



WELL CONNECTED?



What role does technology play in combatting social isolation and loneliness in students?



ASK4

“Technology, like most other things in life, is not a binary ‘good’ or ‘bad’ thing.”

STUDENT MINDS



FOREWORD

University represents a unique experience, often described as ‘the best years of your life’ - it has a lot to live up to.

But for some it doesn't meet those high expectations. Life at university is a period of great transition, whereby students need to navigate establishing new social connections and leaving behind family and other more traditional support networks. There is also significant pressure to perform, worry about student debt, and anxiety about future employment prospects. The growth of social media has also brought new pressure on students in recent years: as they see others seemingly fulfilling those hopes and dreams and leading ‘perfect lives’, it can intensify feelings of loneliness and in some cases, lead to withdrawal and isolation.

Our 2017 Connected Living Report into the future generation of students highlighted the ubiquitous role that technology will

play in the lives of students of the future, and more specifically how much they already rely on technology to connect with others. We surveyed 3,000 14-16yr olds across the UK, Germany and Spain and found that when using internet connected devices, the majority of their time is spent communicating. On an average day, nearly three quarters use their devices to speak with friends, browse social media and communicate via messaging apps like WhatsApp. In fact, a quarter of teens use WhatsApp multiple times an hour.¹

Technology has changed the way we connect with each other and has given students the opportunity to interact in new and exciting ways. Yet, despite being more connected and communicating more than ever, a growing number of university students are reporting feelings of isolation and loneliness and incidences of mental health related illnesses for this group are on the rise.^{2,3} Furthermore, there is now clear evidence linking loneliness and isolation to physical health and illness such as coronary heart disease and stroke,⁴



THE CHALLENGE

with the impact of poor social connections on an individual being comparable to smoking 15 cigarettes a day.⁵

In this report, we explore how technology, that is digital, smartphones and other Internet connected devices, services or apps (where the majority of interaction takes place online), can impact positively or negatively on this growing problem. The scope of this report is international and examines the growing problem of university student isolation and loneliness in several key markets; the United Kingdom, Ireland, Spain and Germany.

As part of this project, we sought the views of our colleagues at Student Minds, Nightline, the University Mental Health Advisors Network (UMHAN) and the Big White Wall on the problem of student loneliness and the impacts of technology in this space.

We hope this report will contribute to the ongoing conversation around student loneliness and isolation and the role that technology plays, sparking collaborative efforts to develop solutions to address this growing problem.

Jonathan Burrows
FOUNDER AND CEO
ASK4

“University can be incredibly isolating if you are not the stereotypical student who likes to go out partying and get drunk regularly. Although people say this is simply a stereotype, a lot of people I have encountered at university do fulfil it, and if you prefer not to go out every night, it can be difficult to find people who feel the same, which can make life incredibly lonely. Likewise, I think there is a lot of pressure to conform to the traditional student stereotype, which can be extremely distressing for students...”

STUDENT MINDS, 2014, “GRAND CHALLENGES IN STUDENT MENTAL HEALTH”

Loneliness has been described by some as an epidemic and is slowly appearing on the agenda of governments at a regional and national level.

The seriousness of this issue is increasingly recognised, so much so, that in the United Kingdom, a Minister for Loneliness was recently appointed. When we think about loneliness and isolation we generally think about the elderly or those living alone. However, evidence suggests that young people experience loneliness at rates equal to or higher than older people – recent data from the UK’s Office for National Statistics revealed that “Younger adults aged 16 to 24 years reported feeling lonely more often than those in older age groups.”⁶ Despite this, the issue of loneliness among young people in general, and university students in particular,

“Isolation is a natural reaction to distress/excess pressure ... there does seem to be far more stress and distress on campuses than ever before”

UMHAN

is an area that has received comparatively little attention.

It is worth noting that the terms loneliness and isolation are often used interchangeably. However, loneliness is not the same as isolation, or being alone. Time spent alone, or in solitude is often a welcome thing – time to ourselves to think and reflect. Isolation does not necessarily lead to loneliness. However, when social isolation is unwanted it can become loneliness – and can be likened to the sensation of physical pain.

THE EXTENT OF THE PROBLEM

In the United Kingdom, almost half of the university student population (46%) admit to experiencing loneliness during their time at university, compared to 32% globally.⁷

When Student Minds researched the 'Grand Challenges in student mental health' in 2014 by surveying students, university staff and health professionals, loneliness actually came out as 1 of the top 10 challenges.

