

This item was submitted to [Loughborough's Research Repository](#) by the author.
Items in Figshare are protected by copyright, with all rights reserved, unless otherwise indicated.

Coping with loneliness at University: A qualitative interview study with students in the UK

PLEASE CITE THE PUBLISHED VERSION

<https://doi.org/10.1016/j.mhp.2018.11.002>

PUBLISHER

© Elsevier

VERSION

AM (Accepted Manuscript)

PUBLISHER STATEMENT

This paper was accepted for publication in the journal Mental Health and Prevention and the definitive published version is available at <https://doi.org/10.1016/j.mhp.2018.11.002>.

LICENCE

CC BY-NC-ND 4.0

REPOSITORY RECORD

Vasileiou, Konstantina, Julie Barnett, Manuela Barreto, John Vines, Mark Atkinson, Kiel Long, Lyndsey Bakewell, Shaun Lawson, and Michael Wilson. 2019. "Coping with Loneliness at University: A Qualitative Interview Study with Students in the UK". figshare. <https://hdl.handle.net/2134/38359>.

Authors accepted manuscript

Coping with loneliness at University: a qualitative interview study with students in the UK

Konstantina Vasileiou , Julie Barnett , Manuela Barreto , John Vines , Mark Atkinson , Kiel Long , Lyndsey Bakewell , Shaun Lawson , Michael Wilson

To appear in: **Mental Health & Prevention**

Received date: 7 May 2018

Revised date: 27 October 2018

Accepted date: **26 November 2018**

Coping with loneliness at University: a qualitative interview study with students in the UK

Abstract

Leaving home to attend University constitutes a transition that is often characterized by an increased risk of loneliness, a psychological state that predicts poor mental health outcomes. Informed by a comprehensive conceptual framework of coping with stress, this study sought to examine the coping strategies young adults deploy to manage experiences of loneliness whilst studying at University. A qualitative, cross-sectional study was designed. Semi-structured interviews were conducted with 15 University students who had moved away from home to study, and who self-identified experiencing loneliness. We used directed qualitative content analysis to analyse the data both between and within participants. The results demonstrate that participants used a variety of coping strategies to manage the distressing experience of loneliness. *Accommodation*, mainly in the form of distraction, *support-seeking*, *social isolation*, *self-reliance*, and *problem-solving* behaviours were the most prevalent coping strategies mentioned. Coping reflecting *helplessness*, *escape*, *submission*, and more rarely, *opposition*, were also found, albeit less often. Students showed evidence of a wide-ranging coping repertoire, with the deployment of specific coping strategies presenting as highly selective and contextual. Strategies for coping with loneliness take into account constraints and opportunities in the environment, the availability and appropriateness of social resources, as well as individual resources and needs.

Keywords: loneliness; coping; mental health; students; interviews

1. Introduction

Loneliness is increasingly becoming a major concern in modern Western societies. Severe loneliness (reporting feeling lonely 'almost all of the time' or 'most of the time') affects 6% of the adults in the UK (Victor & Yang, 2012) with further estimates suggesting that loneliness is a chronic state (often conceptualised as an enduring experience that has lasted for at least 2 years; Young, 1982) for 15% - 30% of the general population (Hawkley & Cacioppo 2010; Heinrich & Gullone, 2006). Defined as the distressing experience arising from discontent with the degree and quality of social connections (Perlman & Peplau, 1981), loneliness is linked to a series of adverse mental health outcomes (Hawkley & Cacioppo, 2010; Heinrich & Gullone, 2006). It is associated with depression (Cacioppo, Hawkley, & Thisted, 2010; Teo, Choi, & Valenstein, 2013), deliberate self-harm (Rönkä, Taanila, Koironen, Sunnari, & Rautio, 2013), suicidal ideation (Stravynski & Boyer, 2001) and engagement with unhealthy behaviours (e.g. smoking, alcohol use) (Lauder, Mummery, Jones, & Caperchione, 2006; Nieminen et al., 2013). Loneliness is also related to poor physical health outcomes, such as high blood pressure (Hawkley, Thisted, Masi, & Cacioppo, 2010), poor sleep quality (Matthews et al., 2017), an increased likelihood of mortality (Holt-Lunstad, Smith, Baker, Harris, & Stephenson, 2015), and increased risk of developing coronary heart disease and stroke (Valtorta, Kanaan, Gilbody, Ronzi, & Hanratty, 2016).

Despite popular belief that loneliness is primarily a problem in old age, younger age groups also present a significant risk of elevated loneliness levels (Luhmann & Hawkley, 2016; Qualter et al., 2015; Victor & Yang, 2012). For example, research with children and adolescents indicates that between 3% (Vanhalst, Goossens, Luyckx, Scholte, & Engels, 2013) and 22% (Qualter et al., 2013) experience prolonged periods of loneliness. Moreover, evidence suggests that loneliness might be experienced more acutely and painfully by young adults than other age cohorts (Rokach, 2000). Indeed, during early adulthood people often leave their home – most for the first time – to pursue higher education. While this time is mostly constructive and exciting, the physical separation from home and the move to greater independence signify an important developmental transition that can be accompanied by loneliness (Cutrona, 1982; Ponzetti, 1990). Attending University often involves relocation to a new place, sometimes abroad, a situational change that further increases the risk of loneliness since people are not only separated from intimate relationships, but also from established social networks and support systems (Rokach, 1989).

Loneliness among University students appears to be prevalent affecting both domestic and international students of all educational levels (i.e. undergraduate, postgraduate). Cutrona (1982) found that 75% of freshmen reported feeling lonely during their first 2 weeks whilst recent survey results from the National College Health Assessment among a random sample of 2,149 students in the USA revealed that in the past 12 months 64% of the sample had felt very lonely, with higher percentages being reported by women (i.e. 71%) compared to men (56%) and undergrads (68%) compared to postgraduate students (56%) (University of Michigan, February 2018). Similar high percentages were identified among international students in Australian Universities with 65% reporting experiencing loneliness (Sawir, Marginson, Deumert, Nyland, & Ramia, 2008). Survey results in Turkey showed that 60% of respondents felt lonely, with higher levels reported by first-year students (Özdemir & Tuncay, 2008). Loneliness was also a prominent manifestation of psychological distress in a representative sample of undergraduate students in the UK (Nightline Association, 2014). Indeed, a survey of just over 1000 students in the UK showed that 34% of respondents, aged 18-24, felt lonely fairly or very often to almost constantly (YouGov, 2016). Finally, in a sample of 481 students in the Netherlands, 22.5% manifested severe levels of loneliness scoring highly on the loneliness scale, whilst 27% self-identified experiencing loneliness. In this sample

variables such as age, gender and type of housing (e.g. living alone, living with peers; parents; or partner) were not significantly associated with loneliness. Instead, homesickness, negative self-image, extraversion, help-seeking behaviour, psychological problems and alcohol abuse were significant contributors to experiences of loneliness whilst being a member of a student association and joining a sports club decreased the likelihood of loneliness (Pijpers, 2017).

