

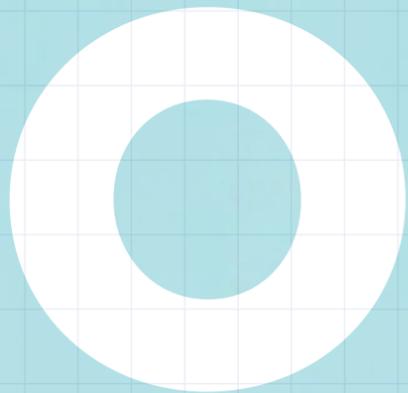
STRONG MIND

The loneliness business is **BOOMING**

A collective craving for contact has created demand for social surrogates – and from hug-mimicking blankets to robotic pets, the tech industry has delivered. Could the long-term solution to loneliness really be a product rather than a person?

WORDS GEMMA ASKHAM





nce upon a more precedented time, in a land far away from Covid, paying for social interaction was a murky domain; one occupied by influencers buying fake followers or rather questionable webcam displays. But the arrival of the pandemic didn't just change your life in weird and unthinkable ways, it changed what you spent your money on. Thoughtfully put together OOTDs gave way to 'activewear' you walked sub-1,000 steps in; sweatpants and slippers became status symbols; hand sanitiser became the cult beauty buy and a trip to B&Q was as hotly anticipated as a fortnight in Greece. And when a fancy face covering and a tub of Farrow & Ball paint failed to fill the gulf left by not seeing your friends and family for months, suddenly the concept of buying your way out of loneliness went from something shady to something sensical.

John Lewis has seen a 170% increase in searches for weighted blankets – bead-filled throws that simulate the sensation of being hugged. East Asian countries like Japan, South Korea and China, where one-person households are a growing phenomenon, continue to lead the field in 'wacky-but-would-you?' innovations. There's Paro, a cuddly animatronic seal that's said to offer the same therapeutic rewards as a living therapy animal, there's even an iPhone case featuring a life-sized fleshy rubber hand that you can interlock fingers with (you're welcome for that visual). Telenor, an international telecoms firm, named anti-loneliness tech as one of its top five trends for 2021, predicting advances such as 3D holographic video calls and companionship chatbots that initiate conversations rather than simply responding to your questions about the weather. Meanwhile, intimate audio offerings, such as podcasts and ASMR, continue to grow, while the Soho House of the pandemic era – audio-based social

networking app Clubhouse – promises chats with thought leaders, provided you're invited in. Even now, as, roadmap-enabled, your social life picks up again, experts believe the loneliness industry will continue to grow. 'Loneliness is a social issue and a public health problem that existed long before the pandemic,' says Emma Chiu, trend forecaster and global director of Wunderman Thompson. 'And it will continue to prevail even after it's under control.' So, it seems a pertinent time to ask: if the business of loneliness is booming, are human substitutes really ready to step into your friend zone?

WIRED TO CONNECT

To answer that, you need to get to grips with what loneliness actually is. Neuroscientist Dr Kay Tye is one of the pioneers unpicking the circuitry of the emotion in the brain. Last November, her team at the Salk Institute for Biological Sciences in San Diego discovered something of a brain-changer. They asked 40 people to do two challenges: to go 10 hours without food, and then 10 hours without social contact, with each session followed by a stint in an fMRI brain scanner. The lab found that going without humans and food both evoked a craving response in the brain; essentially, going without social contact leaves you hardwired to crave social connection like a hungry person craves a buffet. Dr Tye's lab even identified a specific dopamine neuron, called the dorsal raphe nucleus (or DRN), that's more active when people are lonely. Future work on this neuron could unravel the complex nuances of human loneliness, such as why you can be

'Buying your way out of feeling lonely has moved from shady to sensical'

alone and happy but feel left out at a party; what makes you more or less inclined to seek out social connection, and what portion size of connection is enough to prevent social hanger.