Due to limited primary data, the prevalence of loneliness among university students in Ireland is not clear. However, indications are that loneliness and isolation of young people is a significant problem. Youth mental health charity Jigsaw notes that loneliness and "isolation / withdrawal from others is one of the top ten issues" cited by young people seeking help from the service.⁸ In early 2018 Ireland set up a Loneliness Taskforce to examine loneliness across all age groups, acknowledging that "loneliness is now as prevalent in the young as it is in the elderly, it just manifests itself differently."⁹

The rate at which university students in Spain experience loneliness has received little attention. In part, this may be because Spanish culture emphasises strong family ties and the importance of personal relationships¹⁰ and more Spanish students live at home compared to other countries, and so loneliness may not be considered as significant a problem in the Spanish university student population. However, findings from a research study into loneliness in Spain indicate that this is still a growing issue.¹¹


In Germany, one study found that 17 percent of people in the 18-29 age group feel constantly or often lonely, and only one in ten never feels lonely.¹²


Another study found elevated levels of loneliness in young people, which peaked around 30 years of age, with these levels not being surpassed again until age 80 or over.¹³




WHICH STUDENTS ARE MORE VULNERABLE?


There is some evidence to suggest that among the student population there are certain groups of students who are more vulnerable to feeling isolated or lonely than others:

 **First year undergraduates** are vulnerable as they navigate the transition to university and attempt to develop new social networks.¹⁴

 **PhD students** – the very nature of working towards a PhD, conducting research into a unique topic is isolating. This is compounded by limited contact with supervisors and others.^{15 16}

 **Distance learners** – students who are distance learners, either by necessity or because of limitations around mobility, report feeling cut off from campus life and other students.¹⁷

 **Students with a disability or a long-term medical condition** which may make frequent attendance on campus difficult.^{18 19}

 **International students** - for international students, transitional issues are magnified by having to navigate a new culture and academic system, often in a different language.^{20 21}

"The increase in pressure to succeed – academically, career-wise and even socially – may make students feel isolated if they don't meet the tough criteria that university life can offer. Additionally, despite huge leaps forward in the mental health agenda, stigma does still exist around mental health and for students who are struggling with their mental health, not being able to speak about their issues contributes to a feeling of isolation."

BIG WHITE WALL

WHY DOES STUDENT ISOLATION AND LONELINESS NEED ADDRESSING?

Failure to address the issue of student isolation and loneliness can have serious consequences for both the individual and the broader community.

Students who report feelings of loneliness have decreased levels of life satisfaction. Although not mental health problems in themselves, feelings of isolation and loneliness increase the risk of mental health problems such as anxiety and depression, addiction and suicide.²² Other health impacts include cardiovascular issues and reduced immunity.^{23 24}

If left unchecked, isolation and loneliness could result in significant downstream costs to health systems. Students who report being lonely are also more likely to consider

dropping out of their course.²⁵ This not only affects retention rates and student satisfaction, but it also impacts on the labour market and other life outcomes for the individual.

Universities and student accommodation providers heavily market the concept of the 'student experience' and need to be able to deliver on this for their student population. Supporting the emotional needs of students is an important aspect of this. Failure to do so increases reputational risk for providers.

The effects of loneliness are cumulative, therefore acting early to prevent feelings of loneliness escalating into more serious health problems is critical for individuals, and to reduce pressure on support services.



EMERGING SOLUTIONS

The keys to addressing loneliness include helping people to maintain existing social connections and to build new ones, fostering a sense of community and belonging, and reducing the burden by providing appropriate, timely support.

While there are valid concerns about the impact of technology on the mental health of young people, there is increasing evidence that technology can play a key role in combatting student isolation and loneliness.²⁶

For many years there has been a debate around whether technology such as the Internet and social networking sites increase feelings of loneliness. There is also evidence to suggest that social networking sites can

have negative impacts on young people's social skills and mental health, with concerns ranging from more serious issues such as cyberbullying, to concerns about not being able to interact in face-to-face exchanges.

Although these are valid concerns which require ongoing attention, recent research suggests that time spent on the Internet and social networking sites may, in part, be a *result* of loneliness rather than the cause. There is also evidence that technology, in particular social networking sites, can be useful in combatting the effects of isolation and loneliness and may, in fact, assist in the creation of new social connections.

“Technology, like most other things in life, is not a binary ‘good’ or ‘bad’ thing. Everyone uses social media differently and there can be both benefits and challenges to your mental health.”

STUDENT MINDS

“What we find talking to students is that they really are often quite expert at using technology as a support mechanism, as well as a social media to link up with social networks that offer them support as well, so as well as the potential negatives they are getting a lot of positives.”

NIGHTLINE

In short, we are faced with a paradox – on one hand, the pervasive portrayal of ‘good times’ and ‘perfect lives’ on social media can be a cause of anxiety, while on the other, social media and other technologies are an integral means of connecting socially and accessing information and support.

This is particularly true for today's young people - ‘digital natives’ who have grown up with the Internet and other technology embedded in their lives. Fundamentally, young people use technology differently to older people, and therefore, understanding the ways in which their use differs is important, to ensure that responses are age appropriate.