Loneliness negatively affects academic and social adjustment to the new environment (Wohn & LaRose, 2014) and has been suggested to be an important factor underlying dropout from University (Ali & Kohun, 2007; Kelly, Kendrick, Newgent, & Lucas, 2007). Indeed, a synthesis of qualitative evidence has indicated that the most commonly reported student stressor pertains to social relationships (i.e. romantic, peer, family and faculty relations) (Hurst, Baranik, & Daniel, 2013). Moreover, difficulties in coping with social pressures at University and the associated risk of becoming socially isolated and lonely are considered to play a significant part in the increasing prevalence rates of mental illness, psychological distress and low well-being among the student population and the rising demand for support services (Thorley, 2017). Loneliness has been shown to be the strongest predictor of student mental distress (McIntyre, Worsley, Corcoran, Harrison Woods, & Bentall, 2018) and longitudinal evidence demonstrates that loneliness induces or exacerbates anxiety, stress, depression and overall poor mental health over time in students (Richardson, Elliott, & Roberts, 2017). Similarly, socially supportive academic environments, feelings of belongingness, and inter-personal resilience are associated with better mental health outcomes and academic persistence (Fink, 2014; Hartley, 2011) and reduce the risk of suicidal ideation (Ploskonka & Servaty-Seib, 2015).

Conceived as a form of 'social pain', loneliness highlights deficits in social relations and motivates people to reconnect (Cacioppo & Patrick, 2008; Qualter et al., 2015). Coping effectively with loneliness is therefore crucial for re-establishing a satisfactory sense of social connectedness, and thus preventing the risk of developing mental health distress. In the general population, coping with loneliness has been associated with reflection and acceptance; self-development and understanding; social support-seeking; distancing and denial; being drawn to religion and faith; and increased activity (Rokach, 1990; Rokach & Brock, 1998). Coping with loneliness appears sensitive to cultural influences (Rokach, 1999; Rokach & Neto, 2000) and is enriched with developmental maturation (Rokach, 2001).

Inductive qualitative research about experiences of, and coping with, loneliness focusing on University students has been conducted (Firmin, Firmin, & Lorenzen, 2014; Janta, Lugosi, & Brown, 2014; Vaarala, Uusiautti, & Määttä, 2013). Analysis of PhD students' narratives on an online forum showed that coping with loneliness was structured around three themes: resorting to face-to-face and online interactions; devoting time to professional development; and escapism from the academic life (Janta et al., 2014). Using a similar methodological approach, Vaarala et al. (2013) demonstrated that coping with loneliness encompassed concrete actions (e.g. going out, hobbies) initiated by students, seeking social support, and emotional and cognitive regulation (e.g. optimism, realistic expectations for friendships). Finally, an examination of the loneliness experiences of female students involved in long-distance romantic relationships found that coping involved seeking support from family, friends, and the partner; positive reframing of the separation; and placing the relationship within a broader context (Firmin et al., 2014).

Whilst this research provides useful exploratory insights, theoretical developments in the broader area of *coping with stress* complement and provide a more refined understanding of how students cope with the distressing experience of loneliness. To this end, we used a comprehensive hierarchical framework of coping (Skinner, Edge, Altman, & Sherwood, 2003), developed on the

basis of an extensive critical literature review, which consists of 12 families of coping, each including specific coping strategies:

1. *Problem-solving*: strategizing, instrumental action, planning
2. *Information-seeking*: reading, observation, asking others
3. *Helplessness*: confusion, cognitive interference, cognitive exhaustion
4. *Escape*: cognitive avoidance, behavioural avoidance, denial, wishful thinking
5. *Self-reliance*: emotion regulation, behaviour regulation, emotional expression, emotion approach
6. *Support-seeking*: contact-seeking, comfort-seeking, instrumental aid, spiritual support
7. *Delegation*: maladaptive help-seeking, complaining, whining, self-pity
8. *Social isolation*: social withdrawal, concealment, avoiding others
9. *Accommodation*: distraction, cognitive restructuring, minimization, acceptance
10. *Negotiation*: bargaining, persuasion, priority-setting
11. *Submission*: rumination, rigid perseveration, intrusive thoughts
12. *Opposition*: other-blame, projection, aggression

This framework has previously been utilized in research examining coping with loneliness in childhood (Besevegis & Galanaki, 2010). Expanding this work to early adulthood, this typology informed a systematic and detailed examination of the coping strategies young adults deploy to manage loneliness experienced whilst studying at a British University.

2. Methods

2.1. Study design and ethical approval

A cross-sectional qualitative study was designed. *Qualitative description* seeks to provide a rich description of an event or experience that stays close to participants' accounts (Sandelowski, 2000), and constitutes a pragmatic approach that is often deployed to inform practice, policy making, and the development or refinement of interventions (Neergaard, Olesen, Andersen, & Sondergaard, 2009). Individual, semi-structured interviews were used to collect the data.

This study was carried out in accordance with the recommendations of the British Psychological Society. The study protocol received ethical approval from the Research Ethics Committee of the Department of Psychology (Ethical approval reference number: 15-149) at the University of [anonymous] and the Ministry of Defence Research Ethics Committee (Application number: 620/MoDREC/14).

2.2. Study population, sampling and recruitment

The study population was defined as University students who had moved away from home to pursue their studies and who had self-identified experiencing loneliness during this period of life transition from home to University. The characteristics of separation from home and of the self-identification of experiences of loneliness allowed us to adopt a purposeful criterion sampling approach which was likely to attract information-rich cases (Patton, 1990). Maximum variation was attempted concerning students' gender and nationality (i.e. British and non-British students). In 2018, 67% of the enrolled students were British and 33% were non-British (EU and international students), according to the records of the University where the study took place.

Prospective participants were approached by advertising the study (see supplementary material for the research study advertisement) at University venues (e.g. online notice board, library, student Union). Thirty-three students e-mailed the researcher within the timeframe of the data collection period expressing an interest in the study. These students were provided with a Participant Information Sheet that detailed the aims of the study and the research process, an Informed Consent Form to be signed prior to the interview, and a short Demographic Questionnaire that gathered basic demographic information (e.g. gender, age, level and subject of studies, nationality, marital status, use of digital communication technologies). Those students who met sampling requirements were invited to be interviewed. Information about coping was consistently being repeated by interview 15, indicating data saturation.

2.3. Participants

Nine women and six men took part in the study. Participants' median age was 20 years old (youngest = 18, oldest = 29). Nine students were undergraduates and the remaining six were postgraduates. Seven were British and eight were international students from various countries (i.e. Spain, Germany [2 students], Mexico, China, South Korea, Vietnam, and India). All students used digital technologies to keep in contact with their family and friends (e.g. Skype, Facebook). Details for each participant's characteristics are presented in Table 1.

Table 1

Participants' characteristics

Participants' unique code	Age	Gender	Nationality	Level of study	Year of study
P01	18	Female	British	Undergraduate	1 st year
P02	29	Female	Chinese	PhD	3 rd year
P03	20	Female	Vietnamese	Undergraduate	1 st year
P04	19	Female	British	Undergraduate	2 nd year
P05	26	Female	German	PhD	1 st year
P06	27	Male	Mexican	PhD	2 nd year
P07	18	Male	British	Undergraduate	1 st year
P08	21	Male	British	Undergraduate	Final year
P09	21	Male	Indian	MSc	-
P10	18	Female	British (Jamaican born)	Undergraduate	1 st year
P11	26	Male	German	PhD	3 rd year
P12	19	Female	Spanish	Undergraduate	2 nd year
P13	20	Male	South Korean	Undergraduate	1 st year
P14	24	Female	British	PhD	2 nd year
P15	19	Female	British	Undergraduate	1 st year

2.4. Data collection and analysis

All interviews were conducted at the University premises in winter 2016, at a time that was convenient to participants. Interviews lasted on average 53 min. The lead author, an experienced

qualitative researcher, carried out the interviews after receiving written informed consent from participants. An interview protocol had been developed to guide the conversations. The interview was divided into two main parts. Following ice-breaking questions around participants' subject of study, Part 1 explored how students viewed their life period at University (e.g. the decision to pursue higher education; expectations before leaving home; first impressions after coming to the University; contact with family and friends back home since leaving home; experience of living away from home). Part 2 examined the nature and context of the experiences of loneliness since parting from home and the coping strategies participants deployed to alleviate these feelings. Specifically, students were asked to describe what they normally did (or avoided doing) in order to manage feelings of loneliness. On completion of the interview, participants were provided with the debrief sheet which included a list of appropriate support contacts. A £20 shopping voucher was also offered as a token of appreciation for taking part in the study.

