The experience of loneliness among international students participating in the BBC Loneliness Experiment: Thematic analysis of qualitative survey data

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ABSTRACT

Loneliness is associated with poor mental and physical health in the general population. It is thought to be prevalent among international students, but few studies have investigated this. To capture what loneliness means in the everyday lives of international students we analysed data from 521 international students aged 16–40 years who participated online in the 2018 British Broadcasting Corporation (BBC) Loneliness Experiment. Using the approach of thematic analysis of free-text responses to a question probing the perceived meaning of loneliness, we identified six main themes: (1) Negative psychological and social aspects of loneliness; (2) The distressing experience of being alone; (3) Disrupted ability to make meaningful connections; (4) Sense of entrapment in a state of loneliness; (5) Awareness of others' stigmatizing perceptions of oneself as lonely; (6) Perceptions of positive aspects of loneliness. These findings identified a range of negative social and psychological dimensions of loneliness in international students in relation to their well-being, emotional health, and social functioning, hampering the benefits to be gained from their overseas study. Higher education teaching staff, pastoral staff, and mental health professionals need to be more aware of the prevalence and impacts of loneliness and should tackle it in culturally appropriate ways.

1. Introduction

An increasing number of students choose to study abroad for their higher education, with motivations including enhancing employability, gaining new cultural perspectives, and the university or college reputation (Shkoler and Rabenu, 2022). In the 2020/21 academic year, 605,130 international students were studying at United Kingdom (UK) universities, of whom 75% were from outside the European Union (EU), overall accounting for around 22% of the university student population (HESA, 2022). International students bring diversity to the university and local community and make a major economic contribution to the host economy through overseas tuition fees to higher education institutions (HEIs), wider spending in the host economy, and (potentially) their later contribution to the labor market. International students contribute £28.8 billion each year to the UK economy (Hillman, 2021), explaining why many HEIs market their degrees to overseas students.

The UK government's 2021 International Education Strategy aims to increase the number of international students to 600,000 enrolling per year (Department for Education, 2021). This is also the strategy of many international HEIs, with the estimated economic impact of international students estimated at $300 billion United States (US) dollars (Choudaha, 2019).

However, international students face many challenges when studying abroad, including language barriers, homesickness, culture shock, discrimination, social isolation, and loneliness (Almurideef, 2016; Akanwa, 2015; Götz et al., 2018; Hasnain and Hajek, 2022; Liu et al., 2016; Morris et al., 2021). They are also more likely than domestic students to experience emotional problems (Altinyelken et al., 2019; Li et al., 2021; Rathakrishnan et al., 2021), including anxiety (Roitblat et al., 2017) and depression (Oei and Notowidjojo, 1990). International students in the UK have lower levels of mental health literacy, help-seeking attitudes, and help-seeking intentions for suicidal

ideation than domestic students (Clough et al., 2018; Cogan et al., 2021). Qualitative work suggests this is linked to stigma and fear of judgment, adaptation and acculturation difficulties (a lack of belongingness), and communication barriers (Cogan et al., 2021). These threats to the wellbeing and mental health of international students are concerning and addressing them should be an education policy goal in order to maximize what this group gain from their studies, as well as their cultural and economic contribution to the host country.

Very little research has investigated experiences of loneliness among international students. Loneliness is defined as the subjective, unwelcome feeling, which occurs when there is a discrepancy between the quantity and quality of an individual's current and desired social relationships (Perlman and Peplau, 1981). Loneliness is most common in young people and older adults (Yang and Victor, 2011), and appears to be more stigmatizing for young people than older age groups (Barreto et al., 2022). The public health impacts of loneliness are now wellrecognised and include reduced wellbeing (Park et al., 2020), an increased risk of psychiatric disorder (Solmi et al., 2020; Park et al., 2020), suicidal behavior (McClelland et al., 2020), and an increased risk of allcause mortality (Rico-Uribe et al., 2018). Whilst transient loneliness in international students (for example at the start of a course) may be a prompt to form friendships and could be viewed as an evolutionary advantage (Cacioppo et al., 2013), where it persists it can have serious implications for well-being and mental health (Park et al., 2020).

The few studies that have investigated loneliness in international students have tended to be quantitative, use small samples, or focus on students in the US or Australia. Such work shows that loneliness is more common in international students than domestic students (Oei and Notowidjojo, 1990), and that higher levels of loneliness among international students are associated with poorer functioning (Hunley, 2010). In one UK sample, loneliness was reported by 72% of international students, among whom loneliness scores indicated a moderate level of loneliness (Wawera and McCamley, 2019). Whilst loneliness in international students tends to be most acute during the initial transition period, whilst settling into the new country, declining thereafter (Sawir et al., 2007; Serrano-Sánchez et al., 2021), it can also persist for long periods (Serrano-Sánchez et al., 2021). Risk factors for loneliness in international students include feelings of social and cultural disconnection (Hasnain and Hajek, 2022) and homesickness, minority status, and language difficulties (Shan et al., 2020). Discrimination contributes to loneliness (Liu et al., 2016), and is experienced as perceived xenophobia and a sense of insincerity among domestic students when attempting to forge connections with them (Girmay and Singh, 2019).

We lack research evidence describing the experiences of loneliness among international students, and therefore there is a lack of understanding of the precipitating and perpetuating factors. Conducting such research would help develop approaches to prevent or reduce loneliness, with implications for emotional health, quality of life and academic outcomes. To address this gap in the evidence we explored the following questions:

(1) What does loneliness mean to international students?
(2) How do international students perceive the impact of their experiences of loneliness on their well-being and emotional health?

To address these aims we used qualitative approaches to focus on the underlying meaning of data describing international students' experiences of loneliness, and to understand whether those descriptions linked to their well-being and emotional health.