Young people take technology for granted and staying connected is of utmost importance to them. In fact, our own research into the next generation of students found that the majority would feel ‘frustrated’, ‘isolated’ and ‘angry’ if they were not able to communicate online as they would expect.²⁷ For our current cohort of young people, technology is the vehicle for interacting with others, making friends and growing their networks. Technology is also the primary means for accessing information.

For universities, and organisations providing mental health, accommodation and other support to university students, the challenge is to provide engaging and trustworthy information and support in a way that students want to access it, while working to mitigate some of the more potentially damaging aspects of technology.



HOW TECHNOLOGY CAN BE USED TO SUPPORT STUDENTS

1 Awareness Raising and Provision of Information - today's students are ubiquitous users of the Internet and are likely to turn first to the Internet for information about mental health and support, although this is not a replacement for face to face support, which is a preference for students.^{28,29}

However, not all students trust the available information – one Spanish study found that while students would access the internet for information, they are less likely to trust what they find. This highlights the importance of ensuring that relevant, age-appropriate information from trusted and validated sources is available online to support students, particularly those that are hard to reach, when they take the first steps to access help and support.

In terms of raising awareness of issues, technology provides a way to access greater numbers of students. When talking to our colleagues at Nightline, Student Minds and UMHAN, they all spoke about the huge exposure they have been able to achieve through social media.

“For UMHAN, technology plays an important role in terms of reaching students. It is now way easier to organise digital campaigns and have people show their support through social media rather than have them attend actual events. On University Mental Health Day, we reached 23 Million People on Twitter through the Uni Mental Health Day hashtag. This would have never happened without the help of technology”

UMHAN

2 Ease of access – access to online support or support via an app is instant and thus there is no need for students to wait to get help. The importance of this is highlighted by statistics provided by Big White Wall where 90% of users log on outside of traditional office hours (9am-5pm). It is ever more important that information is available, but also up-to-date and accurate, as students will sometimes be using this as their only avenue for support.

Big White Wall - a community of members, who support and help each other and share what's troubling them in a safe and anonymous environment. The site is available 24 hours a day, 7 days a week, 365 days a year, which means that users do not need to wait until morning, the next business day or for a doctors' appointment to receive support.

To ensure safety and anonymity, the site is monitored by clinically trained 'Wall Guides', who are online 24/7. Wall Guides help users to feel welcome and guide users on how to get the most from Big White Wall.

3 Provision of support and education – technology offers a valid means of providing support, especially for those with milder symptoms - “of the approximate 5 million people who suffer depression every year, roughly 80% fall within the mild to moderate end of the spectrum. In these instances, face-to-face therapy does not need to be the default mode of delivery when digital can be viewed as a choice.”³⁰

Elefriends.org.uk - an online community managed by UK mental health charity Mind. Elefriends provides a supportive online community for young people to share experiences, be heard and listen to others. Elefriends started life as a Facebook group encouraging people to be open about the “elephant in the room” - workplace mental health. However, the group quickly grew into something more and thus the Elefriends website was born. Since its inception in 2013, more than 86,000 people have signed up as Elefriends.

From a service provider perspective, the provision of online or app-based support is a cost-effective alternative, although Nightline emphasise that it should not be the only avenue of support, but rather part of a wider package of support.

Online and mobile-based interventions are also a potential means of engaging with students who would not otherwise seek help. In Germany, an evaluation of StudiCare³¹, an online and mobile-app-based support service highlighted that it was not only a cost-effective means of supporting students, but that it attracted students who would not otherwise seek help. It was also shown to be a way of averting the development of more serious symptoms among at-risk students.³²

Mobile phone apps are increasingly being used to support mental health and offer the advantage of providing support at any time, and in any place. While not specifically tailored for students, examples include Worrytime³³, an app designed to help

users more effectively manage worry, and Headspace³⁴, an app designed to teach mindfulness and meditation techniques. The University of West of England has developed SAM³⁵ – an app designed to help users manage anxiety and connect with users experiencing the same issues. The Student Room also offers an app designed for students, allowing them to discuss issues of concern as well as seek study help.

StudiCare is a German stress management intervention designed to promote coping skills for emotional strain and academic stress by using mindfulness-based metacognitive and problem-solving techniques. Marketed as “support for coping with academic stress” rather than as a mental health intervention, StudiCare is delivered via the Internet or a mobile-based app, with students completing eight educational modules and a rumination diary. They also have access to trained support staff. An evaluation highlighted that StudiCare attracted students who, although they had clinically significant symptoms of depression, had not sought clinical support before.

‘Given the central role that technology plays in many students’ lives, I do think that technology has the potential to revolutionise health and could help to tackle some of the causes of ill health such as isolation’

STUDENT MINDS

The Student Room – www.thestudentroom.co.uk offers an app developed in the UK that allows students to chat with other students about university life, relationships, health and lifestyle issues and more. It also provides a forum for students to get support with exam revision

“Technology also brings with it the option of being totally anonymous – 67% of our student members have shared an issue or feeling for the first time, with anonymity being the biggest factor in their decision to do so.”