As our analysis was informed by the hierarchical model of the structure of coping (Skinner et al., 2003), a *directed* qualitative content analysis was used to analyse the data (Hsieh & Shannon, 2005) both across and within participants. Using existing theory or research findings, this deductive variant of qualitative content analysis provides analysts with key concepts which can be used as the initial coding categories. In the present analysis, the 12 families of coping along with their coping strategies formed the categories and sub-categories, respectively, of our coding scheme to which relevant coping instances, as appearing in the data, were assigned.

KV performed initial coding of the data. At this stage, uncertainties around coding were discussed and resolved in regular meetings between KV and JB who is the senior qualitative researcher on this project. The coding of the entire corpus of data was finally reviewed by JB and analysts considered and solved any remaining disagreements or uncertainties.

Uncertainties and discrepancies in coding were handled by regularly discussing and reviewing our understanding of the categories of the coping framework as well as by revisiting the assignment of coping instances to codes. For example, distinguishing *distraction* from *escape* and more specifically *cognitive avoidance* provoked most uncertainty during the coding process. The analysts' understanding and resolution to this matter was that distraction – which can entail both cognitive (e.g. watching a movie) and behavioural (e.g. engaging with sports) elements – does not simply divert attention from loneliness but aims to further direct the individual to activities that somehow can be constructive and/or pleasurable. On the other hand, we came to understand escape and cognitive avoidance as coping behaviours that simply served purposes of 'forgetting' about loneliness and low moods and did not appear to then build on other functions. For instance, we coded the following participant response as cognitive avoidance because it does not seem to have a secondary benefit other than diverting attention from loneliness: *Interviewer: Do these technologies [twitter, Facebook] help you when you feel lonely? Respondent: No, it just kills time, it's not really helpful, I'd rather go for physical exercise rather than spend time on social media.* Overall, we viewed discrepancies in coding as a signal of conceptual ambiguity on which we needed to elaborate in order to clarify our potentially different perspectives or assumptions.

3. Results

Table 2 presents the families of coping and the respective coping strategies that appeared in these data. The frequency of occurrence of each family of coping and associated coping strategies are also reported along with the number (and percentage) of participants articulating respective coping instances. The analysis below presents the details of coping with loneliness across participants and

extracts are used to illustrate the analytic points. Interview extracts are identified by the participants' unique identifying code, their gender, age and nationality.

Table 2

Frequency (% of total number of occurrences of all families) of coping instances representing each family of coping and respective lower order categories, and number (%) of participants reporting each family of coping

Family of coping Lower order categories	Frequency (%) of occurrence	N (%) of participants reporting the family of coping
<i>Accommodation</i>	55 (27%)	14 (93%)
Distraction	39	
Cognitive restructuring	9	
Minimization	4	
Acceptance	3	
<i>Support-seeking</i>	37 (18%)	14 (93%)
Contact seeking	17	
Comfort seeking	15	
Instrumental aid	5	
<i>Social Isolation</i>	35 (17%)	12 (80%)
Concealment	17	
Avoiding others	14	
Social withdrawal	4	
<i>Self-reliance</i>	24 (12%)	11 (73%)
Emotion regulation	5	
Emotional expression	8	
Emotion approach	5	
Behavioral regulation	6	
<i>Problem-solving</i>	21 (10%)	11 (73%)
Instrumental action	19	
Strategizing	1	
Planning	1	
<i>Helplessness</i>	11 (6%)	9 (60%)
Confusion	6	
Passivity	5	
<i>Escape</i>	10 (5%)	7 (47%)
Cognitive avoidance	5	
Behavioral avoidance	1	
Wishful thinking	3	
Denial	1	
<i>Submission</i>	9 (4%)	7 (47%)
Rumination	9	
<i>Opposition</i>	2 (1%)	2 (13%)
Other-blame	2	

<i>Total</i>	<i>204</i>	-
--------------	------------	---

3.1. Support-seeking

Coping with loneliness through support-seeking was a prevalent strategy, reported by 14 out of the 15 participants (93%). *Contact* and *comfort seeking* were the most commonly reported objectives of support-seeking behaviours, whilst *seeking instrumental aid* appeared less frequently. *Seeking spiritual support* (i.e. faith and religion) did not appear in these data. Support-seeking was mostly directed to significant others such as family members, friends from home, partners, or friends in the new environment to whom participants felt close. Occasionally, mental health professionals, more distant friends, acquaintances, or peers were also involved.

Achieving social contact was valuable during moments of loneliness. Students attempted to reach others either physically, when possible, or through different forms of communication technologies (e.g. phone calls, texts, skype, facebook, viber, etc.) when they were geographically distant from the social ties they wished to reach. Having the companionship of other people, talking with them, or sharing enjoyable activities helped students manage feelings of loneliness.

Sometimes I would obviously look to just talk to or chat with people that I haven't talked to in a while. So sometimes you just want to talk to someone and then you think, 'Oh I didn't talk to that person in a while.' And then just chat them up, have a little chat or maybe Skype. So that helps as well. Sometimes you just need to talk to people. (P11: Male, 26, German)

Whilst seeking social contact to alleviate loneliness did not always implicate significant others, seeking comfort and emotional relief were consistently directed to strong social ties whom participants trusted and who were expected to be understanding, receptive, and non-judgmental. Comfort seeking was sometimes attempted more implicitly without directly talking about loneliness and related sad feelings. For example, contacting close friends from home acted for one participant as a reminder of the existence of important relations in her life, a thought which was comforting when feeling lonely.

It reminds me that I'm not quite as alone as I thought I was. Like if I do feel lonely I feel like there's no one around that I can talk to, that I don't have anyone. But when I do talk to my friends I'm reminded of the fact that I do have people that care about me and I care about them and it just reminds me that it's not all that bad. (P10: Female, 18, British)

Instrumental aid in the forms of physical companionship by a significant other, counselling from a mental health professional, and practical help from family or a friend were sought by a few. Being able to reach professional help in cases of severe loneliness was vital to emotionally protect both the self and important social resources to which participants routinely turned for support.

Having somebody external that didn't know me personally so that I didn't feel guilty about telling them about what was going on would have really helped me to be able to talk about what I was feeling. Because whenever I spoke to my other half about it or my parents, I then felt guilty for telling them, because it made them upset. Whereas if I was telling a stranger or a professional then I wouldn't feel guilty about it because that's what they're there to do. (P14: Female, 24, British)

3.2. Social isolation

Whilst support-seeking was repeatedly deployed to help students manage feelings of loneliness, the opposite family of coping – social isolation induced by participants themselves – was similarly present in these data reported by 12 (80%). *Concealment* of feelings of loneliness and related negative emotions and *avoiding others* were the most prevalent behaviours of coping through social isolation, followed by a few instances of more generic *social (and emotional) withdrawal*.

