown to severely impact an individual's everyday

functioning (Epifanio et al., 2021), negatively affecting the ability to maintain control and independence in their daily lives. This is consistent with Ryff's emphasis on the influence of autonomy and independence on psychological wellbeing (Ryff, 1989), which has been observed among students (Botha et al., 2019). Changes in everyday functioning can have a negative impact at both a cognitive and affective level, affecting students' sense of purpose, which is in line with the student wellbeing model (Soutter, 2014) and is important to maintain psychological wellbeing (Arslan et al., 2020b). At an interpersonal level, university students' positive social relationships are key in improving psychological wellbeing (Vasilenko et al., 2020). The extent of the impact of academic pressures, such as deadlines and assessments, on the psychological wellbeing of students can depend on the individual's perceived social support (Glozah, 2013). Seligmans' (2011) Positive Emotion, Engagement, Relationships, Meaning and Accomplishments (PERMA) model of flourishing further supports this, identifying positive relationships and social integration as key aspects of psychological wellbeing. In times of crisis, research has highlighted the importance of physical proximity for developing social ties (Boda et al., 2020). This is of particular concern, given the strict social distancing measures during the COVID-19 pandemic. However, the use of online communication has been linked to positive psychological outcomes, particularly when in-person contact is limited (Brown & Greenfield, 2020). Social media and videocalls can help to maintain existing relationships, as well as building new connections (Ryan et al., 2017).

At an organizational level, COVID-19 restrictions have had a significant impact on the university environment and experience for students. Many universities have transferred to remote learning methods, delivering content solely online. Research conducted prior to the COVID-19 outbreak, indicated that students taught in an online capacity, experienced increased social isolation when compared to their in class colleagues (Phirangee & Malec, 2017). Academic difficulties amongst students have been identified as a primary cause for

seeking support for mental health difficulties (Eleftheriades et al., 2020). The link between student mental health and academic work illustrates the significant role academic organisations can play in supporting student learning and wellbeing (Salimi et al., 2021). However, due to restrictions, the online delivery of lectures presents a significant barrier in the learning experience, reducing levels of engagement and productivity, and resulting in increased anxiety and stress amongst university students, in addition to attention and memory issues, severely limiting their learning experience (Limon-Vazquez et al., 2020; Sahu, 2020). The lack of a physical university setting has also resulted in the loss of routine for many students, increasing their opportunities to engage in negative health behaviours (Viner et al., 2020).

Amongst community-level factors in the socio-ecological model, social media plays a significant role in the psychological wellbeing of students. The portrayal of COVID-19 as a 'killer virus' in the media further exacerbates feelings of uncertainty and losing control (Xiang et al., 2020). Recent research during the pandemic by Wang et al., (2021), indicates that exposure to media detailing reduced mortality rates and successful treatment methods were linked to lower reporting of anxiety.

In light of the multiple factors that can impact a students' psychological wellbeing at different levels during emergency situations such as the COVID-19 pandemic, it is crucial to investigate coping skills used amongst university students. Previous research has highlighted the importance of engaging with meaningful activities to maintain and enhance psychological wellbeing (Hooker et al., 2020). Studies have demonstrated that individuals lacking effective coping skills, in addition to having a negative outlook (Moore et al., 2020), are more vulnerable to the adverse psychological effects of lockdown measures (Liang et al., 2020). Conversely, evidence suggests that effective coping skills and personal resilience can improve psychological wellbeing and reduce loneliness, anxiety and depression during

lockdown (Ye et al., 2020), thus being key in mitigating the effects of lockdown measures (Labrague & de Los Santos, 2020). In particular, coping skills that foster personal resilience and promote life meaning are vital in recovering from adverse experiences (Yildirim & Arslan, 2020).

During the COVID-19 pandemic, students have experienced significant changes at a intrapersonal, interpersonal and organizational level, that are only beginning to emerge. For instance, there is an abundance of research documenting the psychological effects of containment measures in China, during the first wave (December 2019 to June 2020; Gan et al., 2020; Duan et al., 2020). The current study aimed to further expand on existing research and explore the impact of lockdown measures on the psychological wellbeing of Irish students, who experienced three waves of full restrictions between March 2020 and May 2021 with the third wave resulting in a lockdown of the longest duration, 6 months and the highest daily case numbers reported since the beginning of the pandemic. Some studies are only beginning to emerge now and have mainly focused on the impact of the pandemic as a whole on academic performance and learning experiences amongst Irish university students and staff (Finnegan, 2021; Hill & Fitzgerald, 2020), thus warranting the need for further research on psychological wellbeing. Globally, research has had a particular focus on the psychological wellbeing of medical and nursing students, given their important role as frontline workers during the COVID-19 outbreak (Liang et al., 2020; Pereira et al., 2020). The current study examined students from a range of different courses, in an attempt to identify difficulties across disciplines. Using a qualitative approach, this exploratory study aimed to investigate two research questions:

1. How have COVID-19 lockdown measures influenced the mental wellbeing of university students?

2. What coping strategies are used by students to support their mental wellbeing in light of lockdown measures?

2. Methods

2.1.Design

This qualitative study used one-to-one semi-structured interviews to gather an in-depth and meaning-based account of the participants' individual experience of lockdown. The study is reported in line with the consolidated criteria for reporting qualitative research (COREQ) guidelines (see Supplementary File 1) (Tong et al., 2007).