BIG WHITE WALL

4 Anonymity - technology may also reduce the stigma around asking for support because of the anonymity that technology can provide. The Internet is a place where students feel they can speak openly and honestly. In our Connected Living report, many young people revealed they had multiple identities online, and when we looked at the reasons why, almost a quarter cited that ‘it gives them the confidence to say or do things they can’t in the real world’. This is also supported by figures provided by Big White Wall which show that for over 2/3 of their users, the Big White Wall was the place where they shared an issue for the first time.

Services such as the Samaritans’ text help and email service³⁶ also provide an avenue for instant, anonymous support.



5 Social connections and community – students today are members of multiple communities: course communities, accommodation communities, clubs and societies, as well as family and friendship groups from home. Technology such as social networking sites, messaging and video calls help students to keep in touch with existing networks and reduce homesickness, ease the transition into university by helping students to forge new social connections, reduce feelings of loneliness³⁷, and increase feelings of support³⁸. It also enables students to be members of multiple communities at the same time and offers an avenue of reassurance to students that they are not the only ones experiencing problems.

Increasingly, universities are using social media to connect new students with each other before university commences, helping to ease some of the anxiety around the transition to university and support students to make new friends before they arrive on campus.³⁹

Of course, it cannot be a replacement for face to face interactions, but rather it should augment these.

Sheffield University in the UK is one of the many UK universities embracing social media as a means of connecting students and improving the learning experience. Initiatives include setting up official “Firmers” pages for each year’s cohort of freshers to help new students feel a sense of welcome and connect with others before they commence their studies; use of WhatsApp groups to connect groups of students and lecturers and use of video scribe to create revision videos which are then posted on Youtube. Sheffield University has also trialled the use of ‘WeChat’, a popular instant messaging platform in Asia to better engage with Chinese students.

6 Improving the student experience – technology such as online discussion forums, real-time video conferencing, WhatsApp groups and instant messaging can all help to develop a sense of community and belonging for students, particularly those who are more likely to feel isolated, such as PhD students, distance learners and students with a disability. Well-moderated online discussion forums can provide an avenue for students to share their feelings with others in similar circumstances.⁴⁰ Technology such as Google Docs, Google Slides, Google Sheets and Pinterest can be used to increase student collaboration and engagement, overcoming the barrier of geographical distance.⁴¹

Social media also has significant potential as an educational support tool, with evidence suggesting that students are positive about the use of Facebook groups as a form of community of practice, and find it delivers an improved student experience.⁴²

However, there is also evidence to suggest that one of the barriers to greater uptake of social media as a means of augmenting the learning experience is hesitation on the part of faculty due to its informal nature, concerns about safeguarding, accountability and tracking of processes, and the need for greater digital literacy among faculty members.⁴³

Supporting students with technology in their accommodation is increasingly a critical aspect of the student experience. Our own research highlights that European teens expect seamless device-to-device connectivity in their accommodation. They expect to use their devices to chat online with friends and family, as well as cast content to a laptop or television from their smartphone, connect to wireless printers and send music to wireless sound systems.

In addition, students face significant pressure to balance work and study. Being able to connect with whoever they need, access the information they need, when they need it, is integral to this. An article written back in 2013 by the then CEO of Campus Living Villages signalled that the evolving needs of students in this area are prompting changes to building design and technological infrastructure: “In some new accommodation, the ground floor better resembles a professional lobby area suitable for business meetings.”⁴⁴

Fast forward to today, with the speed at which technology is developing and needs are changing, and this is ever more the case. Students need to be able to study remotely and work collaboratively from their accommodation. Technology in student accommodation needs to be capable of supporting students to manage their time and these competing demands, and this makes for happier and more settled students.⁴⁵ Ensuring that the technological infrastructure of a building can support multiple devices and 24/7 learning and connectivity, is an issue that cannot be ignored.

More examples of how technology is being used to combat loneliness and resulting mental health issues in young people can be found in the UK and Germany than in the other territories. In Ireland, online support is available through websites such as Turn to Me, developed to support young people aged over 18 to “get help, and let them know they are not alone. The site facilitates a safe online community space that allows people to open up and reach out for help.”⁴⁶

In Spain, some information on combatting loneliness is available on some university websites, however, examples of more proactive support provision such as online discussion forums could not be identified. This highlights an area of opportunity to strengthen support for students, given the increasing numbers of international students and student mobility in Europe.



FURTHER OPPORTUNITIES

GAINING A BETTER UNDERSTANDING OF THE CAUSES OF STUDENT LONELINESS

There are a number of theories around the increasing problem with loneliness and isolation in young people, with technology often linked to this - but none of these appear conclusive. There is a significant opportunity to explore the issue of student isolation and loneliness further. Taking a preventative approach is a longer-term solution and may ultimately reduce pressure on universities to provide ever-increasing reactive support.