Concealing the negative feelings of loneliness from others was frequently reported by participants, obstructing and complicating in some instances the reception of, or quest for, social support. Hiding loneliness and sad feelings was thought to protect participants from being seen by others in negative ways. For example, one participant expressed the idea that negative emotions are not socially accepted rendering their communication to others, sometimes even to close friends, as problematic. Others were reluctant to disclose their loneliness due to an anticipation that people would blame them for feeling lonely and for not managing it. Furthermore, during early formation of friendships, sharing loneliness was believed to reveal a personal weakness or failure to others which could hinder their development.

I think at the very start we didn't really discuss it. I think you feel this need to look strong, like you're not scared of anything because you really want to make friends and you don't want to look like the one who is really missing home and maybe having a little cry at times. You don't want your friends to see that. So it wasn't something we spoke about at the start. (P07: Male, 18, British)

At times, participants were not willing to disclose their feelings due to a perception that others would not be able to help them, or because they did not feel comfortable to expose their emotional vulnerability.

Whilst trusted significant others were most frequently sought for social support, participants largely hid their loneliness from these same social ties, primarily their parents, to avoid worrying or upsetting them.

I felt that I was alone in all of this, even though I talked with my mum, when she asked me, "How do you feel, how are things?", I always said okay because I didn't want to worry her so that's why she didn't give me support because I was saying, "everything is fine, everything is perfect". (P06: Male, 27, Mexican)

Avoiding others was the second behaviour reflecting social isolation. When feeling lonely participants avoided people who were not perceived to be supportive and emotionally close and withdrew from social contexts whereby the atmosphere and the social interactions among people were seen to come into sharp contrast to participants' feelings. Occasionally, participants chose to stay away from others because they feared that they would not be able to contain their negative emotions and that they would react in a socially undesirable manner.

I think of those moments if you're feeling lonely you feel even more different from others and you're more grumpy towards others. So I try to stay away from them because I know I would react towards them in certain ways, which I wouldn't like to react usually. (P05: Female, 26, German)

Alongside instances of physical avoidance of others, participants commonly reported that during moments of loneliness they avoided exposing themselves to the materials appearing on certain social media platforms, such as Facebook or Instagram, where people tend to share primarily joyful moments of their life. Despite a recognition that these materials do not reflect a realistic picture of

people's life, exposure to this sort of social word of others exacerbated participants' loneliness. A heightened sense of loneliness happened when students encountered other people enjoying time and activities *together* which seemed to deepen a sense of apartness and separateness from others and gave rise to appraisals of personal deficits. Loneliness was also compounded through an underlying perception and *sense of aloneness with feelings of loneliness* triggered from the acute antithesis between participants' own negative feelings and the 'happy' ones experienced by others and exhibited on social media. Unless participants wished to communicate with certain people through these technologies, students consistently avoided these platforms when they felt lonely.

I use Facebook quite a bit, and I think it can be quite bad because you see everybody else and you only see positive stuff most of the time anyway, you see how everybody else is having a great time and everything and then if you go on when you're lonely or you're feeling down, then it's just like, "Oh, you're having a great time, you're in this country" and it's just like after a while, I just realize, this is just making me feel worse. Because I'm seeing everybody else having such a great time, but like I'm feeling bad, now I'm feeling worse. So I would use the messenger to communicate, but actually like seeing what people are up to, that's not the best time that I want to do it. (P08: Male, 21, British)

3.3. Self-reliance

Whilst support-seeking and social isolation are linked and have reference to social resources in the environment, self-reliance coping describes a turn to the self and personal resources. Self-reliance coping, reflected in *emotion* and *behavioural regulation*, *emotion approach* and *emotional expression*, was mentioned by 11 (73%) participants.

Emotion regulation was attempted through efforts to logically analyse and understand the reasons for feeling lonely in order to attach a sense-making narrative to the experience. Self-encouragement and self-comforting ideas, such as the thought that the difficult feelings will eventually pass, or that the person is not alone but does have people in their life who are important to them, aimed to regulate emotions.

I found ways to cope with it and to manage it and to rationally talk to myself and say, "Okay you know this is just a phase and it's going to be better soon." It turns out it will be better again and so I found ways to get myself out of this hole that you feel in. (P05: Female, 26, German)

Emotional expression, such as talking through feelings to others, crying, and in one case through creative writing, was another strategy participants adopted to manage loneliness.

So yeah now I'm okay with...I feel stressed, I feel sad, then I start crying, I have a small crisis where I cry for an hour and then I get better again and I go, "Okay I have to do this, this, this". (P12: Female, 19, Spanish)

Despite a risk of getting excessively pre-occupied with emotions, some participants found it beneficial to acknowledge and stay with them. Listening to certain types of music sometimes helped students approach their emotions and "feel at one with them". Recognizing, admitting, and eventually going through the emotional turmoil of loneliness were also thought to alert students to necessary action that needed to be taken in order to alleviate loneliness.

I think admitting it, you don't always need to go and tell somebody else but just recognizing it yourself helps as you can then arrange to meet a friend or go and do something that you find makes you happy. (P07: Male, 18, British)

Instances of behavioural regulation that aimed to control and alleviate loneliness were also present in these data. For example, avoiding drinking or stressful situations, and creating a structure within days helped some participants to control their loneliness and contain their negative emotions. Possibly in an effort to re-establish a sense of belongingness based on his national identity, one participant described how he purposively consumed foods and listened to music from his own country to alleviate his intense loneliness.

3.4. Accommodation

Fourteen (93%) participants mentioned some form of accommodation with the most prevalent coping strategy being that of *distraction*. Evidence of *cognitive restructuring*, *minimization*, and *acceptance* of the distressing experience of loneliness also appeared in the data.

Engaging with activities that served to divert attention from feelings of loneliness into more constructive and pleasurable preoccupations – that is, distraction – was mentioned by the majority of participants. A series of activities – such as academic work and daily responsibilities, sports, physical exercise, watching movies, playing games, painting, drawing, reading, learning new skills, listening to music, going for a walk, and self-caring activities – helped participants keep themselves occupied and ‘take their mind off’ loneliness but also derive pleasure, release their stress, and accomplish a sense of achievement. Meeting friends and spending time with others also acted as distraction from loneliness at times. Some students tried to plan and schedule of distracting activities in advance since this created a sense of positive anticipation that made feelings of loneliness more manageable in the present. Another student described how she had proactively prepared a list of movies she could access whenever she felt lonely.

Yeah, so I'll try and do stuff I enjoy, that's one of the key ones. I think that remaining active is, well remaining active either physically or mentally is quite important to avoid like, avoid feeling down or lonely or anything, so I'll go for a run. That helps me quite a lot. (P08: Male, 21, British)

So I would watch a good movie online that I would research for, a list of good movies in advance and when I feel lonely, I would just select one and watch it. (P03: Female, 20, Vietnamese)

Participants' accounts suggested that distraction at times possibly functioned as a counterweight to the less helpful coping of submission to the emotional turmoil of loneliness.

I feel like if I don't keep myself engaged it's kind of going to suck me in. The deeper and blacker that I see things, it's going to be worse and harder to get over it. (P12: Female, 19, Spanish)

Although distracting activities were valued, a student who experienced a severe episode of loneliness noticed how the solitary character of many of these activities compounded her feelings of loneliness and isolation. For this participant, who seemed to have felt alienated from herself as part of her intense loneliness, distraction seemed to have a comforting effect when the activity created a sense of familiarity and stability that provided an emotional anchor.

