

Image-editing apps and mental health

Briefing on reducing the influence of the
commercial determinants of health



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Introduction



Our mental health is influenced by many social, cultural, environmental and commercial factors, which interact to shape our mental health at an individual and collective level. For instance, the housing we live in, the relationships we have, and our level of education all have a role to play in relation to our mental health.

Our mental health is largely shaped by the circumstances in which we are born, grow, and age in, and, in turn, these circumstances are often heavily influenced by the commercial environment in which we live.¹

In this context, the actions of corporations and the strategies they adopt to promote their products or services, have a significant impact on our health. It is therefore important that the power of corporations is subject to appropriate checks and balances to ensure that their behaviours align more closely with the public good.² This is particularly important to the concept of mental health security – the protection from threats to our mental health.

Health security is understood in a collective way – reducing the vulnerability of communities to harms to health – and an individual way – access to safe and effective products, services and technologies.³ In other words, we cannot expect that public education alone will be enough to improve people’s health, unless we also take steps to protect them from harmful factors over which they have no personal control.

One industry that is growing at a significant rate year-on-year is the global app industry, with an estimated worth of \$6.3 trillion by 2021.⁴ A significant subset of this industry includes image-editing apps, which people can download from application stores (App Store, Google Play), to edit their photos. Many of these apps are free to download but encourage in-app purchases for users to unlock extra features.

We consider it vital that we take action to understand how these apps influence people’s body image and their mental health. It is an industry that is growing largely unchecked, in a space where the potential to negatively impact people’s lives is significant.

Use of these apps



Image-editing apps allow people to change the way they look in photos and videos. Such apps vary greatly in the editing features offered, from smaller-scale edits such as colour filters and teeth whitening, to more extreme edits that can dramatically change one's body shape, skin tone, height or muscular complexion.

In our research and discussions, we found that there is debate as to how widely these apps are used. However, a 2019 UK survey by the Mental Health Foundation of 1,118 teenagers (13-19 years old) revealed that **one in four girls and one in ten boys have edited photos of themselves in order to change their face or body shape because of concerns about their body image.** Whilst there are no transparent data on how many people use these apps, **many of these apps have been downloaded millions of times.**

A quick search in Google Play shows the 'Body Editor' app to have been downloaded more than 10 million times. Similarly, the app 'Facetune 2', which allows users to change photos with various features ranging from whitening teeth and removing blemishes and pimples to contouring faces, has been downloaded more than 10 million times on Android, and is also available to download on Apple devices. The reach is even more extensive as this type of software is not limited to standalone apps but also extends to built-in functions on platforms such as TikTok, Instagram and Zoom.

While many of these apps are free to download, they often encourage in-app purchases which allow users to unlock extra 'user-friendly' features, enabling dramatic editing of bodies and faces in photos or videos.



What's the problem?



We know that having a healthy body image is important for our mental health. Research has found that higher body dissatisfaction is associated with a poorer quality of life and psychological distress⁵, a higher likelihood of depression symptoms^{6,7} and the risk of unhealthy eating behaviours and eating disorders.⁸ Conversely, body satisfaction and appreciation have been linked to better overall wellbeing.⁹

In today's visual and virtual world, beauty has become an ethical ideal to live by – increasingly serving as a value that people actively prioritise in pursuing as a goal and a marker of one's success or failure in life.¹⁰ It is not uncommon to see celebrities shamed for the way they look and now that an estimated 2.65 billion people are using social media (that is one in every three people in the world),¹¹ this criticism extends to non-celebrities too. It is perhaps not surprising that image-editing apps such as FaceTune,

which allow people to adjust their photos to match narrow and often unrealistic beauty ideals, have exploded in popularity. With such a global emphasis on appearance, it is likely that the shame people feel about their body will intensify and compound.¹² This has potentially huge implications for people's mental health across the world.

A recent *Stylist* magazine campaign found that 83% of women surveyed said that social media negatively affects their self-esteem and 58% of women said that social media has changed how others view them and how they view others.¹³

The Mental Health Foundation's report for Mental Health Awareness Week 2019 found that one in eight of the adults surveyed experienced suicidal thoughts or feelings because of body image concerns.¹⁴ Understanding more about the relationship between image-editing apps and body image should, then, be a priority for public mental health.

What did we find?



In our work we heard some very real experiences of distress from young people who had used these apps and from people with experience of eating disorders or body dysmorphia.

Additionally, we also heard the challenges, expressed by academic experts, with collecting good quality data in such a rapidly changing landscape, which is reflected in the relative scarcity of research in this area.

An important question that emerged from our discussions is *'where do we draw the line – what types of editing can be considered harmful?'* There are different types of image-editing, which can range from using filters to dramatically reshaping features to cartoon adaptations of one's image, and it is likely that these have differential impacts on people's mental health. Being more specific about what we mean when we refer to image-editing apps will be important in limiting the types of editing that may be harmful.

It is also essential to understand the reasons *why* people use these apps. In the current research on image-editing apps, while there are indications that using these apps can lead to lower body image,¹⁵ the direction of this relationship is unclear. It may be the case, for instance, that young people who are more dissatisfied with their body are more likely to use these apps.¹⁶

From a mental health perspective, this is important to understand, as exposing people with vulnerabilities to unchecked products can bring high risks.

