



# Assessing the Impact of the COVID-19 Pandemic on Student Wellbeing at Universities in the United Kingdom: A Conceptual Analysis

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Transitioning into the university environment can be both exciting and stressful for new and returning students alike. The pressure to perform well academically in an increasingly competitive environment, coupled with a vast array of lifestyle changes, can contribute to suboptimal wellbeing. Over recent years, uptake to wellbeing services within universities in the United Kingdom has grown given the concurrent rise in mental health difficulties reported. Higher education students now have to contend with a drastically altered learning landscape, owing to the discovery of novel coronavirus, Sars-Cov-2, otherwise referred to as COVID-19. In the United Kingdom, universities have moved to close their campuses to both students and non-essential staff in an effort to protect them from contracting the virus. The repercussions of these decisions have been monumental for the delivery of teaching, relationships and, importantly, the provision of student services. Ambiguity remains as to how teaching will be delivered for the forthcoming academic year. The uncertainty caused by the pandemic has yet to be considered in terms of student wellbeing and the new, mostly online, environments that students will be expected to navigate without their typical support networks. For the purpose of this paper, the concept of student wellbeing, a population-level term concerned with positive emotions rather than diagnosed mental health conditions, will be considered in relation to the COVID-19 outbreak. The current paper performs a conceptual analysis on student wellbeing in United Kingdom universities with a specific lens on the psychosocial impact of the global COVID-19 outbreak. Given the unprecedented world that students now learn in, considering the impact of the pandemic on psychosocial outcomes delineates the novel challenges that researchers and practitioners must consider when implementing student wellbeing initiatives moving forward.

**Keywords:** student wellbeing, universities, mental health, students, COVID-19

## INTRODUCTION

Transitioning into the university environment represents a significant venture in an individuals' life with feelings such as excitement and, conversely, trepidation. Multiple facets converge during this life event that impact almost all elements of an individuals' life. Beyond the obvious change in academic challenge where students are expected to become more autonomous in their studies,

individuals may also relocate to another geographical location within the United Kingdom and, sometimes, internationally. This transition denotes a monumental shift in independence. For many new students, complete control over their behavioral choices becomes the norm for the first time with the potential for either positive or negative change (Mulye et al., 2009). The student solely decides all elements of their life such as diet, exercise, alcohol consumption and drug use. Previous research has illustrated how behavioral choices tend to cluster together in a student population, whether that be maladaptive or optimal behavior (El Ansari et al., 2018). For example, students who had a poor diet were found to be more likely to order takeaway food, smoke and engage in less physical activity (Sprake et al., 2018). These suboptimal choices tend to be compounded by the financial restraints felt by students upon entry, imposed by rising tuition fees and limited disposable income. Money and debt worries are described by students as being the main risk factor for exiting their degree prior to completion (Nevill and Rhodes, 2004), where financial concern can significantly impact upon social functioning (Jessop et al., 2020). The social implications of becoming a university student can be disruptive to the students' previous support networks. Moving away from pre-existing support networks that include both family and friends can be especially daunting. Forging new social connections can be exceptionally difficult for prospective students and can lead to periods of loneliness or feelings of disconnectedness. Loneliness in university students has been significantly linked to increased stress, anxiety and depression (Richardson et al., 2017). Synthesizing the above, the university experience presents multifaceted challenges to prospective students and has the potential to negatively impact upon student wellbeing. Despite this, entry levels to universities in the United Kingdom show no sign of waning. Record entry levels of 34.1% for 18 year olds into undergraduate study after year-on-year decreases (UCAS, 2020) demonstrate that many young adults still strongly consider Higher Education (HE) as a next step in their life. Adding into this already complex intersection of factors impacting upon student wellbeing, the exponential transmission of novel coronavirus COVID-19 has altered the HE landscape monumentally, from teaching delivery to campus closures. This conceptual analysis will illustrate the intricacies of student wellbeing in Higher Education, why universities interest in this concept has increased over recent years, and how COVID-19 has impacted student wellbeing through its' prodigious impact on both physical life and psychological outcomes.