2. Methods

2.1. Participants

We analysed quantitative descriptive and free text data collected from international students who indicated feeling lonely in an online survey marketed as the British Broadcasting Corporation (BBC) Loneliness Experiment. This was, to date, the largest survey on loneliness that has been conducted internationally. It was promoted in February 2018 on BBC Radio 4 and the BBC World Service to any adult (aged 16 years and above) internationally interested in participating. The survey gained a high level of media attention in print and broadcast media, thereby maximizing reach and recruitment over a period of four months. A total of 54,988 people aged 16–99 years responded, answering a series of fixed-choice and free text questions about their social lives and their experience of loneliness.

For the current analysis, we identified all those participants who defined themselves as full-time or part-time students, and who indicated that they resided in a country that was different to their country of birth, operationalising this as our definition of international students. We excluded people over the age of 40 years, given the age patterning of loneliness (Yang and Victor, 2011; Barreto et al., 2021), people who did not specify their age, and those who indicated that they never felt lonely on a direct measure of loneliness ("*How often do you feel lonely?*") to ensure that all participants related responses to recent experiences of loneliness. Finally, we excluded all those who did not respond to one specific question on the meaning of loneliness (see Fig. 1: Flowchart of participants). Our final analytic sample included 521 eligible participants.

2.2. Survey instrument

The survey questionnaire was developed by a team of academics researching loneliness to capture opinions and experiences of loneliness and related topics, including friendship, relationships, and use of technology (Barreto et al., 2021; Qualter et al., 2021). The survey included fixed-choice questions on self-reported gender, age, country of origin, country of residence, student status (full-time/part-time), sexuality, household size, marital status, time spent alone, items from the University of California Los Angeles (UCLA) Loneliness Scale, and other measures assessing aspects of the experience of loneliness. The survey elicited frequency, duration and intensity of feeling lonely, each using sliding scale responses. A range of open questions on experiences of loneliness elicited free text responses. The question of interest for this study was: "*In this next question, we would like to know what loneliness means to you. Please type as much, or as little, as you like. Please separate your ideas and thoughts with a full stop.*" The study took approximately 45 min to complete and the full text of the questionnaire is accessible on the Open Science Framework (OSF): https://osf.io/hv7t2.

2.3. Ethical approval

Ethical approval for this study was obtained prior to data collection from the University Research Ethics Committee at the University of Manchester. The study followed ethical guidelines by the British Psychological Society and the Declaration of Helsinki (2013). All participants took part on a voluntary basis.

2.4. Data analysis

We presented descriptive statistics to illustrate the sociodemographic characteristics of this sample. We also tabulated responses to questions capturing time spent alone (fixed-choice options), frequency of feeling lonely (Likert-type scale), intensity of feeling lonely (Likert-type scale), and responses to a fixed-choice question "*Is the experience of loneliness positive?*" (fixed-choice options).

We chose to use reflexive thematic analysis (Braun and Clarke, 2006, 2020), using both deductive and inductive approaches to capture the underlying meaning of participants' descriptions of their experiences and present a level of complexity to themes and patterns in the data (Nowell et al., 2017; Byrne, 2021). We followed the recommended six stages of reflexive thematic analysis (Braun and Clarke, 2020) to maximize data engagement.
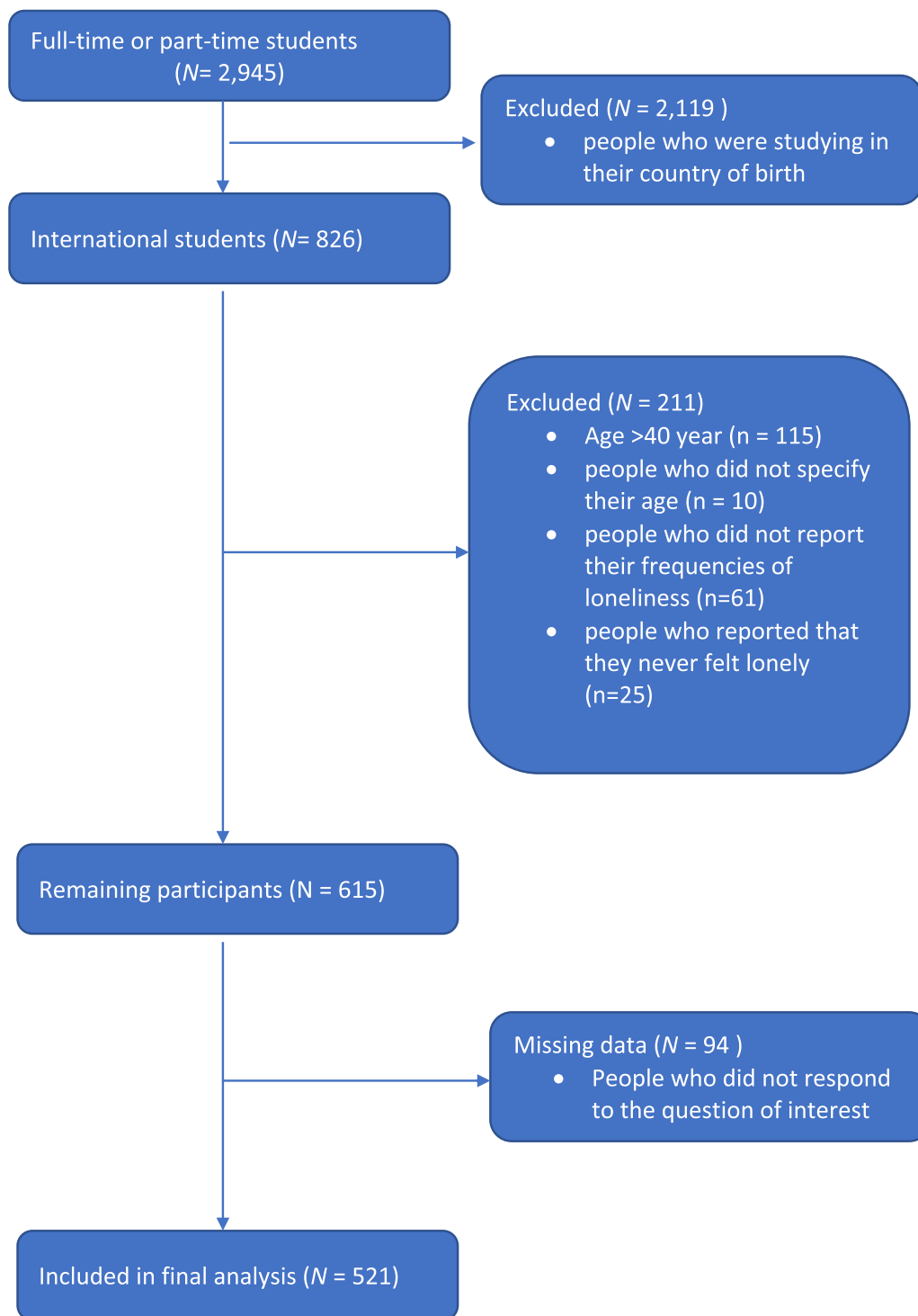
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┌─────────────────────────────┐
│ Full-time or part-time      │
│ students                    │
│ (N= 2,945)                  │
└─────────────────────────────┘
              │          ┌──────────────────────────────────┐
              │─────────▶│ Excluded (N = 2,119 )            │
              │          │  • people who were studying in   │
              ▼          │    their country of birth        │
┌─────────────────────────────┐  └──────────────────────────────────┘
│ International students      │
│ (N= 826)                    │
└─────────────────────────────┘
              │          ┌──────────────────────────────────┐
              │          │ Excluded (N = 211)               │
              │          │  • Age >40 year (n = 115)        │
              │          │  • people who did not specify    │
              │          │    their age (n = 10)            │
              │─────────▶│  • people who did not report     │
              │          │    their frequencies of          │
              │          │    loneliness (n=61)             │
              │          │  • people who reported that      │
              │          │    they never felt lonely        │
              ▼          │    (n=25)                        │
                         └──────────────────────────────────┘
┌─────────────────────────────┐
│ Remaining participants      │
│ (N = 615)                   │
└─────────────────────────────┘
              │          ┌──────────────────────────────────┐
              │─────────▶│ Missing data (N = 94 )           │
              │          │  • People who did not respond    │
              ▼          │    to the question of interest   │
┌─────────────────────────────┐  └──────────────────────────────────┘
│ Included in final analysis  │
│ (N = 521)                   │
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Fig. 1. Flowchart of participants.