While it is important to look at ways to better engage students and encourage them to seek help with information on mental health and wellbeing, especially those students who are hard to reach, it is also vital that we address the factors that could be causing the problem and that this is part of a university-wide approach to student wellbeing and mental health. More specifically, technology and social media in particular can also play a preventative role – we know that isolation

and loneliness can lead to more serious health issues, so generating awareness of the significant problem with student loneliness and how to recognise this and get help could potentially help to prevent more serious health effects in the longer term.

USING TECHNOLOGY TO HELP BUILD A SENSE OF COMMUNITY AND GET STUDENTS TALKING

Feelings of loneliness are often linked to a lack of social connections and this is no different for students. There are many examples of technology being used to support the development of social connections in other cohorts in the community. For example, sites such as InterNations⁴⁷ which encourage expats around the world to meet up. However, there are fewer examples of technology being used to develop connections for students, other than via Facebook groups.

The irony here is that Facebook was set up for just that purpose – as an online community site just for Harvard college students, and then later for students at other

universities. Its popularity in this niche is, in part, why it is now such a global success. Groups on Facebook do work for smaller groups / communities, but there is perhaps an opportunity for something more akin to the original Facebook where it's limited to members of one course or institution. When a 'community' becomes too big, it ceases to become one identifiable community, but many - you essentially become lost in the crowd again. As we have discussed, in some cases technology can provide an unrealistic portrayal of students leading 'perfect lives' and this can encourage feelings of anxiety and failure. There is also an opportunity to explore ways to build digital spaces for students where lifestyle is not the core topic, and where honesty about life's ups and downs is encouraged. These are certainly areas that warrant further exploration.

BLENDING PHYSICAL SPACE AND TECHNOLOGY TO IMPROVE THE STUDENT EXPERIENCE

Just as the current cohort of students expect seamless connectivity from their devices, expectations around seamless connections between work, university and accommodation are increasing. Failure to support these needs can result in feelings of anxiety for students.

A key challenge for accommodation providers is how to support social connections and collaborative working for students through a combination of building design and technological infrastructure. Increasingly, purpose-built student accommodation will be expected to provide more than just beds – there are likely to be higher expectations around collaborative study and meeting spaces and the technology required to support these. Furthermore, social spaces are a crucial part of the student accommodation experience, so having the up-to-date technology to offer a 'home from home' experience where students can easily meet and connect with each other is likely to promote a better living environment and therefore happier students.

Sharing good practices and better collaboration between universities and accommodation providers will be crucial to ensuring that facilities can support the ever-evolving lifestyles of the digital generation.

MORE SUPPORT SERVICES TAILORED SPECIFICALLY TO STUDENTS

While there are several good examples of technology being used to provide information and support to young people in general, these are often generic services, and not tailored specifically towards university students. An examination of the specific needs of students in this area would assist in the development of future services.

ENCOURAGING INSTITUTIONS TO EMBRACE SOCIAL MEDIA AS PART OF THE LEARNING EXPERIENCE

Students are open to use of social media as a way of supporting formal learning. However, faculty are not always as enthusiastic. Ways to address faculty concerns about the informal nature of social media as a learning support tool and to increase digital literacy of faculty members should be investigated

Given evidence that interventions focussed on supporting students to develop networks and peer mentoring can reduce student isolation and loneliness and assist in their adaptation to university life, ways that technology can be better used in peer mentoring would also be a useful area of investigation. That said, online communication and peer mentoring can sometimes feel difficult to monitor and control. For institutions and faculties there is an argument that more guidance on acceptable processes, certainly in terms of safeguarding and accountability where online communication is concerned, would be beneficial. There is also arguably an opportunity for institutions to share best practice and learn from each other.



CONCLUSION

Isolation and loneliness is a growing problem among the university student population.

We live in a digital age, and technology will continue to be a permanent feature of our lives. It is incumbent on those involved in the provision of student services to continuously consider the broader impacts of technology on student customers and to continuously strive to improve the student experience.

There is a need to further understand why more students and young people are feeling isolated and lonely. As Student Minds clearly point out, 'we need to focus on prevention, not just the cure.' That said, the feeling of loneliness points to a lack of meaningful social connections. While we should never underestimate the power of physical social connections, technology offers tremendous potential for facilitating those relationships and building a sense of belonging among students.

Today's generation of students are highly proficient at using technology as a support mechanism, and a key challenge is to offer support in a way that students want to access it. While it is not a replacement for face to face support or interventions, technology can play a key role in combatting social isolation and loneliness. Technology can assist in increasing awareness of the loneliness problem and the supports available for students experiencing this –

it's a way for them to feel they are not on their own and understand that others are facing similar pressures. It also provides a stigma-free way for students to access support in the first instance. In the service provision environment, technological solutions provide a cost-effective way of reaching large numbers of students, and for those with lower support needs can be an effective solution. It also has great potential in reaching those students who are reluctant to seek help via more traditional means.