Entry into HE in the United Kingdom has, historically, been limited to a privileged subsection of the general population. Higher socioeconomic status and previous university attendance within the family unit were strong predictors of entry into Higher Education owing partly to the substantial financial costs incurred across the academic journey. In the past decade, the opportunity for a wider range of individuals to embark upon an undergraduate course has grown exponentially aligning with the notion of social inclusivity (Gidley et al., 2010). The introduction of a now well-established student loan initiative, coupled with a growing economic need to acquire formal training within a specific domain (Clegg, 2017), has driven the increasing

diversity within a typical university in the United Kingdom. Individuals from various demographic backgrounds, such as those from lower socioeconomic backgrounds and mature students now have a greater chance of studying in HE. Whilst this is encouraging for the labor market in general, a range of associated issues has emerged as a result. Earlier work has established that those from lower socioeconomic backgrounds are more likely to withdraw from their studies (Smith and Naylor, 2005). University personnel now possess increasing and diverse workloads constituting a plethora of allocated tasks, such as teaching, marking and undertaking research, whilst supporting students during their academic journey has become less prevalent. Growing student numbers have impacted the personal relationships that staff and students hold, leading to a severe reduction in time devoted to pastoral support from academic staff (Heads of University Counselling Services, 1999). As support from academic staff has inevitably reduced relative to student numbers, student services assume the primary vehicle for student support. Services are typically segregated under the umbrella of student services into three main areas: counseling, wellbeing and disability services. Whilst this is the predominant framework, each university approaches student wellbeing in its' own way. Although HE has progressively expanded its' wellbeing provision, problems remain within this domain that impede both accurate measurement and positive impact on the student population. Recent calls have been made to better understand student wellbeing; synthesizing knowledge within the field is challenging owing to studies using terms such as "mental health issues," "psychological distress," and "student wellbeing" interchangeably (Barkham et al., 2019). The conflation of these terms in the academic literature serve to further complicate the collective understanding of student outcomes, with greater clarity required for the field to progress. For the purpose of this paper, the concept of student wellbeing will be addressed using a psychosocial lens.

The mechanisms of daily life changed significantly upon the discovery and subsequent exponential transmission of COVID-19. COVID-19 (or Sars-Cov-2) is a novel coronavirus initially discovered in Wuhan, China in late December 2019. Initially reported as a case of "unknown pneumonia", the escalation of worldwide response has occurred rapidly. COVID-19 can cause the infected person to experience a range of respiratory symptoms but the most commonly reported symptoms include a new continuous cough, fever and a loss of taste and/or smell (NHS, 2020). As COVID-19 has spread across the globe, the World Health Organization declared a Public Health Emergency of International Concern in January 2020 (World Health Organisation [WHO], 2020). Community transmission has led to an exponential growth in cases both nationally and internationally, bringing with it stringent new measures to curb the virus' impact. Each nation has approached the COVID-19 problem with varying degrees of zeal and a range of targeted interventions normally centered around social distancing. The most utilized approach has been quarantine or, as colloquially described in the United Kingdom, "lockdown." Whilst this has looked different in each of the devolved nations, the core element of "lockdown" has been the reduction in social interaction of

all forms, including typical working practices, shopping habits and education. Universities in the United Kingdom, and across the world, have closed their campuses to protect both their student and staff populations. Tertiary students have had to adapt to a completely novel learning experience as a result. COVID-19 poses both direct and indirect threats to student wellbeing; both as a direct contributor toward poor psychological outcomes and as the underpinning reason behind the stark reduction in social contact that students now cope with. Understanding how student wellbeing may operate during the global pandemic and post-COVID-19 is imperative to implementing new and adjusted measures to better support students in their academic journey. This paper will perform a conceptual analysis of 'student wellbeing' as it was first devised prior to COVID-19 and consider the impact of the 'new normal' on student wellbeing moving forward in the Discussion section. General research concerning wellbeing as a concept will first be considered before applying and synthesizing evidence in the tertiary student domain. One of the underlying principles of conceptual analysis is "the belief that to reach some agreement of that kind is a prerequisite for the development of useful (and/or interesting) knowledge..." (Furner, 2004). The impact of COVID-19 will be considered in alignment with wellbeing and how student wellbeing may be affected by the global pandemic. Scopus and Web of Science were searched for relevant papers, using a range of search terms and relevant variations such as: wellbeing, student, university, tertiary and concept. Online software was also used to identify pertinent articles within the domain<sup>1</sup>.