This is going to sound ridiculous, I listened to Harry Potter audio books on the way to work and on the way back from work and in the evenings because the story was familiar, the voice was familiar because it was Stephen Fry. It felt like stability and something that I recognized and something that was familiar...[I felt] A little bit calmer, it was something to focus on. (P14: Female, 24, British)

Though less prevalent than distraction, evidence of accommodation coping through cognitive restructuring, minimization, and some form of acceptance of loneliness was also present in these data. Despite the painful character of loneliness for many participants, searching and finding some benefit helped them see the experience under a more positive light. Specifically, some referred to the lessons they learned regarding their abilities to cope with loneliness and they felt better equipped to manage a similar experience in the future.

Feeling lonely is a big thing, it can make you depressed, it can make you less motivated, but if you get over it, I think it's like a...in one side it's like a bad thing, feeling lonely but at the same time it's a good experience for yourself to know how to get over it. (P13: Male, 20, South Korean)

Others tried to contextualize their feelings within a broader life context focusing on positive elements of their situations, such as the fact that they still have loving and caring relationships, that their life period at University serves important life goals, or that they are young and have the opportunity to taste new experiences. This contextualization provided a broader perspective that minimized the burden of loneliness or led to a positive reframing: *I can live my life in solitude but still in some kind of happiness* (P03: Female, 20 Vietnamese). Finally, some forms of acceptance of loneliness were present, when for example it was conceived as an unavoidable part of a process of maturation or when a student showed evidence of habituation to this experience. Importantly, cognitive reappraisal was sometimes closely linked to distraction suggesting a synergistic relationship between these forms of accommodation coping. For instance, some participants mentioned that they were able to minimize the burden of loneliness when they were engaging with exercise.

3.5. Submission and opposition

Coping instances reflecting submission in the form of *rumination* were reported by seven participants (47%). During moments of loneliness, students exhibited negative thinking, intrusive thoughts that were believed to be unreasonable, fear, and a tendency to blame themselves for feeling lonely and for not having developed friendships.

I found it quite hard, especially if I know there's people, if I've spoken to those people and they aren't even nice or interesting and I'm so confused, there must be something wrong with me because all these people have friends. (P01: Female, 18, British)

Nevertheless, recognizing the risk to succumb to rumination about separation from home, two participants tried to avoid wishful thinking or excessive reliance on materials that connected them with home (i.e. photos of family and friends). Two instances of *blaming others* for the difficulty to develop new friendships and for feeling lonely provided some evidence of deploying opposition in the effort to cope with loneliness.

3.6. Problem-solving

Problem-solving coping, primarily in the form of *taking instrumental action* with a view to developing social connections in the new place, was reported by 11 (73%). Students were acutely aware of the need to build and maintain friendships in the new environment in order to alleviate loneliness and several described the actions they took towards this direction.

Like I really made an effort in the first week to try to put myself out there, that's another thing that helped. (P12: Female, 19, Spanish)

Whilst actively trying to make friends and connect with people appeared mostly effective, problem-solving efforts did not always bring the desired outcomes; in one instance, the participant felt that the new relations were still lacking in closeness, whilst another participant's loneliness was so debilitating that the companionship of a few friends she had made in the new place could only temporarily provide some relief. *Strategizing* around the development of new social connections and *planning* appropriate action were explicitly referred to by a few students.

Alongside a focus on relationship-building in the new place, five participants mentioned problem-solving coping that concerned the separation from home since the latter was sometimes identified as a source of loneliness. Two students had specifically taken instrumental action and visited their home whilst for three students the mere thought that they were able to readily visit home (or even return back) helped them manage feelings of loneliness.

Also that we are like free people and if I wanted to I could go back home at any time. Nobody forces me to be here and this freedom that we have compared to people in other countries that don't have the freedom to choose where they want to be ... It's an amazing feeling that if you think about it makes me feel immediately better. (P05: Female, 26, German)

3.7. Helplessness

Coping instances reflecting a state of helplessness were referred to by 9 (60%) participants, with *confusion* and *passivity* being the main expressions. As participants described their experiences of loneliness, several mentioned that they started questioning and wondering about whether they had made the right decisions (i.e. to live away from home to study). Emotional confusion and numbing were reported by one participant who also felt that she could not change her situation. Expressions of passivity and lack of motivation were also evident in some accounts.

Sometimes, I couldn't talk with my wife because she works, or with my mum and I feel really lonely at that time. At some point I was thinking, "What am I doing here? Why did I leave Mexico?" (P06: Male, 27, Mexican)

3.8. Escape

Seven (47%) participants reported instances of coping that reflected escapism and avoidance. 'Killing time' on social media or the internet, sleeping, and doing academic work were mentioned as ways of 'forgetting' about loneliness, enabling cognitive disengagement from the distressing experience. Behavioural avoidance was mentioned by one participant who avoided being alone as this triggered loneliness and negative feelings. One participant appeared to allay her extreme isolation by considering smoking as her 'companion' and two students spontaneously reported wishful thinking during moments of loneliness.

There were a few days I'd think about it when my house ... some of my housemates who had friends outside of the house, they'd go out and I'd think, "Oh, I wish I had someone that I could just go out with". (P10: Female, 18, British)

Evidence of coping with loneliness through *information seeking*, *delegation*, and *negotiation* was not found in these data.

Whilst the focus of our analysis was mainly across participants, we also explored our data from a within-participant perspective. Table 3 presents the percentage (and number of instances) of each coping family that was mentioned by each participant.

Table 3

Percentage (and number of instances) of each coping family mentioned by each participant

	Accommodation	Support seeking	Social isolation	Self-reliance	Problem solving	Helplessness	Submission	Escape	Opposition	Total
P01: Female British	8% (1)	23% (3)	23% (3)	15% (2)	-	-	8% (1)	15% (2)	8% (1)	13
P02: Female Non-British	23% (5)	18% (4)	27% (6)	4.5% (1)	9% (2)	4.5% (1)	4.5% (1)	9% (2)	-	22
P03: Female Non-British	44% (8)	17% (3)	17% (3)	-	17% (3)	-	-	5% (1)	-	18
P04: Female British	9% (1)	27% (3)	27% (3)	9% (1)	-	9% (1)	18% (2)	-	-	11
P05: Female Non-British	22% (4)	17% (3)	17% (3)	28% (5)	5% (1)	5% (1)	-	5% (1)	-	18
P06: Male Non-British	18% (2)	-	27% (3)	27% (3)	-	18% (2)	-	9% (1)	-	11
P07: Male British	15% (2)	23% (3)	23% (3)	15% (2)	15% (2)	8% (1)	-	-	-	13
P08: Male British	28% (5)	11% (2)	17% (3)	-	11% (2)	5% (1)	11% (2)	11% (2)	5% (1)	18
P09: Male Non-British	38% (5)	-	23% (3)	15% (2)	15% (2)	8% (1)	-	-	-	13
P10: Female British	-	29% (2)	29% (2)	-	29% (2)	-	-	14% (1)	-	7
P11: Male Non-British	25% (1)	50% (2)	-	25% (1)	-	-	-	-	-	4
P12: Female Non-British	47% (8)	18% (3)	-	18% (3)	12% (2)	-	6% (1)	-	-	17
P13: Male Non-British	33% (5)	13% (2)	7% (1)	13% (2)	20% (3)	7% (1)	7% (1)	-	-	15
P14: Female British	35% (6)	18% (3)	12% (2)	12% (2)	6% (1)	12% (2)	6% (1)	-	-	17
P15: Female British	29% (2)	57% (4)	-	-	14% (1)	-	-	-	-	7
Total	55	37	35	24	21	11	9	7	2	204