Technology, the Internet and social media in particular, have played a role in inadvertently stimulating anxiety and feelings of isolation and loneliness, particularly as we have adapted to the 'information age'. However, it appears the tide is turning. Our sense from this review is that tremendous effort is going into developing new solutions and new types of communities, and in the future, with continued effort, we hope that we will look back and consider that technology as a whole has had an overwhelmingly beneficial impact on students' lives and social connections.

'Any technological advances are always going to be more effective when they are complementary to a strategic whole university approach which includes a range of interventions as we all need and respond to different things'

STUDENT MINDS

ENDNOTES

Á, Horgan, and Sweeney J. "Young Students' Use of the Internet for Mental Health Information and Support." *Journal of Psychiatric and Mental Health Nursing* 17, no. 2 (2010): 117-23.

Apaolaza, Vanessa, Patrick Hartmann, Esteban Medina, Jose M Barrutia, and Carmen Echebarria. "The Relationship between Socializing on the Spanish Online Networking Site Tuenti and Teenagers' Subjective Wellbeing: The Roles of Self-Esteem and Loneliness." *Computers in Human Behavior* 29, no. 4 (2013): 1282-89.

Bennett, Liz, and Sue Folley. "A Tale of Two Doctoral Students: Social Media Tools and Hybridised Identities." *Research in Learning Technology* 22, no. 1 (2014).

Croft, Nicholas, Alice Dalton, and Marcus Grant. "Overcoming Isolation in Distance Learning: Building a Learning Community through Time and Space." *Journal for Education in the Built Environment* 5, no. 1 (2010/07/01 2010): 27-64.

Dražković, Nikola, Ana Kuštrak Korper, and Katharina Kilian-Yasin. "Student Attitudes toward Use of Social Media in the Learning Process: A Comparative Study of Croatian and German Students." *International Journal of Management Cases* 19, no. 2 (2017): 53.

Eichenberg, Christiane, Carolin Wolters, and Elmar Brähler. "The Internet as a Mental Health Advisor in Germany—Results of a National Survey." *PLoS One* 8, no. 11 (2013): e79206.

Ellefsen, Lasse. "An Investigation into Perceptions of Facebook-Use in Higher Education." *International Journal of Higher Education* 5, no. 1 (2015): 160.

Griffiths, Hannah. "Social Isolation and Loneliness in the UK: With a Focus on the Use of Technology to Tackle These Conditions." United Kingdom: IoTUK, 2017.

Guil, Rocío, Silvia González, Cristina Rodríguez, Antonio Zayas, Paloma Gil-Olarte Márquez, and Jose Mestre. *Social Support, Perceived Well-Being and Internet Social Networks*. 2016. doi:10.18638/quaesti.2016.4.1.288.

Harrer, Mathias, Sophia Helen Adam, Rebecca Jessica Fleischmann, Harald Baumeister, Randy Auerbach, Ronny Bruffaerts, Pim Cuijpers, et al. "Effectiveness of an Internet- and App-Based Intervention for College Students with Elevated Stress: Randomized Controlled Trial." *Journal of Medical Internet Research* 20, no. 4 (2018).

Hawkey, Louise C, and John T Cacioppo. "Loneliness Matters: A Theoretical and Empirical Review of Consequences and Mechanisms." *Annals of Behavioral Medicine* 40, no. 2 (2010): 218-27.

Holt-Lunstad, Julianne, Timothy B Smith, and J Bradley Layton. "Social Relationships and Mortality Risk: A Meta-Analytic Review." *PLoS medicine* 7, no. 7 (2010): e1000316.

Janta, Hania, Peter Lugosi, and Lorraine Brown. "Coping with Loneliness: A Netnographic Study of Doctoral Students." *Journal of further and Higher Education* 38, no. 4 (2014): 553-71.

Lefever, Ruth, and Becka Currant. "How Can Technology Be Used to Improve the Learner Experience at Points of Transition?"

Review of Peer Reviewed Academic Literature, National and International Resources and Examples of Projects and Initiatives within Higher Education Institutions Literature." Bradford University, 2010.

Luhmann, Maike, and Louise C Hawkey. "Age Differences in Loneliness from Late Adolescence to Oldest Old Age." *Developmental psychology* 52, no. 6 (2016): 943.

Morris-Lange, Simon. "Allein Durch Den Hochschuldschungel Hürden Zum Studienerfolg Für Internationale Studierende Und Studierende Mit Migrationshintergrund (Hurdles to Study Success for

International Students and Students with a Migration Background)." (2017).

Neale, Ian, and Piggot, Laura and Hansom, Josephine and Fagence, Sam "Student Resilience: Unite Students Insight Report." 2016.

Neves, Jonathan, and Nick Hillman. "Student Academic Experience Survey." *Higher Education Policy Institute and Higher Education Academy* 12 (2017).