## THE EVOLVING FIELD OF WELLBEING

The concept of wellbeing has been extensively studied with competing arguments to its' true definition. The foundation of wellbeing discussion is embedded in the World Health Organization's (WHO) early definition that health "...is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization [WHO], 1948). Despite early work discussing two separate approaches of the concept (hedonic (Young, 1952) and eudaimonic wellbeing (Rogers, 1961), it is now widely accepted that wellbeing is a multidimensional construct (Wills-Herrera et al., 2009). Derived in part from the eudaimonic approach to wellbeing, early seminal work by Bradburn (1969) stimulated conversation about the construct. Bradburn proposed that wellbeing was ultimately composed of both positive and negative affect. Agreement has been reached that positive and negative affect are not strictly orthogonal but rather two separate constructs that are independent of one another (Diener et al., 1995). Further research began to elucidate the underpinnings of wellbeing and 'ill-being' as two distinct constructs. 'Ill-being' was found to be driven by worry, somatic complaints and negative affect, coupled with a personal sense of low competence and external factors such as unfavorable socioeconomic factors. Wellbeing, on the other hand, was associated with personality

factors such as extraversion, optimism and an overall sense of personal competence (Headey et al., 1984). With inextricable links to the notion of wellbeing, happiness has also been explored as a core component. Resources, assessment of needs and comparison of life situation, the authors propose, all contribute toward human happiness (Shin and Johnson, 1978). Additionally, the notion of 'quality of life' was discussed in relation to happiness, whereby it is argued that true quality of life should be defined by the individual. A review of subjective wellbeing (SWB) illustrated to the author key components of the concept:

"...the happy person is blessed with a positive temperament, tends to look on the bright side of things, and does not ruminate excessively about bad events, and is living in an economically developed society, has social confidants, and possesses adequate resources for making progress toward valued goals." (Diener et al., 1999, p295).

Whilst subjective wellbeing and psychological wellbeing differentiate, a common thread throughout the progression of the wellbeing literature clearly emerges: wellbeing is a multifaceted concept consisting of both internal and external contributors. An individual's affect, attitude toward life events and general outlook on life, coupled with environmental factors, contributes toward an improved sense of wellbeing. Happiness and positive affect, as a core tenet of wellbeing, has been found to correlate with a multitude of culturally desirable successes in many core aspects of life, such as love, work and health (Lyubomirsky et al., 2005). The value of truly understanding, striving toward, and maintaining positive wellbeing is critically important to ensuring that individuals' within society thrive and flourish within their own right.

Attention in the United Kingdom has more recently focused upon the concept on a national level. Resulting from a 6-month National Debate, three domains of national wellbeing emerged: individual wellbeing (such as life satisfaction), factors that directly affect individual wellbeing (such as health, relationships, where we work and where we live) and contextual domains (such as the economy and natural environment) (Beaumont, 2011). This framework concisely captures factors of wellbeing that have been previously discussed within the academic sphere. However, it has drawn criticism for its lack of conceptual depth. The illusion that the framework creates is that each 'domain' is viewed in silo and without interaction with the others. The academic evidence to date refutes this proposition, as research has consistently demonstrated how individuals possess distinct subjective reactions to each of the domains (Cooper et al., 2011). Evidently, academic findings have yet to be effectively translated into real-world pieces that undoubtedly inform policy and practice within the United Kingdom.

The dynamic interactions that occur within an individual's wellbeing are important to acknowledge. McNaught's (2011) definitional framework of wellbeing extends beyond the concept of individual subjectivity by including different dimensions of life. The four domains of the model are: individual wellbeing, family wellbeing, community wellbeing and societal wellbeing. It is stressed here that individuals should not be treated as passive actors who are the recipient of wellbeing from others around

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them. Individuals shape and mold their own wellbeing through their chosen actions and subsequent interventions. Importantly, McNaught's (2011) framework effectively pulls away from the view of wellbeing being solely related to health, but framing it within the context of one's life. The framework acknowledges that wellbeing is an existential experience subjective to the individual and not merely an operational definition that fits a multitude of personal situations, such as the definition generated by Dodge and colleagues (2012), Placa et al. (2013). The shift away from a hard and fast definition denotes an interesting take on the case of individual wellbeing, in that any number of factors can play a role in an individuals' wellbeing and that, ultimately, the individual shapes and determines their own wellbeing dependent on what matters most to them (Shin and Johnson, 1978; McNaught, 2011).

## STUDENT WELLBEING: BEFORE COVID-19

The term wellbeing generally alludes to a range of factors in ones' life that contributes toward fulfillment and good physical health. It has a complex role to play as both a predictor of outcomes for students, such as their academic attainment (El Ansari and Stock, 2010) but also as an outcome in and of itself influenced by a variety of factors (Kim and Kim, 2017). An updated definition for wellbeing was generated recently, where it was defined as: '...when individuals have the psychological, social and physical resources they need to meet a particular psychological, social and/or physical challenge' (Dodge et al., 2012). As noted by GuildHE (2018), defining wellbeing within the Higher Education domain is a challenging prospect owing to the plethora of evidence available and the complexity of the concept. This echoes McNaught's (2011) proposition that wellbeing is a deeply personal, existential experience. The term student wellbeing can also be described as a population-level term encompassing positive emotion and the inner capacity for an individual to cope with the challenges of day-to-day life and their academic journey (Barkham et al., 2019). In recent years, the student wellbeing sphere has started to embrace core tenets of the positive psychology approach.