For phase 1, *data familiarisation and writing familiarisation notes,* we imported free text data into Excel to organize large volumes of data and to enable the process of familiarisation, supplemented by note-taking. For phase 2, *systematic data coding,* one researcher (KZ) coded all data lines, whilst 10% were coded independently by a second researcher (RJ; a master's student) and a further 10% were coded independently by a third researcher (AP; a research psychiatrist). For phase 3, *generating initial themes from coded and collated data,* KZ created an initial thematic framework in collaboration with AP, discussing successive revisions whilst comparing individual quotes against sub-themes to check validity and consistency of the thematic framework. For phase 4, *developing and reviewing themes,* we used team discussions to reflect on what some of the authors' personal experiences of being international students (see Reflexivity) brought to the analysis process, how those interpretations of the data might differ or match those of researchers with other experiences (for example of teaching or learning with international students), and how our own hypotheses or preconceptions might influence the analysis, as part of reflexivity. For phase 5, *refining, defining and naming themes,* we used an oral presentation of findings to departmental colleagues as a validity check, as a process of knowledge exchange,

and to improve reflexivity, by inviting challenges to our own interpretation of the data. Based on their comments, we refined the thematic framework further. One example of this was where we revised our interpretation of instances where participants had discussed loneliness in a more abstract way i.e. in a way that did not relate to their own experiences. We checked themes for overlap, particularly where responses were coded under more than one theme, and checked for a hierarchy of meaning within the data. We agreed on the final naming of themes and reviewed whether they answered our research questions. For phase 6, *writing the report*, which overlapped with other phases, we agreed an explanation of themes as an analytic commentary supported by relevant quotes. Where presenting these, minor spelling errors were corrected where needed to clarify meaning. We followed the consolidated criteria for reporting qualitative research (COREQ) guideline to report findings (Tong et al., 2007).

2.5. Reflexivity

KZ and MB have personal experience as international students (from China to the US and the UK, and from Portugal to the Netherlands, respectively). They report that these experiences have often involved intense feelings of loneliness, missing friends and family back home, with impacts on mental health. KZ also has an awareness of other international students with similar experiences, who have posted on internet forums but seemed unaware of the importance of seeking help. These authors' personal stance on this topic is a perception that loneliness can impair an individual's well-being and emotional health.

3. Results

3.1. Participant demographics

Of the 2945 respondents who indicated they were full-time or part-time students, we identified 826 respondents as international students. We excluded 115 people who were aged over 40 years, and noted that within this sub-group responses regarding frequency of loneliness were skewed towards a lesser frequency of loneliness: 6 individuals (6%) endorsed Never, 42 (42%) endorsed the adjacent value, and 18 (18%) endorsed the central value. We also excluded 10 people who did not specify their age, and 61 people who did not respond to the direct measure of loneliness (Fig. 1). At this point we established that 96% (615/640) of the international students aged under 40 years reported loneliness. After excluding the 25 who reported that they never felt lonely, we analysed free text data from a total of 521 international students who satisfied these inclusion criteria. These were included regardless of whether they viewed loneliness as ever positive. No responses were uninterpretable.