But Indiana University scientist Dr Stephen Porges, who researches the effect of social connection on the nervous system, says that objects can only do so much. He believes it's only through contact with another person – and the two-way dance of smiles, eye contact, vocal intonation and body language – that we keep each other calm and anxiety-free, and maintain social bonds: an

evolutionary process known as co-regulation. 'Your nervous system craves social interactions to regulate your physiology and enable you to feel calm, optimistic and happy,' says Dr Porges. The bonding effect is the work of a structure called the ventral vagal nerve network, which is your body's equivalent of that friend who knows everyone. It runs from the diaphragm to the brain stem, crossing over nerves in the lungs, throat and eyes to trigger social cues, like warm eye contact, as it goes. 'The bottom line is that we need these experiences of co-regulation,' he explains. 'Inanimate objects, although comforting, are a poor substitute for human interaction.'

TOUCHY SUBJECT

But, of course, many loneliness-extinguishing interventions are not of the tangible realm. Take Caribu, a video-calling app with on-screen puzzles for grandparents and grandchildren to complete together, or Alcove, a virtual reality programme for the Oculus headset that lets families hang out in digital living rooms. On a less wholesome but no less relevant note, there's also a subsector whose USP isn't connecting humans at all – but replacing them. Sex doll manufacturer Abyss Creations now complements its £4,500 physical robot with an app-based version, RealDoll X. 'Goodbye loneliness!' the website promises, next to a twerking CGI butt; for only £1.85 a month, this piece of virtual ass with a customisable body, voice, wardrobe and character will tell you that it loves you and beg you not to log off each night.



Less sexual is Replika, an uncannily lifelike AI companion that Russian tech entrepreneur Eugenia Kuyda created to ease the loneliness that first struck when she moved from Moscow to the US, and was exacerbated shortly afterwards, when her best friend was hit by a car. To help her cope, she engineered a memorial chatbot that both looked like him and – programmed using text from their old messages – responded verbally using his mannerisms. Her story appeared online in 2016, went viral, and led to Kuyda co-founding Replika as a virtual companionship business that today boasts seven million users worldwide. Built using dialogue from eight million webpages, including Reddit and Twitter, Replika offers general chit-chat about your mood and how your day was, alongside probing questions, such as how well you get on with your parents.

FUTURE FACING

You can see how a proposition like Replika's might be appealing when considered in the context of a loneliness crisis; 79% of you told us that you felt lonelier than ever when we asked you back in November last year, as part of our social health initiative The Loneliness Remedy. But is this technology riding in just when humans need it most? Or is it evidence that we're edging towards the kind of connection usually reserved for an episode of *Black Mirror*?

Emily Cross is a professor of social robotics – that's the study of robots created to interact and communicate among themselves and with humans – at the University of Glasgow. She believes there's a danger that loneliness tech is merely papering over the cracks of someone's isolation rather than facilitating the human connection they crave. 'I would say there's a tremendous risk that technology could start to be marketed and used as an easy, cheap and accessible substitute for human connection,' she explains, adding that this would pose a threat to long-term physical and mental health. The main problem with these technologies, she

clarifies, is that, as users, we're in full control of the interactions. Think back to Dr Porges's theory of co-regulation between two people: swap two humans for one human and one machine and there's very little emotion-reading, body language, spontaneity and genuine reciprocity. 'I'll bet that no technology will come close to approximating this human dynamic, and it's right to have serious ethical concerns over any company claiming that their app, website or robot can do so,' warns Professor Cross, adding that there's a risk that this technology could exacerbate the loneliness epidemic if social scientists aren't at the forefront of the debate.