Positive psychology, as coined by Seligman (2004), denotes a paradigm shift from the previous model of mental ill health that permeated the psychological domain. Rather than an explicit focus on a deficit-based model of mental illness, positive psychology transmutes the perception that we must fix what is deemed as being 'wrong' with an individual. Instead, it posits three central pillars of wellness and wellbeing: positive emotion, positive traits and positive institutions. Emerging from this early work is the PERMA model of wellbeing (Seligman, 2011):

1. Positive emotion (P): refers to experiencing and retaining a positive outlook, focusing on life's events in a constructive manner.
2. Engagement (E): ensuring the opportunity for genuine engagement both professionally and personally with activities, adopting a state of flow and immersion in certain instances.

3. Relationships (R): possessing and nurturing a range of meaningful relationships with others and reducing the risk of isolation.
4. Meaning (M): feeling as if one is working toward something that transcends oneself, or believing in something that lends meaning to ones' life.
5. Accomplishment (A): whether in a personal or academic capacity, reaching a desired goal will lead to a sense of accomplishment and thus, contribute to a state of flourishing.

Oades et al. (2011) propose a conceptual framework for integrating PERMA concepts into the university environment, addressing areas such as curriculum, social aspects, faculty and residential domains to achieve a positive university. Similar to the early models rooted within the eudaimonic approach, the PERMA domains capture both internal and external components of ones' life reflecting the multifaceted nature of wellbeing. Recent research has demonstrated how each of the PERMA domains can be incorporated into teaching practices successfully, incorporating an innovative approach to supporting student wellbeing (Matthewman et al., 2018). Moreover, introducing a positive psychology course to students can improve the PERMA domains in turn, as compared to regular psychology students (Smith et al., 2020). The potential that the PERMA model holds in underpinning student wellbeing and subsequent services provided has yet to be fully realized given its' relative infancy within the student domain.

Pertinent within the student wellbeing literature is the role of resilience and how this contributes to elevated wellbeing. Resilience has been previously defined as:

"...the process of effectively negotiating, adapting to, or managing significant sources of stress or trauma. Assets and resources within the individual, their life and environment facilitate this capacity for adaptation and 'bouncing back' in the face of adversity" (Windle, 2011, p163).

Being adaptable when faced with a range of challenges is largely determined by the assets and resources an individual holds, along with their life and environment. Conceptual models have been suggested specific to the role resilience has to play in the HE setting. One of note is the notion of a "coping reservoir" in medical students (Dunn et al., 2008). The authors suggest that each student possesses their own "coping reservoir" that has an internal structure, made up of the individuals' temperament, personality characteristics and preferred coping style. The "coping reservoir" is subsequently impacted by negative and positive inputs that either deplete or replenish the reservoir. This can lead to either positive or negative outcomes reflective of the students' wellbeing, such as resilience or burnout. It is noted however, that wellbeing is a lot more complex than inputs and outputs. Despite this, evidence supporting the "coping reservoir" model has illustrated its' utility (Heinen et al., 2017). Recognizing resilience as an outcome of optimal wellbeing is important to consider, as resilient individuals tend to cope with stressors more efficiently



which is particularly useful in the university environment. Further to this, elements of the ‘PERMA’ model of wellbeing have been found to significantly predict higher resilience (Abiola et al., 2017).

Resilience has also been discovered to be an antecedent of student wellbeing. It has been shown to have a positive relationship to subjective happiness as well as negative relationships with anxiety, depression and stress. Critical to developing resilience capability are the assets and resources that students access within the systems that they participate, such as university, home and work (Turner et al., 2017). This mirrors the ONS’ domains of wellbeing fairly well, placing the individual within a particular environment that contributes toward overall wellbeing (Beaumont, 2011). The role of resilience as an antecedent and outcome of student wellbeing is important to consider and is captured loosely in Barkham et al.’s (2019) working definition, alluding to a students’ inner capacity to cope. Interestingly, aside from the notion of a “coping reservoir,” this has not been explicitly alluded to in more general models of wellbeing. Whilst individual wellbeing or personal characteristics frequently form the central pillar of wellbeing, it could be suggested that resilience contributes significantly to wellbeing and warrants greater acknowledgment.