As table 3 illustrates, the number of *families of coping* mentioned by one person ranged between three (i.e. P11 and P15) and eight (i.e. P02, P08). Whilst some students exhibited a more limited or rigid coping repertoire, others manifested greater flexibility in employing a diversity of coping families. Moreover, the total of *coping instances* found in these data ranged between 4 (i.e. P11) and 22 (i.e. P02). On average, women ($n = 9$) reported slightly more coping instances (Mean = 14.44) compared to men ($n = 6$; Mean = 12.33) and British students ($n = 7$) slightly fewer coping instances (Mean = 12.28) compared to non-British students ($n = 8$; Mean = 14.75). Finally, older students (≥ 24

years old; $n = 5$; all PhD students) narrated a slightly larger number of coping instances (Mean = 14.4) in relation to younger students (≤ 21 years old; $n = 10$; Mean = 13.2).

4. Discussion

Guided by a comprehensive hierarchical framework of coping with stress (Skinner et al., 2003), this study used in-depth interviews to examine the coping strategies young adults deploy to manage experiences of loneliness whilst studying at University. With the exception of turning to spiritual faith and religion as a coping resource (Rokach, Chin, & Sha'ked, 2012), which was not mentioned by these participants, the present results echo existing research on coping with loneliness (Rokach, 1990; Rokach and Brock, 1998). Specifically, coping strategies mentioned by participants reflected nine out of the 12 families of coping proposed in the hierarchical coping model (Skinner et al., 2003). *Support-seeking*, *social isolation*, *self-reliance*, *problem-solving*, and *accommodation* were the most frequent manifestations of coping with loneliness. Evidence of *helplessness*, *escape*, *submission*, and *opposition*, was also present, but these were less commonly reported. Interestingly, accommodation coping (i.e. distraction, cognitive restructuring, acceptance and minimisation) was the most commonly mentioned family of coping in the present study. This chimes with previous research (Rokach, 1990) which similarly demonstrated that acceptance and self-healing in the forms of reflective solitude and solitary involvement were the most frequently reported coping strategies.

Alongside the identification of certain coping strategies, the present results further illuminate some important qualities of coping with loneliness and potential relationships between ways of coping. First, the deployment of families of coping and their respective coping strategies appeared to be highly selective in students' efforts to balance often competing considerations. Participants sometimes oscillated between, for example, support-seeking and self-induced social isolation as they were balancing the support they needed to manage their own feelings of loneliness against the potential of worrying and upsetting their significant others. Or instead they aimed to avoid what they perceived as violations of social norms and behaving in socially undesirable manners under the burden of negative feelings. Support-seeking was also strategically directed to specific targets; usually the participants' strong social ties. Equally, social isolation was mainly used when available social exchanges were perceived as unsupportive. In this sense, participants often (even if tacitly) tried to assess and foresee the usefulness of deploying certain coping strategies against potential costs (e.g. emotional for themselves and their loved ones; social costs).

Second, as well as being selective, coping with loneliness was also contextual, that is, dependent on the opportunities and constraints of the environment. For example, distraction or self-reliance coping were sometimes deployed in the absence of any social resources available or appropriate to provide support, although we recognise that no mention of social resources in respondents' narratives does not necessarily mean that they were absent. As a result of this, documenting when coping is directed more by selection or by contextual constraints is challenging though one could assume that the more opportunities people perceive in their environment, the more selective the coping can be, and vice versa. Third, certain coping strategies seemed to function as a counterweight to others suggesting a potentially antagonistic relationship; there was some evidence, for example, that distraction prevented students from feeling overwhelmed by the difficult emotions accompanying loneliness (i.e. submission) and that problem-solving coping constituted an effort to gain control over the status of relationships as opposed to responses of helplessness that signify a relinquishment of control. On other occasions coping strategies seemed to operate synergistically, possibly reinforcing each other. Distraction was sometimes followed by cognitive restructuring, acceptance and minimization or the cognitive reappraisal of loneliness occurred within the context of engagement with distracting activities.

Arguably, there is an apparent paradox in that loneliness is often caused by objective social isolation (referring to the quantitative number of social relationships a person has and often describing a denuded social network, Young & Victor, 2011), yet, and in line with previous research (Rokach, 1990; Rokach and Brock, 1998), isolation – in the form of self-induced withdrawal – was chosen by the students as a strategy to manage loneliness. Although self-induced isolation has been largely considered as a maladaptive coping strategy, our data suggest that, at least in the short term, it serves important emotional and social functions. Not only does it seem to shelter the individual from unsupportive social exchanges that could further compound negative feelings (Skinner et al., 2003), but it is purposively used to emotionally protect valued social resources (Hobfoll, 1989). In other words, participants seemed to consider and balance the resources of their social ties against the stress of their loneliness.

Finally, we also noted that digital technologies were often implicated with certain coping strategies. Specifically, support-seeking directed to geographically distant ties was heavily facilitated by digital communication technologies enabling contact and comfort seeking. Engagement with certain distracting activities (e.g. playing online games) and sometimes escape (e.g. 'killing time' online) were also facilitated and supported by digital technologies. In contrast, exposure to online social worlds afforded by certain digital technologies (e.g. Facebook, Instagram) was consistently avoided during moments of loneliness suggesting the adoption of isolation coping in an online context. At others times, digital technologies were used cautiously to protect the student from submission. In agreement with existing research (Seepersad, 2004), the present findings suggest that online coping with loneliness reflects, and is an extension of, offline coping.

4.1. Implications

Whilst students' mental health and well-being are recognized as important matters for academic institutions (Universities UK, 2015), there is limited provision of support services for loneliness, despite proliferating evidence demonstrating that loneliness predicts psychological distress and induces or exacerbates mental ill health (McIntyre et al., 2018; Richardson et al., 2017). Developing appropriate structures that might mitigate or intervene with this source of psychological distress should therefore be a priority for Universities.

Raising awareness of loneliness among students as one of the challenges to be expected during transition to University would help normalize this experience. This normalization of loneliness would alert students to the fact that this is a common experience and could help deflect harmful causal attributions to internal and stable individual characteristics (Walton & Cohen, 2011). Greater experience sharing and support seeking among peers could thus be encouraged and further supported by systems such as 'student loneliness ambassadors' or 'buddies'. Such systems could also signpost support services to students at risk and students in need of help to support services. Moreover, directing students to online spaces that encourage the expression and discussion of emotional experiences among peers could be a useful resource when other forms of social support are not available or appropriate (Coulson, Buchanan, & Aubeeluck, 2007).

Appropriate training could be provided to academic tutors and supervisors with a view to recognizing signs of loneliness and signposting students to suitable support services. Making space in the delivery of courses for students to engage in mental health self-care and the care of others could cultivate greater understanding of these issues. On those occasions that lonely students resort to professional counselling services, strengthening the deployment of useful coping strategies and enriching the coping repertoire would help students cope and adjust more effectively. Integrative approaches to short-term psychotherapy have been shown to be effective with students (Hofmann,

Sperth, & Holm-Hadulla, 2015) and could be used to manage psychological distress linked to experiences of loneliness.