2.2.Participants

A total of 15 students from University College Cork (Cork, Ireland) took part in the study. Convenience and snowball sampling were used to recruit participants. The researcher posted on personal social media platforms, including Instagram and Facebook. All recruited participants took part in the study. Inclusion criteria for the study were that participants had to be at least 18 years of age and be enrolled as a student in an Irish University or College at the time of data collection.

This study received ethical approval from the School of Applied Psychology Ethics Committee, University College Cork (Reference number: FYP2011202012). All participants read an information sheet and signed a written consent form prior to taking part in the study.

2.3.Measures

An interview schedule was designed by the two authors to explore the impact of lockdown measures on the psychological wellbeing of university students and coping strategies used to mitigate their effects (see Supplementary File 2). The COVID-19 lockdown measures explored in relation to university students included reduced social contacts,

restricted travel and the stay at home order. The interview schedule explored the participant's day to day life in lockdown, their relationships, psychological wellbeing and coping strategies. Following the interview, participants verbally filled out a short demographic questionnaire, including questions about age, gender, level of study, year of study, living situation and mode of teaching experienced in the current academic year (see Table 1). This information was used to profile the sample of respondents.

2.4.Procedure

Initially, a pilot interview was conducted to evaluate and optimise the interview schedule a before data collection (Castillo-Montoya, 2016). The researcher (AO) interviewed two university students in the pilot study, one male and one female, aged 21 and 22 respectively, one of whom was known to the researcher. This experience allowed the researcher to compare and bring aspects of the first interview into the second interview to help build a rapport with the participant. This establishment of rapport has been identified as vital to the interview process and can result in more in-depth responses (Jacob & Furguson, 2015). Feedback received from these two participants did not highlight any question as being too difficult to understand or irrelevant to the area of research. The pilot interview process also made the researchers more aware of using neutral language in the questions and changing the sequence of questions based on the interviewee's responses, to ensure the interview maintained a natural flow. The data collected in the pilot interviews was not used in analysis.

Data collection took place from December (2020) to January (2021), during which, Ireland was under a Level 5 lockdown (maximum level of restrictions). This involved the closure of all non-essential services, the implementation of a 5km travel limit, all individuals were recommended to work from home and mixing with individuals outside one's household was not permitted. Interview time slots were arranged via email and carried out online with

video and audio recording. Interviews were carried out by AO with guidance from MC. No repeat interviews were conducted.

2.5.Data Analysis

Firstly, the interview recordings were transcribed verbatim using a word processing software. Participants did not review transcripts following data collection and did not comment on the findings of the current study. The researcher adhered to the guidelines on reflexivity and considered the influence of their own biases on the research process (Berger, 2015), especially AO's role as 'insider' given their experience as a university student at the time of data collection. A variety of steps were taken to limit this bias, such as developing the interview schedule in light of this literature and being conscious of the language used during interviews, avoiding leading questions and mannerisms which could influence participant responses. The participants' experiences of lockdown were qualitatively analysed using Braun and Clarke's (2006; 2012) thematic analysis. This analysis was chosen as it facilitated flexible exploration of the data, particularly given the variety of responses received from participants. Further details on the analytical approach and coding examples are provided in Supplementary File 3. The main analysis was carried out by AO, while MC read the interview transcripts and provided feedback on the coding and creation of themes.

Anonymised extracts of interview transcripts are included in the results section together with the participant number.

3. Results

3.1. Sample Characteristics

The sample included eight females and seven males, aged between 19 and 22. Five participants were living with friends and all other participants were living in their family

home. The majority of participants were receiving online lectures at the time of data collection, with three participants being offered a blended approach. All participants were Irish undergraduate students from the same Institution and their year of study varied from first to final year.

Table 1

Sample characteristics

Measure	Estimate
Age, Mean $\pm$ SD	20.73 $\pm$ 1.03
Gender, n (%)	
Male	7 (46.6)
Female	8 (53.3)
Education, n (%)	
Undergraduate	15 (100)
Year of study, n (%)	
1 st	4 (26.6)
2 nd	2 (13.3)
3 rd	6 (40)
4 th	3 (20)
Living situation, n (%)	
Parents/family	10 (66.6)
Friends	5 (33.3)
Mode of Teaching, n (%)	
Online	3 (20)
Blended	12 (80)

Notes. SD = Standard deviation

3.2. Central Themes

Three themes were identified regarding university students' experiences of COVID-19 lockdown and the impact these measures had on their psychological wellbeing. While the majority of participants understood the need for such measures, their narratives centred around the social, practical and emotional changes caused by the pandemic lockdown. The themes identified were labelled 1) 'Negotiating Change', 2) 'Feelings of Loss' and 3) 'Unexpected Positives of Lockdown'. These themes consisted of a number of sub-themes (see Table 2) which are further explored in the analysis.

Table 2

Structure of themes and sub-themes

Theme	Sub-themes
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Negotiating Change	Lifestyle change Academic change Changes in communication
Feelings of Loss	Loss of control Loss of experiences Loss of social support Loss of motivation
Unexpected Positives of Lockdown	Improved family relationships Opportunity to re-evaluate social relationships Personal growth

3.2.1. Theme 1: Negotiating Change

The COVID-19 lockdown brought about a dramatic change in the participants' lives, particularly in relation to lifestyle, academia and communication.