'This tech risks displacing human connection and exacerbating the loneliness epidemic'

WHOLE FRIENDS

It's a sobering thought: the very industry built with the goal of helping loneliness could actually make it worse. So where does that leave you, the curious consumer? Well, just as your favourite social media platform can be credited with both helping to build a successful personal brand and eroding self-esteem, the story of the loneliness business isn't one of goodies versus baddies. We're not about to insist you chuck Alexa out of the window or stick your animatronic seal on Gumtree. For Chui, buying into this trend is about asking how digital connection can

PHOTOGRAPHY: GETTY IMAGES



complement the authentic kind. 'These comfort – and companionship – boosting elements will fit into people's everyday routines alongside human interaction,' she predicts. 'From weighted blankets to masturbation kits, companion apps to comfort toys, it all fits under this inclusive, self-care wellness umbrella.' But rarely does non-human company make for better company. And, the way the majority of experts contacted for this piece see it, you won't easily settle for the sub-optimal option. 'The human brain has evolved over millennia to seek out, connect with and understand other people, and this isn't about to change over the course of a pandemic or in the months afterwards,' agrees Dr Cross. 'Everyone has been shown how important human-to-human contact is for their wellbeing, and I predict that there will be a whole generation of people who will no longer take in-person social interactions for granted.' And if you do see anyone locking fingers with their iPhone via a giant, fleshy hand, cut them some slack – they're only human, after all. **WH**

TRYING TIMES

Our lonely guinea pigs see whether tech can fill the void



THE IN-BED COMFORTER

WHO?
Florence Ogram, 24,
WH Junior Designer

WHAT?
The Kally Body Pillow is an orthopaedic pillow, as well as a comforting companion to cuddle while you sleep.

WHY TRY IT?
While living with my parents during the pandemic, I've had some of the worst sleep of my life, and I blame loneliness – whether that's down to not seeing friends or lack of a partner. I wanted to see if the pillow could help me get a good sleep and compensate for all the hugs I'd been missing.

THE EXPERIENCE
With it being quite an odd concept and being so used to sleeping solo, it felt a bit strange at first; most mornings, I'd wake up with it on the floor. However, having a spooning partner made it easier to wind down and, in turn, helped me to get a better night's sleep. Better yet, it didn't snore.

WORTH IT?
For someone struggling with sleep, as well as loneliness, I'd recommend it – although it can't replace a real-life human being.
Kally Body Pillow,
£39.99, kallysleep.com



THE LONELINESS SUPPORT APP

WHO?
Abi Corbett, 31,
WH contributor

WHAT?
Woebot, an app developed to make mental health tools accessible for free, using CBT, DBT (dialectical behaviour therapy) and mindfulness.

WHY TRY IT?
I missed living with friends after moving back home during the pandemic. I longed for conversation with people who weren't related to me.

THE EXPERIENCE
I used Woebot when I felt exhausted and didn't know how to start feeling better. The prompts helped me to think more clearly, such as asking if I knew the reason why I was feeling like this. It's quite conversational and I honestly felt like I was WhatsApping a friend.

WORTH IT?
Yes, I'll continue using it. The mood graph is particularly useful to see a pattern (mine dipped around my period).
Woebot is free via the App Store and Google Play



THE BLUETOOTH BRACELET

WHO?
Lauren Clark, 28,
WH Acting
Commissioning Editor

WHAT?
The Bond Touch – a pair of wrist devices connected via Bluetooth. Tap to send a 'buzz' to their wrist. Or send an image that self-deletes after 24 hours.

WHY TRY IT?
My boyfriend Ricardo and I became accustomed to being apart (1,467 miles, to be precise) over the past year. He was in Lisbon, I was in Lincolnshire. We live in the same place now (we picked the hot one), but he's a chef, and unsociable hours mean we're still frequently apart.

THE EXPERIENCE
I jumped out of my skin the first time it started vibrating and flashing. I sent my own virtual 'hug' by double tapping the device before pressing it down for 10 seconds. Granted, you *could* just send a text. But there's something quite intimate about the buzz on your skin that really does make you feel connected.

WORTH IT?
If you find yourselves apart for swathes of time, it can help you feel connected – particularly if pics are your thing.
£112, uk.bond-touch.com