Experiencing suboptimal wellbeing in any context can be challenging, but students at university often have to navigate a range of tasks and environments simultaneously with a range of onlookers, such as colleagues and academic staff. Accessing services whilst studying is normally physically easy due to services having close proximity to on-campus students, but the societal challenges that surround support are pertinent. Stigma has previously been defined as: ‘...a socially constructed mark of disapproval, shame or disgrace that causes significant disadvantage through the curtailment of opportunities.’ (Martin, 2010). Students often feel they are unable to access services due to the fear of stigma, where 65% of students regret disclosing a mental health concern and would not advise others to do so (McClean and Andrews, 1999). The fear of stigma can ultimately prevent students from accessing services and addressing their wellbeing when they may be struggling. Not only are students reluctant to rely upon student services for support due to the social implications they perceive they will face, research has found that there is also apprehension around mental health disclosures to their social networks. Mental health disclosures on Instagram were considered not possible by college students, with stigma being cited as one of the main barriers to disclosure (Budenz et al., 2020). Self-stigma particularly has shown to lead to decreased feelings of self-respect and the “why-try” effect, coined to describe when individuals feel that their behavior is futile in achieving their personal goals (Corrigan et al., 2016a). Behavioral futility within the context of HE is extremely concerning, given the academic expectations placed upon students throughout their journey at university. Designing and implementing programs that encourage students to disclose, or make them feel more comfortable with disclosure, are posited as potential

avenues to disarm stigma within the university environment (Corrigan et al., 2016b).

## WHY ARE UNIVERSITIES INTERESTED?

Universities possess a unique organizational structure that incorporate a multitude of competing agendas concerning knowledge production, subsequent translation into real-world impact and financial stability. Ultimately, concentration must be placed on the university as a viable business and thus, means an increased pressure to run as a for-profit business (Taylor, 2017). The notion of “student wellbeing” therefore, has competed for resources and funding alongside other organizational factors that are often prioritized highly.

The settings-based approach to health and wellbeing encapsulates how the university setting can be critical in promoting improved student wellbeing. For students, university represents a community where they can thrive and hopefully flourish both socially and academically (Markoulakis and Kirsh, 2013). Embedding health and wellbeing promoting features within the university setting should be a priority given the unique opportunity that the environment offers to support better behavioral choices. The settings-based approach was initially derived from the World Health Organisation [WHO] (1986), where health was described as: “...created and lived by people within the settings of their everyday life; where they learn, work, play and love.” Whilst the university environment in itself shares commonalities with other businesses in industry whereby it employs staff, it also possesses a range of unique roles within its’ structure that generates a distinctive culture and mission (Dooris, 1999). The university environment plays a role as a “future-shaper” of students and is a platform for cultural, social and economic change, rendering it as a perfect setting to integrate health promotion (Cawood et al., 2010). The health-promoting university, otherwise known as the Healthy Universities initiative, draws upon the settings-based approach to embed health into the organizational structure of the institution and instill health into the daily operation. The Healthy Universities initiative aims to achieve key outcomes by:

- Creating healthy and sustainable learning, working and living environments for students, staff and visitors.
- Integrating health and sustainable development as multi-disciplinary cross-cutting themes in curricula, research and knowledge exchange.
- Contributing to the health, well-being and sustainability of local, regional, national and global communities (Dooris and Powell, 2012).

The Okanagan Charter (2015) has built upon the idea of health promotion infused within the university setting. By embedding health within campuses, universities serve to enhance the success of their institutions whilst promoting equity, wellbeing and social justice. Ultimately, this will strengthen communities economically, socially and ecologically. Through a recent reconceptualization, it was found that developing a supportive ethos and culture, embedding health, targeting the

entire university population, embracing challenges and building a broad understanding of health contributes to the status of being a Healthy University (Dooris et al., 2019). Similarly, students identified that a whole university ethos, coupled with access to health services, is imperative to the initiative (Holt et al., 2015). Becoming a Healthy University is intrinsically appealing owing to the clear relationship between wellbeing and academic attainment. Previous research suggests that health, health behaviors and health awareness hold relationships with key determinants of academic attainment, such as perceived importance of achieving good grades (El Ansari and Stock, 2010). The importance of promoting health within the university environment is therefore high, owing to the subsequent gains achieved resulting from improved wellbeing.