4.2. Limitations of the present study

This study is not without limitations. As participants were asked to answer open-ended questions, they might have overlooked certain coping strategies or have selected to report coping strategies that seem more socially desirable (e.g. social support as opposed to opposition) and hence the number of coping strategies used is likely to be underestimated. Although this selective reporting might provide an indication of either the most salient or of the most socially acceptable strategies, this underestimation is a challenge of narrative methods as opposed to structured questionnaires which may provide relevant prompts when attempting to capture the full range of coping (Folkman & Moskowitz, 2004). Although the lack of information-seeking as a coping strategy chimes with previous research on coping with loneliness (Besevegis & Galanaki, 2010), the absence of evidence reflecting delegation and negotiation coping might then be the result of the lack of relevant prompts.

Moreover, although several of our participants were still feeling lonely to a greater or lesser extent at the time of the interview, most reflected on past episodes of loneliness with which they had already coped and as a result interviewees were not overwhelmed by loneliness. This is likely to have produced accounts in which coping retrospectively appears more organized, systematic and purposeful. Coping might be more haphazard and provisional when people encounter the stressor for the first time and it is experienced very intensely. Although this study documented the perceived usefulness of the various coping strategies, it did not measure any indicators of psychological adaptation and related outcomes of coping, which could be a focus of future research on loneliness. Finally, this is a small scale qualitative study that used a purposeful sampling approach and as such the findings cannot be generalised to the student population at large in any statistical sense; quantitative research with larger and representative samples of students would be needed to complement these context-specific qualitative insights.

5. Conclusion

The present research provided a theoretically-informed investigation of coping with loneliness in University students that illuminates the selective, contextual, and socially-influenced character of coping. Young adults at University do not only strive to manage their loneliness but also to preserve valued social resources, existing and potential. As loneliness is a pervasive experience in this population and has been found to be conducive to psychological distress, any effort to improve students' mental health and well-being and prevent mental health problems requires strategic responses to this challenge from academic institutions.

Acknowledgements: We would like to thank all the students who took part in this study. We would also like to thank Paul Cawkill, Senior Scientist at Dstl, for providing useful feedback and comments on a previous draft of this paper and for contributing to the development of a successful ethics application form that was submitted to the Ministry of Defence Research Ethics Committee (MoDREC).

References

- Ali, A., & Kohun, F. (2007). Dealing with social isolation to minimize doctoral attrition: A four stage framework. *International Journal of Doctoral Studies*, 2, 33-49.
- Besevegis, E., & Galanaki, E. P. (2010). Coping with loneliness in childhood. *European Journal of Developmental Psychology*, 7, 653-673. doi:10.1080/17405620903113306
- Cacioppo, J. T., Hawkley, L. C., & Thisted, R. A. (2010). Perceived social isolation makes me sad: 5-year cross-lagged analyses of loneliness and depressive symptomatology in the Chicago health, aging, and social relations study. *Psychology and Aging*, 25, 453–463. doi:10.1037/a0017216
- Cacioppo, J. T., & Patrick, W. (2008). *Loneliness: Human nature and the need for social connection*. New York: W.W. Norton & Company, Inc.
- Coulson, N. S., Buchanan, H., & Aubeeluck, A. (2007). Social support in cyberspace: a content analysis of communication within a Huntington's disease online support group. *Patient education and counseling*, 68, 173-178. doi:10.1016/j.pec.2007.06.002
- Cutrona, C. E. (1982). Transition to college: Loneliness and the process of social adjustment. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research, and therapy* (pp. 291-309). New York: Wiley.
- Fink, J. E. (2014). Flourishing: Exploring predictors of mental health within the college environment. *Journal of American College Health*, 62, 380-388. doi:10.1080/07448481.2014.917647
- Firmin, M. W., Firmin, R. L., & Lorenzen, K. (2014). A qualitative analysis of loneliness dynamics involved with college long-distance relationships. *College Student Journal*, 48, 57-71.
- Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology*, 55, 745-774. doi:10.1146/annurev.psych.55.090902.141456
- Hartley, M. T. (2011). Examining the relationships between resilience, mental health, and academic persistence in undergraduate college students. *Journal of American College Health*, 59, 596-604. doi:10.1080/07448481.2010.515632
- Hawkley, L. C., & Cacioppo, J. T. (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine*, 40, 218-227. doi:10.1007/s12160-010-9210-8
- Hawkley, L. C., Thisted, R. A., Masi, C. M., & Cacioppo, J. T. (2010). Loneliness predicts increased blood pressure: 5-year cross-lagged analyses in middle-aged and older adults. *Psychology and Aging*, 25, 132–141. doi:10.1037/a0017805

- Heinrich, L. M., & Gullone, E. (2006). The clinical significance of loneliness: A literature review. *Clinical Psychology Review, 26*, 695-718. doi:10.1016/j.cpr.2006.04.002
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American psychologist, 44*, 513-524. doi:10.1037/0003-066X.44.3.513
- Hofmann, F. H., Sperth, M., & Holm-Hadulla, R. M. (2015). Methods and effects of integrative counseling and short-term psychotherapy for students. *Mental Health & Prevention, 3*, 57-65. <https://doi.org/10.1016/j.mhp.2015.04.005>
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: A meta-analytic review. *Perspectives on Psychological Science, 10*, 227-237. doi:10.1177/1745691614568352
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*, 1277-1288. doi:10.1177/1049732305276687
- Hurst, C. S., Baranik, L. E., & Daniel, F. (2013). College student stressors: A review of the qualitative research. *Stress and Health, 29*, 275-285. doi:10.1002/smi.2465
- Janta, H., Lugosi, P., & Brown, L. (2014). Coping with loneliness: A netnographic study of doctoral students. *Journal of Further and Higher Education, 38*, 553-571. doi:10.1080/0309877X.2012.726972
- Kelly, J., Kendrick, M., Newgent, R., & Lucas, C. (2007). Strategies for student transition to college: A proactive approach. *College Student Journal, 41*, 1021-1035.
- Lauder, W., Mummary, K., Jones, M., & Caperchione, C. (2006). A comparison of health behaviours in lonely and non-lonely populations. *Psychology, Health & Medicine, 11*, 233-245. doi:10.1080/13548500500266607
- Luhmann, M., & Hawkey, L. C. (2016). Age differences in loneliness from late adolescence to oldest old age. *Developmental Psychology, 52*, 943-959. doi:10.1037/dev0000117
- Matthews, T., Danese, A., Gregory, A. M., Caspi, A., Moffitt, T. E., & Arseneault, L. (2017). Sleeping with one eye open: Loneliness and sleep quality in young adults. *Psychological Medicine, 47*, 2177-2186. doi:10.1017/S0033291717000629
- McIntyre, J. C., Worsley, J., Corcoran, R., Harrison Woods, P., & Bentall, R. P. (2018). Academic and non-academic predictors of student psychological distress: the role of social identity and loneliness. *Journal of Mental Health, 1-10*.
- Neergaard, M. A., Olesen, F., Andersen, R. S., & Sondergaard, J. (2009). Qualitative description: The