Lifestyle change

At an intrapersonal level, participants reported their everyday life was one of the areas most negatively affected by lockdown. The blurring of boundaries between personal and professional life often led to an imbalance of worlds for participants:

P2: There are no boundaries at home, like this is my time for work, this is my time for relaxing, it's hard to separate those out when it's all in the same location. Before, I would go to the library, do my college work there and then come home and relax, but in lockdown we don't have that luxury.

Many participants referred to the cumulative effect of lockdown, with many discussing the initial excitement of the novel 'lockdown' turning to exhaustion due to its lengthy duration:

P12: There is no excitement in life anymore. It's just, it's so mundane, every day is just the same thing, this is what we're doing. Do it again, wake up, do the exact same thing the next day, which at the start was good, but then it, kind of lost its magic.

In an attempt to mitigate the effect of these changes, many participants began to explore various coping strategies. Some participants found effective coping methods with ease, such as '*colouring or journaling*' (P14), while others were still in the process of figuring out those best suited to them:

P2: I don't have a sure fire strategy that has worked for me. I feel I'm still trying to figure that out.

Some found trying to establish a routine helped them cope in the current circumstances. Setting small goals and completing them, led participants to experience a sense of accomplishment. Many found that goal setting acted as a catalyst to initiating healthy lifestyle changes. Engaging in activities of interest and learning new skills also helped participants deal with this new way of life:

P7: Making a to do list and things like that, just trying to self-motivate, or I asked my sister to help me to be more organized and remind me of things that I've to do so that's helped, keeping me accountable.

Academic change

The majority of participants made reference to the significant impact lockdown had on the student experience of university life, especially in terms of organisational challenges which included technical difficulties, reduced interactions with staff and limited accessibility of resources.

Particular concerns were expressed with regards to more practical courses and the unsuitability of online delivery for these programmes. Some argued the '*one size fits all*' (P7) approach was inadequate, given the diverse nature of university courses and suggested the need for more adaptable solutions to accommodate all areas of study:

P2: Courses by their very nature are really diverse, you have to adapt the measures for each course to ensure that it's efficiently delivered but I don't think the university

is doing that. I mean some courses are more information based while others really need the practical side, so they really can't be treated the same.

Another area of concern for participants was the limited accessibility of student resources required to effectively engage with online learning. Participants gave examples of students living in remote areas with unstable internet connection or students without regular access to a laptop, who could be at a greater disadvantage than others without these difficulties:

P2: Not everyone has a Mac computer in the house and in some cases any computer at all. So for these families, it becomes really difficult to perform at the same standard without having this access. I know the library is open and you can use a computer in there but I mean what if I'm not located in the county, how are those people supposed to do college work with limited access to the resources they need?

In addition, some participants found the home to be an unsuitable learning environment. Many experienced difficulties concentrating, with the presence of increased distractions leading to reduced focus. Participants were concerned about the potential impact an unsupportive home environment could have on a student's academic success:

P12: I find it a lot harder to focus for exams, the actual studying part because I don't have the library at the moment and just going to the library to, you know, go in and find a place to sit, that's good for motivation and just keeps you studying. I think it's a lot easier to get distracted at home.

Some participants also highlighted the difficulties of interacting with academic staff and learning material in a meaningful way:

P9: It's hard if it's pre-recorded but then not actually get to speak to a lecturer until two weeks later and by then the questions have piled up. I feel like if you fall a little

bit behind, it's much more noticeable because you want to ask a question on something two weeks ago.

On the other hand, some participants identified advantages of online learning, including the flexible nature of recorded lectures and studying in a manner most conducive to academic performance. This experience was often attributed to increased staff interactions and leniency around assignment deadlines and assessments:

P4: I actually liked the online lectures, I think it's a lot easier to study when you can pause them go back over the notes and you're kind of forced to pay attention with your cameras on.

These contrasting accounts highlight the variation in experiences across disciplines and the considerable psychological impact of academic changes. Among participants who expressed struggling with online learning and interacting with academic staff, some reported feeling 'forgotten' and 'unheard' (P14) and felt there was a need for more guidance in order to reduce students' feelings of helplessness:

P13: I think a lot of students feel that the university isn't too concerned about our wellbeing and that makes a lot of us feel quite helpless and no one is listening. I think a lot of students are really fed up and are really, really struggling but nothing is being done. We are completely being ignored and disregarded, both by the government and the college. We need support.

Changes in communication

The lockdown resulted in the emergence of various changes to communication, with online communication becoming the new norm. Overall, participants found online communication platforms to be an asset, facilitating the formation of new social connections and maintenance of existing relationships:

P5: Keeping in contact with friends was probably one of the easiest transitions because we would keep in contact online anyway.

P4: My friendships haven't really deteriorated cause we still have texting and video calls, but I just find that I miss them a lot. There are always opportunities to connect with friends because we have online platforms, so I'm grateful for that.

However, while sufficient as a temporary solution to the current restrictions, participants felt that online communication often resulted in reduced intimacy and interactions of an impersonal nature. For many, this led to face-to-face interactions gaining a newfound significance in their everyday life:

P13: I find it really difficult to interact online. You miss a lot when you're video calling, the non-verbal cues, the facial expressions, small things like that are impossible to notice online and that can lead to misunderstanding the other person or losing the momentum of the conversation.

A commonly held opinion amongst participants was that online communication was incomparable to the face-to-face contact experienced prior to lockdown. Participants discussed how the increased connection provided by online communication did not always equate to an increased sense of closeness:

P2: I feel like when you're on a video call with someone, it's really hard to feed off the other person's energy, there's this barrier and it can't really be taken down.