## DISCUSSION

The global pandemic has shifted the student wellbeing domain considerably due in part to the extensive pragmatic changes that have been introduced to curb the spread of COVID-19. Education, across the board, has experienced drastic changes to teaching delivery. Transition into online learning has occurred rapidly and has presented a range of novel challenges both to staff and students. As noted by Burki (2020), the utilization of virtual learning may well persist until a suitable vaccine for COVID-19 has been developed. Navigating the vast array of technological platforms now being relied upon for telecommunication (such as Zoom, Skype for Business and Microsoft Teams), as well as becoming fully competent using platforms such as Moodle, also stimulates questions surrounding the pragmatic barriers that students may face when attempting to study, collaborate with peers and submit pieces of work. Computer literacy, for example, is understood to be fairly high with the student demographic (Link and Marz, 2006). Given that teaching has not been a strictly face-to-face endeavor for some time, it is assumed that students will engage with technology seamlessly and with little difficulty. However, it must be considered that a proportion of the student population will now encounter difficulties with the technology-heavy approach to learning. An individuals' sense of personal competence can contribute to suboptimal wellbeing and a perceived sense of decreased wellbeing should a student feel a loss of capability when it comes to their studies. Universities should strive to provide comprehensive support to their students in terms of navigating their new learning experience and extensive resources to underpin the transition to online learning.

Preliminary work has demonstrated that, even in simulation-based scenarios, it is possible to deliver functionally similar sessions that allow students to attain their educational objectives (Torres et al., 2020). Fully scoping the requirements for each individual session should be paramount to retaining similarity between an on-campus and online scenario, ensuring that functionality is truly aligned with the objective of each session. However, the authors do note that barriers do occur, with practical elements such as internet speed providing challenges to the learning experience. Conversely, Da Silva (2020) suggests that virtual learning could contribute to greater attendance

and participation with sessions, removing the anxiety associated with asking questions in front of course peers. This claim is corroborated by recent student surveys indicating that students value online learning for its flexibility and the ability to study at a time convenient to them (Lall and Singh, 2020). Interestingly, 10% of students surveyed described the lack of face-to-face contact as one of the main strengths of online learning. This could be linked to the idea of reduced anxiety surrounding learning in general but also highlights the importance of others in conceptual frameworks of wellbeing. The concept of others may not always refer to positive relationships held with others but the presence of social judgment, especially concerning perceived stigma relating to mental health. This is, however, counteracted by 26% of the sample disliking online learning as they are unable to meet with friends. Clearly, the transition to virtual learning and assessment comes with both advantages and disadvantages. The technological move could potentially compromise the notion of Accomplishment, one of the five tenets of Seligman's (2011) PERMA model. Each university has approached assessment differently as a result of the pandemic, deploying novel methods that many students have not experienced before such as open-book examinations. The uncertainty surrounding assessment will inevitably provoke anxiety within the student population. Coupled with this uncertainty is the anxiety of completing assessments in a completely novel fashion, where students may worry that the new forms of assessment used will not truly capture their ability, especially when compared to traditional methods. Graduation ceremonies were not exempt from cancellation, negating a significant life event that celebrates the student's achievements after years of hard work. This also calls into question the notion of Meaning stipulated in the PERMA model. Seligman (2011) posits that a state of flourishing can be attained by working for something that transcends oneself. Research has demonstrated that education and career are one of the main sources of meaning for undergraduate students (Hill et al., 2013). If students feel as if their work is not meaningful, especially given that their studies will occur in a predominantly isolated fashion, detrimental wellbeing could ensue. Ensuring that students are fully informed of new assessment protocols, as well as moving to celebrate their successes in an engaged way, could potentially mitigate the risk of suboptimal wellbeing in this instance. Institutions and, more importantly, researchers should consider the transition in a balanced fashion to truly understand the role virtual learning has on student wellbeing over the course of the COVID-19 pandemic and beyond.

The environment in which the student now resides and studies will provide unique barriers to a streamlined learning experience. Considering the drastic shift in environment that students have experienced, perhaps the biggest potential contributor to poor student wellbeing is the change in physical location. Currently, all academic content is delivered through technological means whilst campuses remain closed. The impact of this change is significant and far-reaching, deviating from the typical university experience that students have become accustomed to. A lack of physical contact with academic staff, coupled with their reduced capacity associated with the technological shift, has put students under increased pressure to meet deadlines without the typical

access to support that they would normally experience. Prior to COVID-19, students may have sought advice by physically meeting with a supervisor or module lead. Staff should, in the wake of the pandemic, consider offering virtual office hours to sustain and promote frequent engagement with students to mitigate the disruption they are experiencing to their studies (Zhai and Du, 2020). The absence of physical contact is not limited to teaching staff. Students are now faced with a prolonged period of time without their friends and course companions. Where group work and collaborative projects are now a mainstay of many university courses, the opportunity for students to work with fellow students has been reduced and become more challenging. The likelihood that students will experience more frequent and intense feelings of loneliness, anxiety and isolation is high, owing to the disconnectedness many will feel as a result of leaving the university campus (Zhai and Du, 2020). As previously stated, loneliness has been found to be significantly associated with stress, anxiety and depression in students (Richardson et al., 2017). In addition to education and career, undergraduate students consider relationships as a main contributor to meaning (Hill et al., 2013), considered integral to wellbeing according to the PERMA model. The importance of combatting feelings of loneliness should be considered owing to the highly detrimental effect this has on student wellbeing. For many, the university campus is home and moving away due to the COVID-19 pandemic represents a significant upheaval for the individual.

