





## Balancing Bytes and Bliss: Sustaining Happiness in A Digital Age

Harriet Burrow

## Abstract

In a growing digital age, it is not new information that technology is creating an "antisocial" generation. But have these technologies created platforms for positive change as well?

In 2024, 98% UK adults aged 16-24 now have a smartphone<sup>1</sup>. These can be amazing tools for networking, studying and relaxing, however the majority of time spent on these is used watching TV and scrolling social media. In a Uswitch survey in 2022 the average person in the UK's screen time is over 5 hours<sup>4</sup>. This is over 20% of their day spent looking at a screen. Overall, the time spent studying or relaxing is significantly lower than time spent online, this cannot be beneficial to a young adult's mental or physical health. Moderate usage of these technologies is proved the most productive, due to its connectivity enhancement, financial inclusion, and access to information. In short, digital technology is a double-edged sword.

What is happiness? There are so many definitions for happiness and therefore many say it is difficult to pinpoint. Aristotle thought of happiness as a combination of "pleasure" and "a life well lived." These principles have formed a solid base for how scientists monitor and measure happiness. Pleasure engages multiple regions of the brain; most studies conclude this is due to the release of dopamine, serotonin, oxytocin, and endorphins as well as cortisol and adrenaline<sup>6</sup>. Physical health has been concluded to have a large effect on underlying happiness. There are many physical and biological factors which contribute. Oxytocin is released from the pituitary gland and causes a spectrum of behavioural and physiological effects, there is a significant correlation between oxytocin levels after a positive stimulus and a reported level of happiness. Cortisol is released by the adrenal glands in response to inflammation, its role is to manage stress. This has been shown as a consistent biomarker for depression and salivary cortisol is a good indicator of happiness. Adrenaline produces similar effects to Cortisol, such as increased heart rate and immune system suppression. Research indicates that urinary adrenaline is another good indicator<sup>3</sup>.

The rapidly advancing digital world sustaining happiness is a challenge and a necessity. It is vital to navigate social media with mindfulness and integrity. A study in 2017 indicated teenagers with higher social media usage are reportedly three times more likely to feel socially isolated. Social media platforms create feelings of jealousy and relational aggression<sup>7</sup>. We rely hugely on technology in accessing educational resources and following personal interests. But how do the youth of today manage the pros and cons of a growing virtual world? They must be mindful of excessive screen time, social media comparison, and information overload diminishing the positive effects technology can have.

So how can we maintain a healthy relationship with technology while staying connected to the real world? It is important to engage meaningfully in the digital realm over passive scrolling. Preserving mental wellbeing in a world of social media can be difficult however there are a few rules to consciously follow to prolong

happiness while still using social media. Most sources say avoid comparison with others, surround yourself with positive influences and spread happiness through your own platform to boost joy in others' lives<sup>10</sup>. Most pivotally, do not be afraid to log off. Setting boundaries and assigning specific times for technology usage can be an excellent way to disconnect from time to time. Some browsers and sites have options to block or limit certain social media based on your preferences.

The power of connection with the non-digital world is even greater in the 21st century. Focussing on hobbies and interests which rest your mind and bring positivity is key. Exercise and experiencing the outdoors releases endorphins and serotonin which operate as neurotransmitters promoting feelings of positivity and satisfaction after something like exercise<sup>5</sup>. Many of the population practice mindfulness techniques in the form of yoga or meditation which are proven to increase levels of these neurotransmitters and calm your mind and body. For those who find exercise or meditation difficult there are surprising foods which aid your serotonin and dopamine production. Probiotics promote gut (where serotonin and dopamine are produced) and brain health and therefore can benefit both your mental and physical wellbeing<sup>5</sup>. Some everyday food which contain omega-3, folate or B12 can increase neurotransmitter production having the same effect on a person's happiness.

Researchers are evaluating the use of technology positively and how this sustains mental wellbeing. The "positive technology" approach has been introduced, applying the use of technology for improving the quality of personal experience through its structure, augmentation, or replacement<sup>8</sup>. Technology is constantly changing and in the 21st century we quickly become accustomed to these changes, and they no longer provide contentment. Some of our generation would argue that happiness can be found within the confines of social media, however the repetitive dopamine deliverance from constant scrolling is not sustainable in the long term. In many ways the structure of technology, more specifically social media, creates individuals with shorter attention spans and fewer social skills. From a student's perspective social media creates a distraction from studies in more than one way, aside from it being the perfect tool for procrastination the construction of social media trains the brain to respond to constant dopamine hits rather than sustain a constant level of happiness. This consequently reduces focus and productivity when trying to study as the brain is looking for these monotonous dopamine releases to keep happy.