Many participants also mentioned the practical issues associated with communicating online, including connection issues, resulting in delayed speech:

P10: I find though that the conversation just doesn't flow as naturally, just because there's a delay, you can't hear what someone's saying properly. It's hard over, video calls, with like time lags and everyone is talking over each other without meaning to.

Concerns were also raised regarding the nature of future social interactions and the impact lockdown has had on participants' social skills:

P3: I think in lockdown we haven't had many social interactions and I mean that has to have some effect on us. I feel like I've almost forgotten how to act in social situations because we've been so isolated in lockdown for so long.

3.3. Theme 2: Feelings of Loss

Drawing from the changes described in the previous theme, several participants discussed the impact of COVID-19 lockdown measures on their psychological wellbeing, central to which was a feeling of loss. The experience of loss, compared by many participants to the process of grieving, was expressed by participants in relation to control, experiences, and social support, all of which contributed to both psychological and emotional losses.

Loss of control

Participants reported experiencing a personal loss of control over their daily lives, their social interactions and their future, particularly as a result of external decisions being made by government bodies:

P5: All the toing and froing about lockdowns really affected my mental health, I mean we are being told this will last for six weeks, then we'll be free and then it's another six weeks and when you're being played like that, the future can begin to look really bleak and depressing.

Some participants found themselves struggling to accept the uncertainty associated with the COVID-19 pandemic and the consequent loss of control over the future. The seemingly never ending nature of the COVID-19 lockdown measures further fostered this sense of powerlessness:

P6: I work really well with plans and I like having my next step ahead of me. I had a postgraduate plan that I've had for a long time, what I wanted to do after college, and lockdown and COVID and everything have pretty much erased those plans.

Loss of experiences

There was also a loss of broader experiences amongst participants as they discussed their lives that should have been. Many participants referred to this experience in the context of grieving and the loss of momentum experienced in life before lockdown:

P6: I think we've lost a lot, I know we could be much worse off, but we have lost a lot. I feel there is kind of a sense of grief, like we've lost in a sense, a life, our past life.

A number of participants spoke about the expectations they had for their life and drew comparisons to their current reality. Participants referred to the discrepancy between these two realities and the impact this has had on their wellbeing:

P15: I feel like I'm being robbed of a whole year of social life. I'm a first year college student. I shouldn't be sitting in my bedroom. I should be enjoying myself. I should be having fun but that has all been taken from us.

Many struggled with the concept of the 'new normal' (P15), longing for the return of life before COVID-19. These new circumstances were described as a 'harsh reality' (P3) and one that must be eventually accepted:

P9: It's really sad to me because I think even if we do get out of lockdown and the vaccine and everything, I think it'll be a long time before we're back to hugging people. I find even walking down the street, it's a surreal experience, you can't see anyone giving you a smile and we naturally walk further away from each other.

While participants expressed feelings of disappointment over their current circumstances, these comparisons often led to an expression of gratitude of life before COVID-19 and the privilege associated with such a lifestyle:

P15: It's definitely made me realise how much you appreciate the people who you spend lots of time with. You appreciate going to the pub or like things that we used to take for granted before COVID-19. Seeing your friends and going to concerts and going out, it's all gone now.

Loss of social support

All participants mentioned a significant loss in their social lives at university as a result of COVID-19 lockdown measures, discussing feelings of isolation and a lack of connectedness. Participants referred to the current university experience as 'solitary' (P6), losing the sense of belonging within the wider student community:

P11: You are doing college by yourself, and you're not reminded that other people are doing the course and other people are struggling as well. We don't see that, even last year going to the library and going for breaks and stuff and talking about assignments, I don't know, it just kind of gave you the sense that you were not alone.

The majority of participants expressed disappointment and were upset by the lack of contact with friends. Some participants even referred to online university as quite a hostile experience, due to the lack of mutual trust and communication between classmates:

P1: When we are not in a classroom and away from everyone, it kind of brings out that competitive side, maybe because you don't know how much work someone is putting in, are they ahead of me or vice versa. It's every man for himself.

Participants found the reduced social support and lack of shared experiences to have a significant impact on their academic life, both in terms of their achievements and with regards to tackling academic-related challenges:

P6: I've lost all motivation for my college work. I think, just being at home and not having people around to motivate you. Even just being in the library, you were

surrounded by other students and that alone would keep you going. I guess a sense that we were all in it together.

Loss of motivation

For many participants, the aforementioned experiences of loss contributed to various psychological losses. Participants experienced reduced productivity and motivation, in addition to feelings of hopelessness and loss of meaning in life. They found it difficult to motivate themselves confined to the home environment, further exacerbated by the absence of friends and a support system:

P14: I think you lose your purpose being in the same environment for so long, it's just all the same, every day. It's exhausting.

Participants found lockdown removed the sense of purpose that would typically drive university students:

P1: Without a routine or structure I think it's harder to get myself out of bed. I mean I don't have to get up in the morning for a 9am, get dressed and get the bus, I just have to turn my laptop on.

Being in lockdown also resulted in rewards, participants previously used to motivate themselves, being cancelled or postponed. Participants experienced difficulties in finding alternative means to retain their enthusiasm and ambition:

P7: There's nothing to look forward to so I think it's really easy to lose your motivation and just sit in your feelings. Like there's no this night out to look forward to or a concert and that will be my reward and I'll work hard till then.