Participants ranged in age from 16 to 40 years (Table 1) as per inclusion criteria. The majority self-identified as female (68%), exclusively heterosexual (53%), single (68%), full-time students (93%) and living alone (24%). The majority reported that they often spent time alone (65%), sometimes felt lonely (34%), felt that loneliness was never positive (58%), and rated themselves at a moderate intensity of loneliness (33%). Participants' most common region of origin was Europe (61%), and the most common region for country of study was also Europe (77%). The most common country of study was the UK (60%), which we classified as within Europe.

3.2. Thematic analysis of findings

Data were coded under six higher order themes (Table 2), as set out below, together with illustrative quotes. The first theme delineated specific negative aspects of loneliness, but these negative aspects also permeated themes two to five. The sixth theme (Perceptions of positive aspects of loneliness) overlapped with other themes only in that a small number of individuals described both positive and negative as-

Table 1

Socio-demographic characteristics of participants (*n* = 521).

Characteristic	*N* %
Age	mean 23.4 years (SD=5.44; range 16–40)
Gender	
Male	157 (30)
Female	355 (68)
Other	8 (2)
Prefer not to say	1 (<1)
Region of origin	
Europe[a]	318 (61)
Africa	14 (3)
North and South America	59 (11)
South-East Asia	33 (6)
Western Pacific	63 (12)
Eastern Mediterranean	26 (5)
Region of residence as a student	
Europe[a]	403 (77)
Africa	4 (1)
North and South America	42 (8)
South-East Asia	7 (1)
Western Pacific	44 (9)
Eastern Mediterranean	16 (3)
Student status	
Full-time student	485 (93)
Part-time student	36 (7)
Sexuality	
Exclusively Heterosexual	288 (53)
Predominantly Heterosexual	130 (25)
Equal	39 (8)
Predominantly Homosexual	25 (5)
Exclusively homosexual	11 (2)
Asexual	24 (5)
Household size (excluding survey participant)	
0 (i.e. single occupancy)	127 (24)
1	95 (18)
2	85 (16)
3	99 (19)
4	58 (11)
5+	44 (8)
Marital Status	
Single	352 (68)
In a relationship (and living together)	0 (0)
In a relationship (and not living together)	82 (16)
Married	27 (5)
Separated	1 (<1)
Divorced	3 (1)
Widowed	1 (<1)
Cohabiting	55 (11)
Time spent alone	
Never	1 (<1)
Seldom	128 (25)
Often	337 (65)
Always	48 (9)
Frequency of feeling lonely[b]	
1 - Never (excluded from sample)	0 (0)
2	150 (29)
3	175 (34)
4	154 (30)
5 - Always	42 (8)
Intensity of feeling lonely [c]	
1 - Not intense at all	14 (3)
2	98 (19)
3	131 (26)
4	170 (33)
5 - Very intense	96 (19)
Perceptions of whether loneliness is ever positive[d]	
Yes	17 (3)
No	299 (58)
Sometimes	205 (39)

[a] This was a geographical rather than political definition of Europe, and included the UK.

[b] Question was worded: "How often do you feel lonely?", with sliding scale responses.

[c] Question was visible to those scoring >1 on "How often do you feel lonely?" and was worded "How intense is the feeling?", with Likert-style scale responses.

[d] Question was visible to those scoring >1 on "How often do you feel lonely?" and was worded "Is the experience of loneliness positive?", with Likert-style scale responses. Abbreviations: SD=standard deviation.

Table 2
Summary of themes and sub-themes identified in thematic analysis of free text data.

Higher order themes	Sub-themes

1. Negative psychological and social aspects of loneliness	1.1 Negative psychological aspects of loneliness:
	     (1) Social confusion
	     (2) Emotional distress
	1.2 Negative social aspects of loneliness

2. The distressing experience of being alone	2.1 Feeling alone physically, mentally and socially 2.2 Tendency to rumination/ introspection 2.3 Loneliness as depressing 2.4 Sense of a gaping physical distance from family and friends 2.5 Lack of companionship
3. Disrupted ability to make meaningful connections	3.1 Inability to communicate meaningfully with people around one 3.2 Absence of a confidant(e) when in need of support 3.3 A yearning for social connections experienced as authentic 3.4 Feeling rejected/worthless 3.5 Feeling restricted by societal norms, demands, or pressures
4. Sense of entrapment in a state of loneliness	4.1 Feelings of helplessness/hopelessness/powerlessness 4.2 Feelings of emptiness/pointlessness/meaninglessness
5. Awareness of others' stigmatizing perceptions of oneself as lonely	5.1 Feeling ashamed and judged 5.2 Feeling of being perceived as a burden on others
6. Perceptions of positive aspects of loneliness	6.1 Loneliness is a stimulus to become a better self 6.2 Isolation as a positive time for reflection / self-focus

pects of loneliness, albeit with negative experiences more dominant. The six themes were therefore not mutually exclusive.

3.2.1. Theme 1: negative psychological and social aspects of loneliness

The first theme captured the range of ways in which international students perceived loneliness as negative, sub-divided into psychological and social aspects.

Negative psychological aspects of loneliness. Many people described the unpleasant cognitions that they recognised in themselves in relation to loneliness. These were variously described as a sense of social confusion and emotional distress or psychological discomfort.

(1) Social confusion: A few people mentioned a sense of confusion in the sense that they did not know what to do with themselves when they were feeling lonely through lacking the "safety net" of close confidantes.