In an exponentially developing digital era there are now apps which are designed to build gratitude, mindfulness, and emotion regulation<sup>2</sup>. In particular, Unmind is a workplace mental health platform which gives organisations and their employees power over their stress using a clinically supported assessment tool to monitor their mental health. This app allows colleagues to identify stress in themselves and others and develop pathways to support the workforce effectively. Another application, Sanvello provides clinically validated techniques based on cognitive behavioural therapy and mindfulness meditation. This connects science, technology, and therapy in a positive way to create a community and tailored pathways to tackle stress. And finally, "Youper," this piece of software helps us to take control of our emotional wellbeing. This app uses quick nudges to positively change your day. For example, reminding you to drink water, eat healthy and guided meditation. The data collected enables mood tracking and the adaptation of techniques to specific types of stress<sup>9</sup>.

But what happens when it all goes wrong, and happiness is no longer sustained? Celeste Foster, a lecturer at the University of Salford and child mental health specialist, is working with a specialised team to develop a piece of software called "Mood on the Move". She explores happiness as not being the ultimate goal but for young people to be able to understand all emotions that they feel. The software is directed at those suffering from thoughts of self-harm and designed to help them identify what triggers these thoughts. This application uses a smart watch and emojis to express how a person is feeling throughout the day, track their heart rate, comment on what triggers these emotions and be used to devise a plan to avoid and

manage these triggers effectively. It was important to Celeste to involve the affected young people in the development of the application to ensure its suitability and usability. The overall goal is for young adults to gain a better understanding of their mood changes overtime, to promote wellbeing and happiness and to engage with all emotions.

All these platforms form the argument that technology can be used to sustain a constant level of happiness; however, the key is in the balance between these mindfulness exercises and our social media use. The process could be counterintuitive if these are not regulated. It is a personal process those wanting to sustain their mental wellbeing must undergo. This may be reducing screen time or keeping connected. It is all down to you.

## References

- Baker, N. (2024). *UK mobile phone statistics, 2023*. USwitch. Retrieved 01/03/2024 from <u>https://www.uswitch.com/mobiles/studies/mobile-statistics/</u>
- Davis, T. (2019). Four Ways Technology Can Make You Happier. <u>https://greatergood.berkeley.edu/article/item/four\_ways\_technology\_can\_make\_you\_happier</u>
- Dfarhud, D., Malmir, M., & Khanahmadi, M. (2014). Happiness & Health: The Biological Factors- Systematic Review Article. *Iranian journal of public health*, *43*(11), 1468-1477.
- Hiley, C. (2022). *Screen Time Report 2022*. USwitch. Retrieved 01/03/2024 from https://www.uswitch.com/mobiles/screentime-report/
- Integris Health. (2022). *How You Can Benefit from Happy Chemicals*. Retrieved 01/03/2024 from <u>https://integrishealth.org/resources/on-your-health/2022/july/happy-chemicals</u>
- Kringelbach, M. L., & Berridge, K. C. (2010). The Neuroscience of Happiness and Pleasure. *Social research*, 77(2), 659-678. <u>https://doi.org/10.1353/sor.2010.0049</u>
- Regis College. (2020, 25/10/2021). *How Technology and Isolation May Affect Mental Health*. Retrieved 01/03/2024 from <a href="https://online.regiscollege.edu/blog/technology-and-social-isolation/">https://online.regiscollege.edu/blog/technology-and-social-isolation/</a>
- Riva, G., Baños, R. M., Botella, C., Wiederhold, B. K., & Gaggioli, A. (2012). Positive technology: using interactive technologies to promote positive functioning. *Cyberpsychol Behav Soc Netw*, 15(2), 69-77. <u>https://doi.org/10.1089/cyber.2011.0139</u>
- Superscript. (2020). 5 awesome apps for wellbeing. <u>https://gosuperscript.com/news-and-resources/5-awesome-apps-for-wellbeing/</u>
- Tennova Healthcare. (n.d.). Using Social Media to be Happier. Retrieved 01/03/2024 from https://www.tennovanorthknoxville.com/health-library/253