As a result, some participants experienced difficulties maintaining an optimistic outlook, with some attributing feelings of depression and hopelessness to the nature of the lockdown environment. The difficulties experienced with online learning, in addition to

reduced social interactions further contributed to feelings of helplessness amongst participants:

P11: It's hard to envision a future that is so incredibly uncertain at the moment and lockdown is practically handing me this sense of hopelessness.

3.4. Theme 3: Unexpected Positives of Lockdown

Despite the losses experienced by participants, as evidenced in the previous theme, many reflected on the positive aspects of lockdown and how they made the most out of the current circumstances. Participants described positives such as, improved family relationships, re-evaluation of social relationships and personal growth.

Improved family relationships

It was widely acknowledged by participants that lockdown had a positive impact on family relationships, with some building stronger connections and others re-evaluating the family dynamic:

P15: I think in a sense lockdown kind of saved some of my family relationships because we were forced to kind of re-evaluate and make the most of what we have.

Participants experienced an increased awareness of each other's emotional needs and witnessed more emotional expression in the family environment. Increased honesty, openness and discussions surrounding mental health between family members were also identified as positive outcomes of lockdown:

P4: They actually ask how's your mental health today. They would never have brought that kind of stuff up in conversation before. So I feel we definitely know each other better now. I think we actually tend to be just more aware of our relationships and what we need to do to keep us in check.

These experiences often led to improved communication between family members, particularly in the case of communicating needs, resulting in improved conflict resolution strategies within the family:

P11: I got to know my family better, we spend every waking hour of every day together and have since March. I think we've become closer as a family, we definitely talk more, not even talk but we communicate with each other better.

However, these benefits were not immediately apparent, with participants referring to an 'adjustment period' (P2) where they learned to navigate family relationships in the lockdown environment. Participants found achieving a balance between the individual and shared needs of the family to be challenging:

P9: At the start when I could only see my parents and nobody else, it was a lot, just seeing the same people over and over again. I think we kind of adjusted and learned what worked with us all living in the same space 24/7.

Despite the challenges experienced, many participants were grateful for the time spent with family during lockdown, particularly at an age where distancing oneself from the family home is most common:

P3: It's nice having that time at home, especially at this age, because usually this is when everyone would be moving out. So yeah, I'm grateful for having this time with my family in lockdown.

Opportunity to re-evaluate social relationships

While causing a loss of social interactions, for many, lockdown provided space and time to reflect on social relationships. The concept of support bubbles prompted consideration about who participants wanted to maintain a quality relationship with:

P7: It's really like who do I want to keep in my life and who in the middle of lockdown you wouldn't really notice was missing. I feel those friendships just fall through the

cracks and the lack of impact it has on your life highlights that they weren't that important to you in the first place.

Many participants found that lockdown allowed them to identify their 'true friends' amongst their relationships, those with whom they shared a deep and meaningful connection with. However, participants acknowledged that the longer the period without communication in lockdown, the lesser the chance of repairing the relationship. While video calls delayed the deterioration of friendships, the lack of effort and commitment from both individuals, resulted in these friendships being the most likely to perish:

P14: I feel like I have managed to stay relatively close with my close friends but it's the other friendships that got lost in the mix, the less important friendships. I think some friendships, the strong ones, will survive and after lockdown ends, they'll go back to the way it was before lockdown but the more casual friendships probably won't last.

Personal growth

Some participants viewed lockdown as an opportunity to work on themselves, engaging in interpersonal and reflective activities that facilitated self-exploration. While lockdown removed elements of a structured lifestyle, it also reduced the pressure and demands associated with this way of life:

P5: I don't feel the need to constantly be chasing highs, now. In lockdown I have become much more reflective on my life and self and more present in my day to day life.

Some participants found themselves in a better mental state now, compared to life before COVID-19. Lockdown provided a break from an otherwise exhausting life, allowing participants to engage in relaxing activities which, for many, were absent prior to lockdown:

P13: I slowed down. And I was thinking about being more grateful in the moment. I was just so at peace with myself in the world. I think I kind of, not found myself, but I guess, I learned a lot about myself.

Participants found that lockdown facilitated an appraisal of their current ways of living, inspiring positive changes in their everyday lives. There was a shared understanding that lockdown provided a space to explore different areas of interest and engage in healthier habits:

P12: I think just trying to find some positives in the situation has helped me. I have tried to journal and write down what I am grateful for everyday and I feel that has helped. If you really try to find things to be grateful for, even the simplest things, it can really help your mood.

Participants reported feeling more present in the ‘here and now’ (P9) and lockdown shifted their focus, allowing participants to delve into their life purpose and priorities. In addition, participants found themselves accepting their current circumstances, without letting their mind race into the future:

P9: I tried a lot of meditation, it's so cliché but I did find it helped a lot. I felt so much more present and it gave me the opportunity to really reflect on my life and what I want in life.

4. Discussion

This study aimed to explore Irish university students’ experience of COVID-19 lockdown measures and the impact of these measures on their psychological wellbeing. A qualitative methodological approach was undertaken, in the form of semi-structured interviews. Thematic analysis identified three themes, which revealed that key issues for

students focused on lifestyle (intrapersonal) and practical (organizational) changes, in addition to social and emotional (interpersonal) losses, in line with socio-ecological models of education (Travia et al., 2020). Despite these negative lockdown experiences, the improvement in family and social relationships, in addition to personal development, illustrated a lighter aspect of the lockdown environment.