Newsome, Linda K, and Paul Cooper. "International Students' Cultural and Social Experiences in a British University: "Such a Hard Life [It] Is Here"." *Journal of International Students* 6, no. 1 (2016): 195-215.

Nicolás, Juan Díez, and María Morenos Páez. "La Soledad En España." 2015.

Nowland, Rebecca, Elizabeth A Necka, and John T Cacioppo. "Loneliness and Social Internet Use: Pathways to Reconnection in a Digital World?". *Perspectives on Psychological Science* (2017): 1745691617713052.

Office for National Statistics. "Loneliness - What Characteristics and Circumstances Are Associated with Feeling Lonely?" <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/lonelinesswhatcharacteristicsandcircumstancesareassociatedwithfeelinglonely/2018-04-10>.

Oman, Susan. "Student Experience Survey 2017: Investigating Well-Being at University." Times Higher Education, <https://www.timeshighereducation.com/student/blogs/student-experience-survey-2017-investigating-well-being-university>.

Páramo Fernández, María Fernanda, Alexandra M Araújo, Carolina Tinajero Vacas, Leandro S Almeida, and María Soledad Rodríguez González. "Predictors of Students' Adjustment During Transition to University in Spain." *Psicothema* 29, no. 1 (2017).

Rockach, Ami, Tricia Orzeck, Miguel C. Moya, and Francisca Expósito. "Causes of Loneliness in North America and Spain." *European Psychologist* 7, no. 1 (2002): 70-79.

Sodexo. "The Sodexo International University Lifestyle Survey." 2017.

Taylor, Gary, Liam Mellor Mellor, and Lizzie Watson. "Students with Disabilities and Widening Participation".

Thorley, Craig. "Not by Degrees: Improving Student Mental Health in the UK's Universities." (2017).

UK Equality Unit. "Inclusive Campus: Accommodation and Social Space." 2008.

Valtorta, Nicole K, Mona Kanaan, Simon Gilbody, Sara Ronzi, and Barbara Hanratty. "Loneliness and Social Isolation as Risk Factors for Coronary Heart Disease and Stroke: Systematic Review and Meta-Analysis of Longitudinal Observational Studies." *Heart* 102, no. 13 (2016): 1009-16.

1. www.ask4.com/connectedliving
2. Craig Thorley, "Not by Degrees: Improving Student Mental Health in the UK's Universities," (2017).
3. Jonathan Neves and Nick Hillman, "Student Academic Experience Survey," *Higher Education Policy Institute and Higher Education Academy* 12 (2017).
4. Nicole K Valtorta et al., "Loneliness and Social Isolation as Risk Factors for Coronary Heart Disease and Stroke: Systematic Review and Meta-Analysis of Longitudinal Observational Studies," *Heart* 102, no. 13 (2016).
5. Julianne Holt-Lunstad, Timothy B Smith, and J Bradley Layton, "Social Relationships and Mortality Risk: A Meta-Analytic Review," *PLoS medicine* 7, no. 7 (2010).
6. Office for National Statistics, "Loneliness - What Characteristics and Circumstances Are Associated with Feeling Lonely?," <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/lonelinesswhatcharacteristicsandcircumstancesareassociatedwithfeelinglonely/2018-04-10>.