- poor cousin of health research?. *BMC Medical Research Methodology*, 9, 52.
doi:10.1186/1471-2288-9-52
- Nieminen, T., Prättälä, R., Martelin, T., Härkänen, T., Hyyppä, M. T., Alanen, E., & Koskinen, S. (2013). Social capital, health behaviours and health: A population-based associational study. *BMC Public Health*, 13, 613. doi:10.1186/1471-2458-13-613
- Nightline Association, (2014). *Psychological distress in the UK student population: Prevalence, timing and accessing support*. Retrieved from: <https://www.nightline.ac.uk/wp-content/uploads/2014/08/Psychological-distress-prevalence-timings-accessing-support-Aug-2014.pdf>
- Özdemir, U., & Tuncay, T. (2008). Correlates of loneliness among university students. *Child and Adolescent Psychiatry and Mental Health*, 2, 29. doi:10.1186/1753-2000-2-29
- Patton, M. (1990). *Qualitative evaluation and research methods*. Beverly Hills, CA: Sage.
- Perlman, D., & Peplau, L. A. (1981). Toward a social psychology of loneliness. In S. Duck & R. Gilmour (Eds.), *Personal relationships in disorder* (pp. 32-56). London: Academic Press.
- Pijpers, J. (2017). *Loneliness among students in higher education: Influencing factors - A quantitative cross-sectional survey research*. Retrieved from: https://www.huisartsenamsterdam.nl/wp-content/uploads/2017/07/Loneliness_Among_Students_in_Higher_Education_Influencing_Factors.pdf
- Ploskonka, R. A., & Servaty-Seib, H. L. (2015). Belongingness and suicidal ideation in college students. *Journal of American college health*, 63, 81-87. doi:10.1080/07448481.2014.983928
- Ponzetti, J. J. (1990). Loneliness among college students. *Family Relations*, 39, 336-340.
doi:10.2307/584881
- Qualter, P., Brown, S. L., Rotenberg, K. J., Vanhalst, J., Harris, R. A., Goossens, L., ... & Munn, P. (2013). Trajectories of loneliness during childhood and adolescence: Predictors and health outcomes. *Journal of Adolescence*, 36(6), 1283-1293.
<https://doi.org/10.1016/j.adolescence.2013.01.005>
- Qualter, P., Vanhalst, J., Harris, R., Van Roekel, E., Lodder, G., Bangee, M., ... & Verhagen, M. (2015). Loneliness across the life span. *Perspectives on Psychological Science*, 10, 250-264.
doi:10.1177/1745691615568999
- Richardson, T., Elliott, P., & Roberts, R. (2017). Relationship between loneliness and mental health in students. *Journal of Public Mental Health*, 16, 48-54.
<https://doi.org/10.1108/JPMH-03-2016-0013>

- Rokach, A. (1989). Antecedents of loneliness: A factorial analysis. *The Journal of Psychology*, 123, 369-384. doi:10.1080/00223980.1989.10542992
- Rokach, A. (1990). Surviving and coping with loneliness. *The Journal of Psychology*, 124, 39-54. doi:10.1080/00223980.1990.10543204
- Rokach, A. (1999). Cultural background and coping with loneliness. *The Journal of Psychology*, 133, 217-229. doi:10.1080/00223989909599735
- Rokach, A. (2000). Loneliness and the life cycle. *Psychological Reports*, 86, 629-642. doi:10.2466/pr0.2000.86.2.629
- Rokach, A. (2001). Strategies of coping with loneliness throughout the lifespan. *Current Psychology*, 20, 3-17. doi:10.1007/s12144-001-1000-9
- Rokach, A., & Brock, H. (1998). Coping with loneliness. *The Journal of Psychology*, 132, 107-127. doi:10.1080/00223989809599269
- Rokach, A., Chin, J., & Sha'Ked, A. (2012). Religiosity and coping with loneliness. *Psychological reports*, 110, 731-742. doi:10.2466/02.07.20.PR0.110.3.731-742
- Rokach, A., & Neto, F. (2000). Coping with loneliness in adolescence: A cross-cultural study. *Social Behavior and Personality*, 28, 329-342. doi:10.2224/sbp.2000.28.4.329
- Rönkä, A. R., Taanila, A., Koironen, M., Sunnari, V., & Rautio, A. (2013). Associations of deliberate self-harm with loneliness, self-rated health and life satisfaction in adolescence: Northern Finland Birth Cohort 1986 Study. *International Journal of Circumpolar Health*, 72, 21085. doi:10.3402/ijch.v72i0.21085
- Sandelowski, M. (2000). Whatever happened to qualitative description?. *Research in Nursing and Health*, 23, 334-340. doi: 10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G
- Sawir, E., Marginson, S., Deumert, A., Nyland, C., & Ramia, G. (2008). Loneliness and international students: An Australian study. *Journal of Studies in International Education*, 12, 148-180. doi:10.1177/1028315307299699
- Seepersad, S. (2004). Coping with loneliness: Adolescent online and offline behavior. *CyberPsychology & Behavior*, 7, 35-39. doi:10.1089/109493104322820093
- Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin*, 129, 216-269. doi: 10.1037/0033-2909.129.2.216
- Stravynski, A., & Boyer, R. (2001). Loneliness in relation to suicide ideation and parasuicide: a

- population-wide study. *Suicide and Life-Threatening Behavior*, 31, 32-40.
- Teo, A. R., Choi, H., & Valenstein, M. (2013). Social relationships and depression: Ten-year follow-up from a nationally representative study. *PLoS ONE*, 8, e62396.
- Thorley, C. (2017). *Not By Degrees: Improving student mental health in the UK's universities*. Institute for Public Policy Research. Retrieved from: <https://www.ippr.org/publications/not-by-degrees>
- Universities UK (2015). *Student mental wellbeing in higher education: Good practice guide*. Retrieved from: <http://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2015/student-mental-wellbeing-in-he.pdf>
- University of Michigan, (February 2018). *Results of the National College Health Assessment*. Retrieved from: <https://uhs.umich.edu/files/uhs/NCHA-2018-web.pdf>
- Vaarala, M., Uusiautti, S., & Määttä, K. (2013). College students' experiences of and coping with loneliness: Possibilities of peer support. *International Journal of Research Studies in Education*, 2, 13-28. doi:10.5861/ijrse.2013.510
- Valtorta, N. K., Kanaan, M., Gilbody, S., Ronzi, S., & Hanratty, B. (2016). Loneliness and social isolation as risk factors for coronary heart disease and stroke: Systematic review and meta-analysis of longitudinal observational studies. *Heart*, 102, 1009–1016. doi: 10.1136/heartjnl-2015-308790
- Vanhalst, J., Goossens, L., Luyckx, K., Scholte, R. H., & Engels, R. C. (2013). The development of loneliness from mid-to late adolescence: Trajectory classes, personality traits, and psychosocial functioning. *Journal of Adolescence*, 36, 1305-1312. doi:10.1016/j.adolescence.2012.04.002
- Victor, C. R., & Yang, K. (2012). The prevalence of loneliness among adults: A case study of the United Kingdom. *The Journal of Psychology*, 146, 85-104. doi:10.1080/00223980.2011.613875
- Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science*, 331, 1447-1451. doi:10.1126/science.1198364
- Wohn, D. Y., & LaRose, R. (2014). Effects of loneliness and differential usage of Facebook on college adjustment of first-year students. *Computers & Education*, 76, 158-167. doi:10.1016/j.compedu.2014.03.018

YouGov. (2016). Retrieved from:

https://d25d2506sfb94s.cloudfront.net/cumulus_uploads/document/obtomdatp4/Survey_Results.pdf

Young, J. E. (1982). Loneliness, depression, and cognitive therapy: Theory and application. In L. A.

Peplau, & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 379–405). New York: Wiley

Yang, K., & Victor, C. (2011). Age and loneliness in 25 European nations. *Ageing & Society*, 31, 1368-1388. doi:10.1017/S0144686X1000139X