At an intrapersonal level, participants reported the cognitive, affective and practical changes caused by the pandemic restrictions, describing significant shifts in everyday lifestyle as the home environment became the only world to exist, which in turn often blurred the lines between students’ personal and professional lives, and made routines harder to establish. Many participants mentioned distractions such as the anxiety provoking media exposure, shown to have a particularly negative impact on motivation and productivity (Akdeniz et al., 2020; Farooq et al., 2020), as well as a sense of loss of control over one’s life. These findings were consistent with previous studies showing the vital role environment and routine can play in supporting students’ psychological wellbeing (Amerio et al., 2020; Koome et al., 2012). Furthermore, participants described a loss in motivation due to the uncertain nature of the pandemic and the lockdown environment, which has been observed in other studies (Cantarero et al., 2020) and support the crucial role of autonomy in motivating students (Daniels et al., 2021; Ryan & Deci, 2017; Henri et al., 2018).

However, the challenges associated with organisational changes in terms of academic life and participation in teaching and learning permeated many facets of students’ experiences. Some participants enjoyed the flexibility of online learning, but many struggled with the loss of interaction with, and support from, both other students and staff, as well as limited or no access to studying environments (i.e., library) which have been shown to be crucial the psychological wellbeing of students (Mokgele & Rothman, 2014). A supportive university environment can positively affect students’ emotional state and facilitate the

development of resilience (Moses et al., 2016; Botha et al., 2019). These positive interactions can help increase student motivation and self-efficacy, particularly in the case of online lecturing during COVID-19 (Holt et al., 2013; Naji et al., 2020).

The psychological impact of changes in academic life were also exacerbated by intrapersonal adjustments in terms of communication and social relationships. The negative experience of online interactions, described by participants, are in line with findings highlighting the exhausting experience of having all personal, social and academic lives online (Wiederhold, 2020). These experiences may actually accentuate feelings of social isolation, drawing attention to the impersonal nature of online communication (Nguyen et al., 2021). Unsurprisingly, the loss of social interactions was mentioned as another significant contributor to the deterioration of psychological wellbeing. As a result of reduced social interactions during COVID-19, many participants found themselves to be missing out on significant life events. This is reflected in recent research, highlighting the loss of fundamental life experiences amongst young adults as a result of restrictions (Ralls, 2020), and the consequent negative psychological impact (Liang et al., 2020; Qiu et al., 2020).

Despite these negative changes, some participants' descriptions revealed some positive changes as well as coping strategies. Some respondents welcomed the increased time provided by lockdown to engage in self-care, exploring new hobbies and revisiting old interests, without the pressure associated with the typical university lifestyle. Engaging in these activities was described by participants as stimulating personal growth, reinforcing young adults as agents of their own development (Larson, 2006). In some cases, participants identified increased time spent with family members as a particular benefit of their lockdown experience. These findings are consistent with recently published literature that emphasized the strengthening of family relationships as an effective means of coping during lockdown (Mari et al., 2020; Migiliorini et al., 2021). Some participants also identified new routines and

to-do lists as a means of coping, as it gave their day a sense of purpose. This highlights the role of self-efficacy and how these types of coping skills may foster a sense of agency serving as a buffer against the sense of uncertainty regarding current and future circumstances, positively impacting one's psychological wellbeing (Kachanoff et al., 2019). Indeed, research has shown that individuals with problem focused coping strategies displayed increased psychological wellbeing during lockdown (Tuason et al., 2021).

Considering strengths of this study, the semi-structured interviews allowed the researcher to gain an invaluable insight into participants' experience of lockdown measures. Furthermore, the piloting of interviews aided in evaluating the interview schedule and identifying flaws, (Castillo-Montoya, 2016) as well as in reducing the risk of researcher bias (Noble & Smith, 2015). Practicing reflexivity, having previous experience conducting qualitative research and consulting with the supervisor were further steps taken to reduce this risk.

One significant limitation was the small sample size, which warrants caution about the generalizability of our findings (Boddy, 2016). Furthermore, a selection bias cannot be ruled out given the convenience sampling (Galdas, 2017). Indeed, participants recruited were all white Irish students and between the ages of 19 and 22, with no family commitments, living at home or in student accommodation. Nonetheless, students were interviewed from different disciplines to capture common experiences that may be applicable across the board. The online nature of the interviews, although unavoidable in the current circumstances, may have influenced participants' comfort and responses (Jowett, 2020), although all steps were taken to avoid any distress.

Notwithstanding the limitations of this study, our findings highlight the multifaceted experience of being a student during a global pandemic, and the intrapersonal, interpersonal and organizational factors that may influence psychological wellbeing. Furthermore, our

results point to positive routines and maintaining a sense of purpose as crucial coping strategies. As universities consider an increase in use of online and blended modes of learning to adapt to the ongoing pandemic, it is vital that the emphasis of teaching and learning is put not only on content delivery but also on the university as a support system for students, with a focus on optimizing student-staff interactions and emotional engagement, which can, to an extent, compensate for the lack of in-person interaction (Al-Kumaim et al., 2021) and possibly improve students' productivity (Mayer & Estrella, 2014). Examples such as group work or breakout rooms could help satisfy the need for social relatedness and strengthen social support amongst students (Deci & Ryan, 2008). As students are spending the majority of their day online, switching between forms of online communication, such as video calls, texting or online messaging, can reduce fatigue associated with increased screen time (Fox & McEwan, 2017), while also promoting a sense of connectedness (Hsieh & Tseng, 2017).