> *"(Loneliness means) anxiety making you question everything, who your friends are and wondering what's wrong with you." (22 year-old female)*

> *"Loneliness is not knowing where to go or who to turn to." (16 year-old male)*

(2) Emotional distress: Many respondents reported that loneliness made them feel sad or frustrated. A few respondents felt insecure in themselves and uncomfortable about their state of being alone, with concerns about their future social interactions with others.

> *"Loneliness is a mental state associated with sadness and intense independence which creates feelings of discomfort and unease." (23 year-old female)*

> *"Not being around anybody in person for a period of more than a day makes me feel lonely – I feel unsettled and look for ways to see people such as walking around a crowded area or working in a coffee shop or pub." (30 year-old male)*

Negative social aspects of loneliness. It was common for individuals to perceive loneliness as having negatively affected them in terms of adverse social consequences, such as becoming more cut-off from others. Some respondents reported that loneliness impaired their social skills

and interaction with others. They felt that accumulating feelings of loneliness had made them hyper-sensitive to personal criticism and precipitated anxious rumination about their social skills, which exacerbated their social problems.

> *"…(Loneliness) can make your ability to interact with people worse." (38 year-old male)*

Sometimes, as in other themes, it was not clear whether participants were describing their direct experiences or reflecting more broadly on what loneliness might mean to others in their situation.

> *"The resulting self-doubt and feelings of undesirability only exacerbates issues, prompting the sufferer to cut themselves off, leading to a deeper malaise and feelings of general wretchedness." (16 year-old male)*

3.2.2. Theme 2: the distressing experience of being alone

Many of the respondents described uncomfortable feelings they had about their sense of isolation. In their accounts, they made a distinction between being subjectively alone and objectively alone, yet reported feeling lonely, at times, in both those contexts. Some respondents explained that even they were surrounded by other people, they could still feel lonely.

Feeling alone physically, mentally, and socially. Many respondents mentioned they felt lonely in three ways: physically, mentally, and socially. Some described a sense of physical loneliness as deriving from a stark sense of being objectively alone, including in situations where others were present but seemed unaware of them. Mentally and socially, feeling lonely was perceived as a sense of lacking a connection with others and lacking a raft of social support.

> *"I mean you can be surrounded by people but still feel so disconnected in so many ways. From feeling that they don't understand and feeling like you aren't connected not just mentally but sometimes even physically the people aren't actually there they can be on their phones as if they are in another world." (20 year-old female)*

> *"Always the one walking either in front or behind while everyone else walked together in a line." (17 year-old female)*

> *"(Loneliness) describes a state in which one is separated from others either physically or socially and that apartness is found to be distressing." (23 year-old male)*

Tendency to rumination/ introspection. Some people mentioned that when they were alone this created an environment in which they tended to overthink things, ruminating on them repetitively, and imagining social scenarios or regretting past interactions in a way that increased their sense of anxiety or distress.

> *"It is thinking too much with yourself and imagining things, people, situations or places that probably won't be true." (21 year-old male)*

> *"Loneliness means hours spent thinking about the past and regretting choices." (35 year-old male)*

Loneliness as depressing. A few people described loneliness in terms of low mood or made direct observations that they felt loneliness was linked to depression. This "*feeling of depression of being alone*" appeared to impact on their day-to-day functioning. Some respondents described feeling overwhelmed by the fact that they were alone.

> *"Loneliness is the knowledge that you don't have anyone to turn to. I think it isn't just the sadness caused by that thought but also the helplessness and the feeling that you are trapped in a cycle of unhappiness." (16 year-old female)*

> *"Loneliness is being completely alone with just your thoughts for company. It can be oppressive." (28 year-old female)*

Sense of a gaping physical distance from family and friends. International students were acutely aware of how far they were from their hometowns, and family and friends. Feelings of loneliness exacerbated an awareness of this geographical distance and the inadequacy of digital connections with family or friends back home.

> *"…You feel as though no-one is there for you during difficult times or if your family is far away… You also feel quite isolated if you live away from your friends and family." (20 year-old female)*

> *"… being on my year abroad and being truly alone for the first time in my life I've realised it's more about mental well-being. … human company cannot be replaced with online connections." (20 year-old female)*

Lack of companionship. Many respondents explained that they had no-one to talk to or share things with, and no-one to hang out with, whether going out or staying in. When motivated to go out and do something, they felt acutely aware of this isolation in having no companionship options, dissuading them from their plans. A few respondents mentioned how much they missed having a physical connection with others, such as being touched or hugged.

> *"…no-one to just stop by for a drink/chat. wanting to do something but end up not doing because I don't have anyone to come with me." (28 year-old female)*

> *"…feeling like there is no-one to reach out to and share good or bad news, having no- one to spend time with casually." (21 year-old female)*

3.2.3. Theme 3: disrupted ability to make meaningful connections

This theme captures the sense that students recalled a time when they had been functioning well when in their countries of origin, with an ability to forge meaningful connections without difficulty. However, in their host countries they found it very hard to forge connections with the people around them, causing them to yearn for connection and to feel a sense of social inadequacy. It was clear that this often related to cultural disconnectedness and difficulty transitioning from superficial relationships to more meaningful connections.

Inability to communicate meaningfully with people around one. Many described social barriers that prevented them from making authentic connections with others. This might be because of language, or cultural factors in that other people did not share the same values. This left them feeling as though they were not understood.

> *"Feeling isolated and having no-one to connect with. Or even feeling that the people you have in your life are not aligned with your values or are not on the same wavelength." (37 year-old female)*

> *"…I feel lonely when I want to share [something] but my friends are busy & I can't reach out to anyone. I feel lonely when nobody is happy with my achievements. So I think loneliness is not being able to communicate my thoughts & feelings & be understood." (22 year-old female)*

Some respondents described how hard it was to fit into groups where they did not share the same values or lifestyles. This added to a sense of superficial connections.