7. Sodexo, "The Sodexo International University Lifestyle Survey," (2017).
8. <https://www.jigsaw.ie/news-and-events/post/isolation-one-of-the-biggest-issues-for-our-young-people>
9. <https://lonelinesstaskforce.com/>
10. Ami Rockach et al., "Causes of Loneliness in North America and Spain," *European Psychologist* 7, no. 1 (2002).
11. Juan Díez Nicolás and María Morenos Páez, "La Soledad En España," (2015).
12. <https://www.splendid-research.com/de/ueber-uns/presse/item/studie-einsamkeit-deutschland-2017.html>
13. Maike Luhmann and Louise C Hawkey, "Age Differences in Loneliness from Late Adolescence to Oldest Old Age," *Developmental psychology* 52, no. 6 (2016).
14. María Fernanda Páramo Fernández et al., "Predictors of Students' Adjustment During Transition to University in Spain," *Psicothema* 29, no. 1 (2017).
15. Hania Janta, Peter Lugosi, and Lorraine Brown, "Coping with Loneliness: A Netnographic Study of Doctoral Students," *Journal of further and Higher Education* 38, no. 4 (2014).
16. Susan Oman, "Student Experience Survey 2017: Investigating Well-Being at University," *Times Higher Education*, <https://www.timeshighereducation.com/student/blogs/student-experience-survey-2017-investigating-well-being-university>.
17. Nicholas Croft, Alice Dalton, and Marcus Grant, "Overcoming Isolation in Distance Learning: Building a Learning Community through Time and Space," *Journal for Education in the Built Environment* 5, no. 1 (2010).
18. Gary Taylor, Liam Mellor Mellor, and Lizzie Watson, "Students with Disabilities and Widening Participation".
19. Oman.
20. Linda K Newsome and Paul Cooper, "International Students' Cultural and Social Experiences in a British University: "Such a Hard Life [It] Is Here"," *Journal of International Students* 6, no. 1 (2016).
21. Simon Morris-Lange, "Allein Durch Den Hochschuldschungel Hürden Zum Studienerfolg Für Internationale Studierende Und Studierende Mit Migrationshintergrund (Hurdles to Study Success for International Students and Students with a Migration Background)," (2017).
22. Hannah Griffiths, "Social Isolation and Loneliness in the UK: With a Focus on the Use of Technology to Tackle These Conditions," (United Kingdom: IoTUK, 2017).
23. Ibid.
24. Louise C Hawkey and John T Cacioppo, "Loneliness Matters: A Theoretical and Empirical Review of Consequences and Mechanisms," *Annals of behavioral medicine* 40, no. 2 (2010).
25. Ian Neale, and Piggot, Laura and Hansom, Josephine and Fagence, Sam "Student Resilience: Unite Students Insight Report," (2016), 11.
26. Rebecca Nowland, Elizabeth A Necka, and John T Cacioppo, "Loneliness and Social Internet Use: Pathways to Reconnection in a Digital World?," *Perspectives on Psychological Science* (2017).
27. www.ask4.com/connectedliving
28. Christiane Eichenberg, Carolin Wolters, and Elmar Brähler, "The Internet as a Mental Health Advisor in Germany—Results of a National Survey," *PLoS One* 8, no. 11 (2013).
29. Horgan Á. and Sweeney J., "Young Students' Use of the Internet for Mental Health Information and Support," *Journal of Psychiatric and Mental Health Nursing* 17, no. 2 (2010).
30. Big White Wall Interview, May 2018
31. www.studicare.com
32. Mathias Harrer et al., "Effectiveness of an Internet- and App-Based Intervention for College Students with Elevated Stress: Randomized Controlled Trial," *Journal of medical Internet research* 20, no. 4 (2018).
33. <https://play.google.com/store/apps/details?id=air.au.com.reachout.worrytime&hl=en>
34. <https://www.headspace.com/headspace-meditation-app>
35. <http://sam-app.org.uk/>
36. <https://www.samaritans.org/how-we-can-help-you/contact-us>
37. Vanessa Apaolaza et al., "The Relationship between Socializing on the Spanish Online Networking Site Tuenti and Teenagers' Subjective Wellbeing: The Roles of Self-Esteem and Loneliness," *Computers in Human Behavior* 29, no. 4 (2013).
38. Rocío Guil et al., *Social Support, Perceived Well-Being and Internet Social Networks* (2016).
39. Ruth Lefever and Becka Currant, "How Can Technology Be Used to Improve the Learner Experience at Points of Transition?"
40. Review of Peer Reviewed Academic Literature, National and International Resources and Examples of Projects and Initiatives within Higher Education Institutions Literature," (Bradford University, 2010).
41. Liz Bennett and Sue Folley, "A Tale of Two Doctoral Students: Social Media Tools and Hybridised Identities," *Research in Learning Technology* 22, no. 1 (2014).
42. <https://socialmediaforlearning.com/2017/06/19/student-guest-blogpost-smash-social-media-for-academic-studies-at-hallam/>
43. Lasse Ellefsen, "An Investigation into Perceptions of Facebook-Use in Higher Education," *International Journal of Higher Education* 5, no. 1 (2015).
44. Nikola Drašković, Ana Kuštrak Korper, and Katharina Kilian-Yasin, "Student Attitudes toward Use of Social Media in the Learning Process: A Comparative Study of Croatian and German Students," *International journal of management cases* 19, no. 2 (2017).
45. <https://www.theguardian.com/higher-education-network/blog/2013/jul/02/student-accommodation-live-work-space>
46. <https://edtechnology.co.uk/Article/the-importance-of-staying-connected>
47. www.turntome.org
48. www.internations.org



This report was sponsored by ASK4 partners Ruckus Wireless.

Report produced in collaboration with Red Brick Research, June 2018
Design by www.revocreative.co.uk

Shutterstock Image rights:
Cover: Phipatbig. 304716848
Kaspars Grinvalds. 518846416
Jacob Lund. 534602335
Wachiwit. 1052907254
Chinnapong. 565741378
Jacob Lund. 518097751
Rawpixel.com. 521003299
Prasit Rodphan. 609134639



ASK4

GET IN TOUCH

We hope you found this report useful.

t: +44 (0) 114 303 3200

e: connectedliving@ask4.com

w: ask4.com/connectedliving



This report is copyright of ASK4 Ltd. You may not reproduce in full or in part but you are free to reference statistics and quotes with accreditation: Connected Living 2017, ASK4 Ltd.