Considering coping strategies, research has highlighted the efficacy of resilience-building programmes amongst nursing students (Onan et al., 2019) and amongst a variety of other disciplines (Yusuf, 2011). Integrating these programmes in an online capacity could support students' self-efficacy, foster resilience and encourage adaptive coping strategies. An emphasis should also be placed on coping strategies that involve setting and achieving realistic goals, as these can increase perceived competence, consequently improving intrinsic motivation (Ryan & Deci, 2000). Given the projected continuation of restrictions and COVID-19 transmission, it is vital to identify and develop supports and interventions that are sustainable for students long-term (Holmes et al., 2020).

Future research in this area should attempt to expand on the preliminary findings of this study, with larger and more diversified samples to allow for conclusions that could be generalized to larger populations. The experiences of academic staff and faculty should also

be taken into account, in order to gain a comprehensive understanding of university life during lockdown. Finally, longitudinal research examining changes in university experiences over time, alongside the changes in restrictions, could enhance understanding of students' adaptation or exacerbation of negative lockdown experiences.

5. Conclusions

This study provided a unique insight into the realities facing university students during COVID-19 lockdown in an Irish context. The interviews revealed changes across students' everyday life, across their academic life and a shift in the means by which they interact and communicate during lockdown. This research highlighted the feelings of loss evoked in students because of restrictions and their experience of grief in relation to their past, more carefree lifestyle. Students did attempt to make the most out of their current circumstances, identifying a few positive outcomes of their lockdown experience. Our findings highlight the urgent need for social support and targeted interventions centred around self-efficacy amongst university students. As universities strive to provide positive learning experiences to their students, adapting to changes such as that brought about by the COVID-19 pandemic is key to supporting students' psychological wellbeing.

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

Domain 1: Research team and reflexivity		
Topic and Item No.	Guide Questions/Description	Reported on Page No.
Personal Characteristics		
1. Interviewer/facilitator	Which author/s conducted the interview or focus group?	Page 10
2. Credentials	What were the researcher's credentials? E.g. PhD, MD	NA
3. Occupation	What was their occupation at the time of the study?	Page 10
4. Gender	Was the researcher male or female?	Page 10
5. Experience and training	What experience or training did the researcher have?	Page 11
Relationship with participants		
6. Relationship established	Was a relationship established prior to study commencement?	Page 10
7. Participant knowledge of the interviewer	What did the participants know about the researcher? <i>e.g. personal goals, reasons for doing the research</i>	Page 10
8. Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? <i>e.g. Bias, assumptions, reasons and interests in the research topic</i>	Page 10
Domain 2: Study Design		
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? <i>e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis</i>	Page 11
Participant selection		
10. Sampling	How were participants selected? <i>e.g. purposive, convenience, consecutive, snowball</i>	Page 9
11. Method of approach	How were participants approached? <i>e.g. face-to-face, telephone, mail, email</i>	Page 9
12. Sample size	How many participants were in the study?	Page 9

13. Non-participation	How many people refused to participate or dropped out? Reasons?	Page 9
Setting		
14. Setting of data collection	Where was the data collected? <i>e.g. home, clinic, workplace</i>	Page 10
15. Presence of non-participants	Was anyone else present besides the participants and researchers?	Page 9
16. Description of sample	What are the important characteristics of the sample? <i>e.g. demographic data, date</i>	Page 9
Data collection		
17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	Page 9
18. Repeat interviews	Were repeat interviews carried out? If yes, how many?	Page 10
19. Audio/visual recording	Did the research use audio or visual recording to collect the data?	Page 10
20. Field notes	Were field notes made during and/or after the interview or focus group?	Page 10
21. Duration	What was the duration of the interviews or focus group?	Page 10
22. Data saturation	Was data saturation discussed?	Page 11
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	Page 11
Domain 3: Analysis and findings		
24. Number of data coders	How many data coders coded the data?	Page 11
25. Description of the coding tree	Did authors provide a description of the coding tree?	Page 11
26. Derivation of themes	Were themes identified in advance or derived from the data?	Page 11
27. Software	What software, if applicable, was used to manage the data?	Page 11
28. Participant checking	Did participants provide feedback on the findings?	Page 10
Reporting		
29. Quotations presented	Were participant quotations presented to illustrate the themes / findings? Was each	Page 12-25

	quotation identified? <i>e.g. participant number</i>	
30. Data and findings consistent	Was there consistency between the data presented and the findings?	Page 26
31. Clarity of major themes	Were major themes clearly presented in the findings?	Page 13
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	Page 13

Appendix B: Interview Schedule

1. How do you feel that your day-to-day life has been influenced by the COVID-19 lockdown measures?

Prompt: studying/education/work(if applicable)/physical activity

Prompt: How do you feel about these changes?

2. How have lockdown measures influenced your social relationships?

Prompt: family relationships/friendships

3. Thinking about your mental wellbeing, how do you feel that the lockdown measures have influenced your emotions or mood?

4. How are you dealing these changes?

Prompt: coping strategies used

5. How do you feel about the measures put in place by the University in response to the COVID-19 pandemic?

6. How do you feel in general about the impact of lockdown measures on students?

7. Is there anything you would like to add before we finish?

Appendix C: Approach to Thematic Analysis and Coded Extract from Interview Transcript

During the research process, the researcher adhered to the six step guide to thematic analysis, as proposed by Braun and Clarke (2006; 2012).