> *"Loneliness is the inability to connect and ground yourself within a community in your life. It is not the absence of people in your life, but the absence of an established position of belonging to people." (21 year-old female).*

> *"A feeling of isolation and disconnection - being different and separate." (23 year-old female)*

Absence of a confidant(e) when in need of support. The lack of a meaningful connection with others meant that some respondents felt they had no-one to turn to when they needed help, and no-one to trust. This was distinct from the lack of companionship described in theme 2.5 above in that it relied on having others to trust when in need of help or advice.

> *"It means, feeling like you have no-one to turn to in a crisis. Knowing that if something happened you'd have to deal with it alone. It's not being able to share what bothers you with people because there's no-one you trust." (20 year-old female)*

> *"…having things to say and share but no-one to do that with." (17 year-old female)*

This lack of an authentic support system also highlighted an acute sense of lacking intimacy with others.

> *"I have friends and am understood, but my friendships are too superficial. I don't have people whom I can tell secrets to or ask for help." (23 year-old male)*

A yearning for social connections experienced as authentic. Some respondents reported that although they felt they had a sufficient quantity of social connections, those connections were either superficial or of inadequate quality for their needs. This related to an absence of shared values and of intimacy, as described in the sub-themes above, no matter how hard they tried to connect meaningfully.

> *"Wishing for more connection. It could mean wanting more company, but it could also mean you can't find the kind of relationships you want." (25 year-old female)*

In yearning for more connections of good quality some individuals speculated as to why they were experiencing such difficulties, concluding variously that this was due to external factors (such as the inescapable fact of being in a foreign country), or personal factors (such as a deficit in their character).

> *"Loneliness is a dampening feeling of being apart from others. Of not being able to connect however hard you try." (20 year-old female).*

> *"Loneliness means having no friends and being left out. It's also anxiety making you question everything, who your friends are and wondering what's wrong with you." (22 year-old female)*

Feeling rejected/worthless. When explaining loneliness, a large proportion of respondents explained this in terms of feeling rejected or worthless; the sense that they were not wanted or needed. When engaging with others they felt they were not being listened to, or cared about by other people, but instead felt excluded from those social groups and abandoned.

"[Having] no relationship in which there is really an exchange, and you are not the only one talking. No-one wants to see you above other people. Being left out in a group. Feeling like no-one is listening, no-one cares about you or what you say. No-one checking up on you for news or how you are. No-one noticing when you're not okay." (16 year-old female)

This feeling was experienced even more intensely where they perceived others as having supportive social networks (or individuals) around them, highlighting their sense of aloneness.

"Being left out when other friends are all together. Feeling everyone else is having a good time, and you're just alone." (27 year-old female)

Feeling restricted by societal norms, demands, or pressures. A sense of cultural disconnectedness was apparent in respondents who felt they could not be their true selves or express their authentic feelings in the company of their new social circles because of hard-to-navigate cultural norms and social pressures.

"…Missing being able to open up. Missing being able to be you, and not the person situations require you to be." (18 year-old male)

"When I have felt lonely it is when I have no one like-minded to turn to, who I can be myself with, who I can open up to, and relax in front of." (20 year-old female)

3.2.4. Theme 4: sense of entrapment in a state of loneliness

Some respondents described a nihilistic feeling of being trapped in their loneliness.

Feelings of helplessness/hopelessness/powerlessness. Some people expressed a lack of confidence that their current situation could be changed, feeling helpless to effect change themselves, even with some kind of external help. Access to such external support was limited, and some described feeling "*trapped in a cycle of unhappiness*" or "*trapped like on a deserted island*".

"Not having a choice. All interactions with others reduced to flickering movie stills that run by meaninglessly….Being alone is a choice, being lonely is not." (37 year-old female)

"Loneliness is a defeat, because being alone means hitting the bottom. It's a trap, from which one has a hard time escaping. It's a state of mind, changing which requires an intervention from the outside world" (25 year-old male)

"Loneliness is being alone and unable to be not alone despite your efforts." (20 year-old female)

"Loneliness means to me personally when no-one understands you, you are isolated in your problems of your life and mind. It's a positive feedback loop that worsens as your thoughts keep getting deeper and nobody understands you. And you can't bring yourself to explain your problems or seek help" (16 year-old male)

Feelings of emptiness/pointlessness/meaninglessness. Some respondents conveyed a sense of nihilism about their state of social connectedness, with some even abstaining from social interaction because they felt there was no meaning to it. There was a clear sense that studying abroad in this state of loneliness and disconnectedness meant that life had little meaning.

"The feeling of this empty space inside me, a place I can't pinpoint but I feel is trying to connect to my exterior, whether I am surrounded by people or on my own. And although I don't want to be alone, the empty feeling makes me want to hide inside myself and shut everyone out for a while. It sometimes makes me want to weep to myself." (35 year-old female)

"Feeling hollow inside. Lost and listless. Life lacks meaning." (27 year-old female)

3.2.5. Theme 5: awareness of others' stigmatizing perceptions of oneself as lonely

A number of participants mentioned shame in relation to their being lonely, regarding loneliness as stigmatizing and fearing the judgement of others. Publicly they did not want to admit that they felt lonely, and even privately they found it hard to accept this due to self-stigma and shame.

Feeling ashamed and judged. A few respondents reported that they felt being judged by others for being a lonely figure, for not making more of an effort socially, and for not exhibiting more social confidence.

"Feeling ashamed of being lonely and uncomfortable admitting to my friends that I am lonely." (20 year-old male)

"… You feel unimportant and useless/a waste of space. You feel ashamed which only isolates you even more. You end up wallowing in self-pity…" (21 year-old female)

Fear of being perceived as a burden on others. Some respondents mentioned holding back on initiating conversations or extending social invitations in case this identified them as lacking companionship or needing other people. Their reluctance to 'bother' others implied a sense of not being worthy of other people's attention or interest, but also a sense that their loneliness threatened other people with a burden of responsibility.