Wellbeing described more generally often stresses the importance of the individuals' lived environment and how this impacts upon individual wellbeing, such as the places that we work and live (Beaumont, 2011). In this instance, the place where students study, as opposed to work, has evolved considerably. The way in which the lived environment has interacted with how we experience relationships during the pandemic is important to note as access to friends and family has practically ceased due to nationwide restrictions to curb the spread of COVID-19. For some students, the ability to return to the familial home to self-isolate together has been near impossible, especially for international students. There are instances of students remaining in university halls or accommodation throughout the pandemic, living independently but without the social support networks they previously possessed as their cohabiting peers have returned home. The impact that this isolation has on student wellbeing is monumental, as the lived environment and accessibility to social support across the globe has ultimately nullified the possibility of physical contact with loved ones. Thankfully, the digital era that we now live in offers online methods of sustaining regular contact with those within our social networks. Paradoxically, early research suggested that increased engagement with the internet was to the detriment of social relationships, exacerbating feelings of loneliness and depression (Kraut et al., 1998). The use of social media specifically has been found to have both positive and negative effects on psychosocial wellbeing, identity and belonging in adolescents (Allen et al., 2014). In current circumstances where physical loneliness may be impossible to avoid, the positive elements of internet use and social media engagement should be considered. As long as social media usage is engaged with as a means to sustain existing relationships and

forge new connections, it can be a powerful tool in reducing an individuals' feelings of loneliness (Nowland et al., 2018). Whilst the lockdown measures continue to persist within the context of the pandemic, the use of social media will be key in maintaining appropriate support networks for students. In the absence of offline social activities, social media could play a crucial role in alleviating feelings of loneliness within the student population. Given the importance that social connectedness and relationships play relative to a students' wellbeing, digital solutions provide a good substitution for face-to-face interaction.

Whilst the COVID-19 pandemic has had pragmatic implications relating to campus closures and a transition to virtual learning, the virus itself creates a degree of uncertainty that is unprecedented. COVID-19, as a novel coronavirus, is being studied at a phenomenal pace with more scientific information becoming readily available with each passing day. Understanding the transmission, prevalence and symptoms of the virus is critical to keeping the virus under control but until that information becomes clearer, ambiguity surrounding the virus is high. Misinformation has been spread exponentially throughout the duration of the pandemic through a variety of mediums. Social media platforms such as WhatsApp have experienced an overwhelming level of viral messages, with one particular message purporting to contain the cure for the virus, which involved mixing garlic and boiling water (Clarke, 2020). A headline published in the BMJ in late April 2020 (Wise, 2020) is a prime example of how information can be taken out of context and contribute to elevated public anxiety and fear. The article headline stated: "A third of COVID-19 patients admitted to United Kingdom hospitals die," with a remark added when shared by the BMJ on Twitter that the fatality rate was "on par with Ebola." This information was disseminated widely in the United Kingdom press despite the Ebola claim being factually incorrect when case fatality rates (CFRs) are directly compared – Ebola's CFR is approximately 50%, whereas COVID-19's CFR is around 6.5% with significant underreporting of milder cases (Winters et al., 2020). Further to this, over 25% of COVID-19 related videos on YouTube were found to contain nonfactual information totaling over 62,000,000 cumulative views (Li et al., 2020). The infodemic that has ensued has been overwhelming for the general population and for students especially. Amongst the false information being circulated is legitimate scientific knowledge. Many news outlets are providing around the clock coverage of the pandemic and how it is affecting countries and communities across the globe. Accessing and assimilating information relating to COVID-19, whether factual or not, is incredibly easy. For students, relating this to their personal circumstances and how it impacts upon their studies can be detrimental to their wellbeing. Contextual domains are compromised where the economic and educational landscape are now unrecognizable. The unpredictability of the pandemic will undoubtedly contribute to suboptimal mental health outcomes for the general population (Zandifar and Badrfam, 2020). Tertiary students worldwide are facing unmitigated uncertainty in regard to their studies, ranging from fear of contracting the virus once campuses eventually open to the unknown quantity surrounding the completion of their