During data transcription, the researcher gained an initial understanding of the data collected. The interview transcripts were read and reread numerous times, allowing the researcher to familiarise themselves with the data. Braun and Clarke (2006) identify this process of 'repeated reading' as a vital step in conducting quality thematic analysis and achieving data immersion. An open coding process was used to assign codes to the data, meaning that the initial codes identified were based solely on the data itself (see Supplementary File 3). The codes refer to key words used to organise the text and represent extracts pertinent to the research question. The codes were then divided into potential themes, which were reviewed by the supervisor to ensure interpretations aligned and data saturation had been reached (Cleary et al., 2014). Themes were then labelled and further refined into sub-themes, before a narrative linking the themes was established.

Interview Transcript	Coding
R: So yeah if we begin with just what has your experience of lockdown been like and how has it influenced your life?	
P15: Ah okay yeah, so in some ways, lockdown has made my life a little bit less stressful. Because, like, I'm home. And it's keeping me at home. So it's kind of encouraging me to do more things, and things that I wouldn't have previously tried, which is nice, too. I started doing more, I started running just for the sake of it and also because in the first lockdown, there were all those online challenges where you would like run 5km and nominate others to do it, like on Instagram, so that like encouraged me to do that stuff but I think that was very much towards the start of lockdown like when everyone was motivated and it was like a new opportunity to do things but then I think my mental health just deteriorated like everyone's did and I think now we're in our third lockdown and I think everyone is just tired of it. I have just kind of lost the will to do anything, like everyone kind of did, like all my friends just kind of stopped trying with everything really, because lockdown has lost, I don't know the, I don't want to say excitement, but you know, the first lockdown was new and stuff, now it's become the norm. Plus it's different now because I'm in college, so even though I have more time to focus on college work, that doesn't mean I'm more productive, I genuinely think it is having the opposite effect.	<p>Lockdown environment as motivating</p> <p>Opportunity to try new things</p> <p>Social media as online support</p> <p>Cumulative effect of lockdown</p> <p>Lockdown normalized</p> <p>Loss of motivation</p> <p>Reduced productivity</p>
R: Has it been mainly online or blended?	
P15: Yeah so mainly online, actually like all online really. I don't really know how to feel about that to be honest, it can be convenient and inconvenient. Like it's convenient in the sense that like, we don't have to, I don't have to leave my house, I can sit at home in my bed with a cup of tea and watch a lecture but also at the same time, it's difficult to like, I think it's difficult mentally in terms of not getting to see people and not having the opportunity to	<p>Positives vs negatives of online university</p> <p>Ease/convenience of online university</p>

meet people, especially as I just started college. So not like having the opportunity to have like the equivalent of freshers is something I feel like I'm missing out on, like the normal classroom experience and being able to meet new people and make friends like. I still haven't really met anyone from my course because it's hard when you're just seeing names on a screen and you can't match them to a face. I don't know, it feels kind of surreal I guess, because we've never met in person, you know?	<p>Missing social support</p> <p>Impact on psychological wellbeing</p> <p>Loss of rites of passage/experiences</p> <p>Alienating experience</p>
R: Following on from that, how do you think the lockdown measures influenced your social relationships?	
P15: In one way it's definitely made me realise how much you appreciate the people who you spend lots of time with. Like, you know you appreciate like, going to the pub or like things that we used to take for granted before COVID-19. And like seeing your friends and going to concerts and going out like it is all gone, so we got a taste of that freedom in summer so I am really looking forward to the day, we can go back to some form of normality with my friends, like you'd miss hugging people, you know? And then also it's like horrendous because like at our age, I feel like I'm being robbed of like, a whole year of social life. Like I'm a student, I'm a first year college student. I shouldn't be sitting in my bedroom. I should be enjoying myself. I should be having fun and stuff but like that has all been taken from us and yeah it just sucks a lot. I feel we are missing out and the only way I find, makes it easier to come to terms with is that we're all in it together, you know? At least I'm not the only one going through it you know? So at least there's comfort in that, I guess.	<p>Appreciation of pre-COVID lifestyle</p> <p>Privileges of life before lockdown</p> <p>Longing for return to normality</p> <p>Reflection on expectations</p> <p>Resentment – life not meeting expectations</p>
R: And do you think lockdown has influenced family relationships?	Sense of togetherness
P15: Like I think lockdown definitely, like there is a toll taken on family relationships. But I think lockdown actually also encouraged closeness. I think I was like, I didn't have a choice but to just sit at home and by doing this you learn to, in some way incorporate the things that you'd be doing with other people your age and start doing those activities with your family. Like we ended up watching tv shows together and like playing board games and I think that, while at the start we were more forced to do more things together, now we're doing things together because we actually enjoy spending that time together now, you know? Like I am really grateful for how much closer it has brought me to my family and like I've never gotten on well with my sister, we have always bashed heads but now I can genuinely say we get on so much better and I would go to her about anything now. So, yeah, I think in that sense lockdown kind of saved some of my family relationships because we were forced to kind of re-evaluate, I guess and like make the most of what we have.	<p>Adjustment period</p> <p>Encouraged closeness</p> <p>Appreciation of time with family</p> <p>Exploring hobbies/interests as family</p> <p>Improved communication</p> <p>Improvements in family relationships</p>
	Adaptation to family routine