"Having nobody to call up without being worried whether you're bothering them." (23 year-old female)

This fear of being a burden even extended to those outside the host country.

"Loneliness to me is the feeling that you can't turn to your friends for fear of bothering them too much when they are distant (i.e. at another Uni, in another country, etc.)." (18 year-old female)

3.2.6. Theme 6: perceptions of positive aspects of loneliness

A small number of individuals described some positive consequences of feeling lonely, mainly in relation to things they could achieve or enjoy when in isolation or solitude. This tended to be qualified by also describing negative aspects of loneliness. The majority of this group responded No to the question on whether loneliness was ever positive.

Loneliness is a stimulus to become a better self. A few respondents mentioned that although loneliness was painful it could also be healing, explaining this apparent paradox in terms of loneliness being uncomfortable but something that could also stimulate them to become a better person. Some found being alone in some situations to be preferable to being with others.

"I can come up with better ideas and make myself a better person, although it is uncomfortable at some moments. I am getting used to it." (25 year-old female)

"Loneliness is upsetting but there can be positives about it. And while I would much prefer to have company, I don't mind being alone and some would probably prefer to be alone given the choice." (17 year-old female)

Isolation as a positive time for reflection/ self-focus. A few respondents mentioned that life was calmer when they were alone, because it was less disruptive to routine, because the time could be used to focus on themselves or their work or to give them some time for reflection.

"The feeling of having no-one to rely on. But it can also mean time to enjoy myself." (35 year-old female)

"…Being alone for self-focus is OK but not having any family or even one friend to go for support is hard" (22 year-old female)

4. Discussion

Our thematic analysis of free text responses from 521 international students studying worldwide identified six main themes describing their experiences of loneliness, predominantly focusing on negative aspects of loneliness. These conveyed the psychological distress associated with loneliness, including feelings of rejection, worthlessness, helplessness and nihilism, the extent to which loneliness hampered social interactions, the aching sense of a lack of connection with others, and the public stigma and self-stigma of loneliness. The roots of this loneliness appeared to lie in periods of time spent alone and a sense of isolation reinforced through cultural barriers and the significant (and sometimes fruitless) efforts required to create authentic relationships, creating opportunities for self-appraisal and introspection. Self-criticism of their "performance" in social settings, including taking a more passive role in social interactions than was customary, the shame of seeking out others' company, and sensitivity to other's stigmatizing perceptions of loneliness, all engendered conditions in which individuals felt lonely and uncared for. A small minority of participants (coded under theme 6) described positive consequences of loneliness, and this was consistent with the 43% of this sample who endorsed a fixed-choice question that loneliness could sometimes be positive. Their descriptions suggested that positive aspects of having time alone included having time to focus on themselves or their studies. However, this sub-group clearly struggled to balance the negative aspects of loneliness and these perceived advantages. Throughout these six themes we observed no apparent patterning of themes in relation to age or gender, nor any clear pattern in relation to region of origin or host country. The most striking findings were the perception that loneliness had eroded social skills and the sense of entrapment that people reported in their loneliness. Given the distressing nature of the loneliness they described, these factors highlight the importance of preventing the onset of loneliness among international students.

4.1. Findings in the context of other studies

These findings from a sub-sample of individuals responding to the BBC Loneliness Survey must be interpreted in the context of responses from the wider international sample, including non-students and domestic students (Barreto et al., 2021). Previous quantitative analyses of data from this wider sample shows that the top-ranking options of what loneliness meant to respondents were having no-one to talk to, feeling disconnected from the world, feeling left out, sadness, and feeling misunderstood (Victor et al., 2019). The experiences of loneliness described by our sub-sample of international students chime with those for the wider sample, but also include rich descriptions of experiences of feeling cut off from the social norms and culture around them.

Our estimate of the prevalence of loneliness in this sample of international students (predominantly UK-based but international) was higher than the three-quarters estimated for a smaller UK sample (Wawera and McCamley, 2019) and the two-thirds estimated for an Australian interview sample (Sawir et al., 2007). Qualitative analysis of interview data for a UK sample revealed that loneliness was perceived as a negative experience for all respondents (Wawera and McCamley, 2019), in contrast with the small sub-set of our own dataset who also perceived positive consequences of isolation. Many of the negative psychological aspects of loneliness described in our study (theme 1) matched experiences described in the UK sample above of feeling lost, empty or helpless (Wawera and McCamley, 2019). Experiences of feeling a gulf between self and family back home (theme 2) and of superficial relationships (theme 3), as described in our study, were also consistent with experiences they described in this UK sample (Wawera and McCamley, 2019).

4.2. Strengths and limitations

We analysed a large volume of free text data gathered from a widely marketed international survey to further understand international stu-

dents' experience of loneliness. To our knowledge this is the largest qualitative study internationally of experiences of loneliness in this population. We collected data online using an open-ended survey question capturing what loneliness meant to each individual, avoiding leading questions, and promoting disclosure through anonymity. The fact the study was widely publicized, on the radio and other media, might have encouraged reflection and genuine descriptions of this experience. This approach was better suited to the research question than focus groups where more reticent individuals may not feel able to express their views, or interviews where there was a risk of social desirability bias. However, interviews permit a more in-depth exploration of the meaning of loneliness, and an opportunity to probe meaning (Wawera and McCamley, 2019), which this study did not involve. This meant we were not able to interpret responses in the context of where people were studying and how student life was structured there. Validity of the research findings was increased through independent coding, the use of team discussions to review emergent themes, the inclusion of a lived experience perspective, and the broad range on disciplines represented on the research team.