We learnt about potential solutions for alleviating the harmful impact of these apps, such as media literacy programmes. While there is some strong evidence for the effectiveness of media literacy, this tends to be focused on traditional media as opposed to social media literacy, so there is scope to explore the latter. Awareness campaigns that harness the voice of those with lived experience could help the wider population to start thinking about the effects that using these apps may have on their mental health. Collaborating cautiously with body positivity accounts and influencers on social media could ensure that campaigns are wide-reaching.

We also learnt about solutions that do not work, such as disclosing when photos have been manipulated – which according to the evidence may, in some cases, make people feel worse, especially those who may be more likely to compare themselves to others.^{17,18}

In many ways, experience shows that even when we know that images are unrealistic or edited, they still cause stress and shame, as they are linked to the societal beauty ideals to which we are expected to conform.

Understanding and harnessing the role of parents in managing the potentially harmful impact of these apps is an important area to explore. Parents may be unaware of such apps, the effects of social media and/or what they can do to protect their children.



Additionally, often parents are not included in programmes to reduce the harmful effects of social media. Designing interventions aimed at parents may be an effective way to reduce the harmful effects of apps and social media on children and young people.

Imposing restrictions for app developers also emerged as an important theme for lessening the harmful impact of image-editing apps on our mental health. The current guidance for developers on Apple is to ensure the “app doesn’t contain upsetting or offensive content, won’t damage [people’s] devices, and isn’t likely to cause physical harm from its use.”¹⁹ Harm more generally (i.e. not restricted to physical harm only) is referred to in the guidance for developers on Google Play and states that “to ensure that Google Play remain[s] a safe and respectful platform, we’ve created standards defining and prohibiting content that is harmful or inappropriate for our users.”²⁰

These harms are not well defined, and the apps are offered to everyone – often labelled as appropriate to people aged 4+ – with no checks whatsoever.

Given the relationship between beauty ideals, use of these apps, body image concerns and mental health, this issue needs to be treated as a public mental health priority. It is clear from our work that there are serious societal pressures on body image that are driven by the commercial sector, particularly by the fashion and cosmetic industries, and normalised by their extensive market reach.

This is having serious limiting effects on the day-to-day lives of millions and cannot be ignored; nor should action be delayed.



Taking action



Based on this accumulating evidence, we propose the following actions:

1

Body positivity and kindness activists, interested organisations and individuals should engage with the #EverydayLookism campaign.

Negative comments about other people's bodies matter. When we shame bodies, we shame people. These are lookist comments. We no longer put up with sexist comments, we don't need to keep putting up with lookist comments. Sharing your lookism stories shows how common lookism is, calls it out, and says it's not ok. Visit the [website](#) to find out more and use #EverydayLookism and #BeBodyKind on social media.

2

Google Play and App Store should update their guidelines for developers to explicitly include 'mental health' in the range of harms that are unacceptable.

We recognise there will be issues regarding liability. However, guidance on the definition of mental health can take this into account and this can be co-produced with the Mental Health Foundation and other experts. We recommend that at a minimum the guidelines are updated to clearly state that apps should not promote images that are outright lookist, shaming, or triggering of past trauma or eating disorders.

3

Google Play and App Store should make it mandatory that all body and face image-editing apps are rated as PEGI 12/16 and 13+ respectively, to ensure that children and young people who are below the legal age for having a social media account (13 years old) are not using these apps. All in-app purchases for additional features should be restricted to people over the age of 18, to ensure predatory promotion is restricted.

Currently, only a handful of these apps are restricted in this way, and most have no age restrictions, thus often allowing children as young as five to download and use them.



4

Research should focus on understanding the features of image-editing apps that are most harmful to body satisfaction and mental health.

Research can take an ethical perspective in defining more clearly the line which determines which image-editing apps or features are acceptable and which are unacceptable because of the high risk they pose to mental health.

5

Researchers and experts who design services should consider developing new social media literacy training for children and young people.

All training and other programmes should employ a coproduction approach, involving children and young people in their development as well as parents and carers. There appears to be relatively little in the applied research that looks at parents in relation to body image and modelling positive behaviours. Given that parents have a significant influence on the way in which children view their bodies, parents need to be included more in the discussion about image-editing apps.

6

Everyone should be more aware that if they see an advert in a magazine, on television or online that they think presents an unhealthy body image as aspirational, they can complain to the Advertising Standards Authority.

This includes online or other predatory advertising in relation to image-editing apps. Advertisements that promote these apps to more vulnerable groups, for instance young people belonging to BAME communities, warrant greater scrutiny and investigation.

Background



This work is a result of a partnership between the Mental Health Foundation, the University of Birmingham and the Cochrane Common Mental Disorders Group. It was overseen by Dr Antonis Kousoulis, Mental Health Foundation, Prof Heather Widdows, University of Birmingham, and Prof Rachel Churchill, Cochrane Common Mental Disorders Group. This briefing was drafted by Antonis Kousoulis, Jade Yap, Lucy Thorpe (Mental Health Foundation), and Rachel Churchill (Cochrane Common Mental Disorders Group).

The work was underpinned by a rapid evidence review, conducted, collated and overseen by Sarah Dawson (University of Bristol for Cochrane Common Mental Disorders Group), Victoria Zamperoni, Jade Yap, Antonis Kousoulis (Mental Health Foundation), Rachel Churchill (Cochrane Common Mental Disorders Group). This work was project managed by Ruth Simmonds and Cicely Hayes (Mental Health Foundation). This briefing was informed by a roundtable to which the following contributed (in alphabetical order):

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- All methods and background research are available on request.

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