studies. A range of interventions have been posited thus far to combat the onset of poor mental health outcomes including the provision of online mental health resources, online provision of self-help and counseling services, and the deployment of online surveys to understand the prevalence of poor mental health outcomes (Rajkumar, 2020). Universities should consider their resources and provision throughout the pandemic and beyond. Not only in terms of content, but in their accessibility to students' from a variety of demographic backgrounds. The negative affect associated with the pandemic has the potential to impact on student wellbeing for the foreseeable future, therefore further research is required to understand what provision would be most suitable for the HE context. The use of newly produced psychometric measures with university students could facilitate greater understanding of the mental health impact of COVID-19, such as the Coronavirus Anxiety Scale (Lee, 2020) or the Fear of COVID-19 Scale (Ahorsu et al., 2020).

Physical access to wellbeing services offered by a university has ceased completely due to campus closures. Wellbeing and counseling provision are a critical component of student support where students can access varying degrees of support for both acute mental health issues and more chronic, long-term conditions. The absence of these services, and potentially students' lack of knowledge around online access, has the potential to compound existing issues that may have been further exacerbated throughout the pandemic. Students who experience mental health issues and access appropriate services are successful in attaining their educational goals in post-secondary education (Megivern et al., 2003), demonstrating the importance of providing support to the student population. The lack of physical access to services does present a significant barrier to the delivery of student services. Again, these services have transitioned into online consultations and sessions to ensure a continuation of care for those students who need it. The exact implications of this move, whether positive or negative, are yet to be fully realized or investigated. Examples of online interventions to better support student mental health outcomes have been previously described within the literature (Barrable et al., 2018; Farrer et al., 2020), with reference to made to the cost-effectiveness and efficiency associated with online provision. Whilst these illustrate the steps already taken prior to the pandemic to move services online, interacting with wellbeing/counseling staff in a live format, such as through Skype, had not been introduced. A recent review found a number of online interventions available for HE students, but none had included live consultations (Papadatou-Pastou et al., 2017). As the student population is often considered high risk for developing mental health issues, introducing accessible services quickly is imperative. There has been some reluctance for student support staff to provide online consultations. Staff have previously stated concerns over how authentic students would be in utilizing the service along with the legal and ethical conundrums posed by the online environment (Glasheen et al., 2013). Although these concerns will have pervaded throughout the unavoidable transition, universities are now having to become accustomed to a new way of working. The apparent barriers that caused staff concern are counterbalanced

by the benefits that may be realized. As previously discussed, stigma plays a monumental role in a students' attitude toward seeking support from wellbeing services. The shift into an online environment could potentially remove the fear of being judged from peers and staff members, allowing a greater sense of anonymity not previously associated with on-site campus services.

There are limitations to this piece of work and the evidence synthesized. Mainly, research produced during the COVID-19 pandemic is sparse, varied and conducted within a plethora of different scenarios. Studies have originated primarily from Asia where the epicenter of the COVID-19 pandemic can be traced. Little research has been completed thus far within the United Kingdom specifically as Europe's peak of the pandemic arrived later than in Asia. The vast cultural differences observed, alongside the diverse set of methods deployed to explore the impact of COVID-19, means that it is difficult to extrapolate findings directly into the HE setting within the United Kingdom. Only as time passes and more research is conducted in relation to COVID-19 will more concrete conclusions be available. The long-term impact of the virus on student wellbeing, and wellbeing of the general population, is unknown.

Synthesizing the evidence to date in relation to pre-existing models of wellbeing suggests that the psychological impact of the virus will be far-reaching. Whilst students face an unknown length of time living with uncertainty regarding their studies, research teams should move quickly to understand student wellbeing in these unprecedented times and beyond. Considering the negative implications of COVID-19 is intuitive, however, small victories may emerge. The shift to virtual learning and student services could encourage greater participation now that stigma and peer judgment has been significantly reduced. The collective trauma experienced by the university community during the pandemic must not be underestimated, but the potential to rebuild stronger is now more likely than ever (Wilton, 2020). The lessons learnt during this period will undoubtedly contribute toward more online services, greater awareness of the impact of loneliness on the student experience and an increased need to diversify services to suit a variety of student demographics.

## AUTHOR CONTRIBUTIONS

DB conducted the analysis and drafted the manuscript. ND and MH reviewed the manuscript and provided feedback prior to submission and formed the Ph.D. supervisory team. All authors contributed to the article and approved the submitted version.

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**Conflict of Interest:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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