Limitations of our study are that in including international students regardless of host country, the results have broad resonance, but may not be specific to any single country setting. Almost two thirds of participants originated from European countries, whilst three quarters were studying within the continent of Europe (including the UK), suggesting that findings are most generalisable to international students migrating within Europe. We lacked data on region so could not explore spatial differences based on urbanicity or campus versus non-campus settings. We also lacked data on ethnic group, so were unable to explore whether there was evidence of cumulative disadvantage for international students who were members of an ethnic minority and those who had bridged greater cultural divides. The low numbers of respondents from outside Europe meant we could not explore inter-continental variation. There is a possibility of over- or under-ascertainment of international students in the way we operationalised our definition, including those born in a country other than the country of study but resident in the country of study from early childhood, or those studying in the country of birth after a childhood spent elsewhere. The questionnaire was administered in English and some respondents may have conveyed their experiences differently in their native languages, allowing appropriate translations to capture more nuance in respondents' accounts. It was also apparent from responses, particularly those coded under theme 6 capturing positive aspects, that some participants may have conflated the concepts of social isolation (which has positive and negative aspects) and loneliness, undermining the validity of data under this theme. Finally, as data were collected in 2018, prior to the Covid-19 pandemic, it does not reflect the impact of pandemic restrictions, including fewer opportunities to visit home.

4.3. Policy and research implications

The findings of this study help raise awareness among teaching and pastoral staff and student mental health services in Higher Education Institutions (HEI) as to the extent and nature of loneliness among international students. The findings may also help international students recognize shared difficulties in making social connections that they experience as authentic, encouraging them to seek help to address their loneliness before it impacts their mental health. The findings are of interest to policymakers in education and health, helping them build an educational strategy based on teaching approaches that prevent the onset of loneliness and mental health problems through encouraging social integration, as well as strengthening the pastoral support offered to international students to prevent drop-out from education. Students are more likely to be drawn to HEIs that market their courses on this basis, with benefits not only for international students but also domestic students from minority ethnic groups and other disadvantaged groups. Embedding social integration into teaching is more likely to reach students at

risk of loneliness than organizing social events they might tend to avoid. HEI staff should be trained in educational approaches that promote social integration and cohesion, including teaching approaches that draw out the contribution of different students and their diverse cultural experiences (Akanwa, 2015; Shan et al., 2020), study groups integrating students from different backgrounds, and collaborative teaching using buddy systems. HEIs should also support international students from the point of enrolment in navigating the cultural setting of their new environment, including providing language skills teaching, opportunities to participate in voluntary work, inclusive cross-cultural social events, and ensuring they know how to access support services (Akanwa, 2015; Shan et al., 2020). This will help students overcome the sense of disconnection that is normal at the start of the international student journal, and should prevent loneliness from becoming entrenched.

The problems of perceived xenophobia and insincerity among domestic students (Girmay and Singh, 2019) should also be tackled using contact-based strategies, such as social interventions to forge connections between groups of international and local students (Sawir et al., 2007). US research shows that support from other international students is sufficient to buffer risk of loneliness (Wiseman, 1997). Qualitative work with international students in Malaysia identifies successful coping strategies such as sharing problems with others or keeping busy (Saravanan et al., 2019). However, self-help and same-culture networks are not an appropriate solution (Sawir et al., 2007) and HEIs need to play a more active part in addressing the issue. Induction programmes need to offer international students more ways of integrating into the local culture, ensuring opportunities for a meaningful experience and cultural exchange.

BBC Loneliness Experiment responses include suggestions as to how to tackle loneliness, and such data warrants analysis for this sample of international students to identify solutions. Research on interventions to address loneliness in wider populations suggests a role for web-based and phone-based digital interventions to address social isolation (Toh et al., 2022); interventions targeting maladaptive social cognitions (Masi et al., 2010); and interventions that promote social connectedness (Ellard et al., 2022). However, whether such interventions are effective or acceptable for international students is unclear and needs specific trialing. Context-specific qualitative work would help build local co-produced approaches to preventing loneliness in international students, which would become a valuable component of student induction programmes. Future research on loneliness in mental health and wellbeing in international students should also capture perspectives from other regions to identify any context-specific risk factors and the potential for locally tailored solutions.

5. Conclusions

This thematic analysis of free text data from an international online survey captures a range of negative experiences of loneliness among international students. Loneliness was perceived to affect international students' well-being and emotional health, leaving them feeling disconnected from those around them, with implications for their social and occupational functioning. Higher education institutions have an important role in preventing loneliness among international students by helping them overcome the sense of disconnection that is normal at the start of the international student journal. Initiatives that integrate students as part of teaching practices and promote connections with local students have the potential to enhance the social and educational experience of overseas study.

Data availability

Access to data is via formal application to Professor Pamela Qualter, University of Manchester https://www.seed.manchester.ac.uk/education/research/impact/bbc-loneliness-experiment/.

Declaration of Competing Interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

Pamela Qualter, Manual Barreto and Christina Victor conceived the methods for the BBC Loneliness Experiment and gained funding for the survey. All other authors state that they have no conflict of interest.

CRediT authorship contribution statement

Kangning Zheng: Conceptualization, Methodology, Project administration, Formal analysis, Writing – original draft. **Sonia Johnson:** Supervision, Writing – review & editing. **Ruby Jarvis:** Formal analysis, Validation, Writing – review & editing. **Christina Victor:** Funding acquisition, Investigation, Writing – review & editing. **Manuela Barreto:** Funding acquisition, Investigation, Writing – review & editing. **Pamela Qualter:** Funding acquisition, Investigation, Data curation, Conceptualization, Methodology, Writing – review & editing. **Alexandra Pitman:** Conceptualization, Methodology, Formal analysis, Validation, Supervision, Writing – original draft.

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