16 February 2024

Dr Jasmine Fardouly
Ms Jade Gurtala
Associate Professor Marilyn Bromberg

Contact:
The University of Western Australia
Law School (M253)
Stirling Highway
CRAWLEY WA 6009
Telephone number: [redacted]
Email address: [redacted]

FOR PUBLIC DISTRIBUTION

Dear Australian Department of Infrastructure, Transport, Regional Development, Communication and the Arts

Re: Submission Regarding the Online Safety (Basic Online Safety Expectations) Amendment Determination 2023

Thank you for the opportunity to comment on the Online Safety (Basic Online Safety Expectations) Amendment Determination 2023. We are submitting a joint comment in collaboration with Butterfly Foundation, the national charity for Australians who are affected body image and eating disorder challenges, and for those who support them. Dr Jasmine Fardouly, Ms Jade Gurtala, and Associate Professor Marilyn Bromberg wrote these submissions, which use material from their submissions to the Department of Commerce of The United States of America regarding their NTIA Initiative to Protect Youth Mental Health, Safety & Privacy Online in 2022.

Dr Jasmine Fardouly is a Research Fellow in the School of Psychology at the University of New South Wales, Australia. Dr Fardouly has been researching the positive and negative impact of social media use on the body image and mental health of youth for the past 10 years. Ms Jade Gurtala is currently completing a Master of Clinical Psychology and works as a research assistant for Dr Fardouly. Ms Gurtala has been researching the impact of social media on body image for the past 2 years. Associate Professor Marilyn Bromberg is a practising lawyer and legal scholar at the University of Western Australia. Associate Professor Bromberg has around 15 years of experience investigating both Social Media Law and Body Image Law in Australia, the United States, Canada, and internationally.

Together we seek to inform the Australian Department of Infrastructure, Transport, Regional Development, Communication and the Arts of the emerging scientific evidence for the harms and benefits of social media use for the body image of users, especially children. We strongly advocate that the Online Safety (Basic Online Safety Expectations) Amendment Determination 2023 ("Amendment") modify the *Online Safety (Basic Online Safety Expectations) 2022* (Cth) ("Expectations") so that the Expectations include a core expectation in section 11 that requires service providers to try to minimise the amount of content that could negatively impact body image due to the proliferation of images or videos of unattainable beauty ideals and/or pro-eating disorder on social media that harm countless Australians. We believe that making this change could help protect young Australians from the harmful effects of social media on body image and eating disorders.

Specifically, we argue that:

1. The strongest scientific evidence available for the harm of social media on body image is the pervasiveness of images and videos available on popular platforms that contain or promote narrowly defined and unattainable societal beauty ideals.
2. Existing algorithms within platforms that work to increase users' engagement and time spent on social media through the dissemination of personalised content can unintentionally create toxic and triggering environments for vulnerable users, especially children. Algorithms may also inadvertently demote or limit the visibility of content containing larger bodies as they may not maximise user engagement or attract brand endorsements. This can create an online environment that is biased towards a specific (thin-ideal) body type and contribute to the perpetuation of unrealistic beauty ideals. Consequently, we recommend the BOSE amendments require transparency and independent audits of the function of these algorithms (i.e., recommend systems) to ensure that they do not prioritise content that is harmful to body image and eating disorders, especially for children (i.e., those under 18 years). Additionally, platforms should more widely publicise safety functionality, such as the ability to reset the algorithm on TikTok.
3. There is emerging evidence for the benefits of viewing social media content containing natural unedited bodies and content containing diverse body shapes and sizes for the body image of youth. Social media algorithms could be employed to promote more natural unedited bodies with diverse shapes and sizes to reduce the harm of social media use on the health of children. Pro eating disorder content needs to be blocked on platforms, as is currently the case with Meta and TikTok platforms, prompting a pop up with the Butterfly National Helpline. However, pro eating disorder content is not always easily identifiable, and platforms need to continue or commence working with

organisations such as Butterfly to identify what is problematic content. Please see our comments below that contain more detailed information regarding the points above and with links to pertinent literature. Please feel free to contact us if you would like to discuss the above further.

Sincerely,

Dr Jasmine Fardouly

UNSW, Sydney

Ms Jade Gurtala

UNSW, Sydney

Associate Professor Marilyn Bromberg

The University of Western Australia

The harms for body image and eating disorders that social media and other online platforms facilitate

The most popular social media platforms used by youth, such as TikTok, Instagram, YouTube, and Snapchat, are primarily made up of images and videos.[1,2,3] These highly visual environments can provide a heightened focus on one's physical appearance and are often a breeding ground for the promotion of narrowly defined and unattainable societal beauty ideals, which can have negative consequences for users' body image and eating disorder symptoms.

Body image is defined as a person's thoughts, feelings, and perceptions regarding the way they look.[4] Body image concerns can develop early in life, with girls as young as 6 years old reporting a desire to be thinner and dieting to lose weight.[5] These concerns often increase during early adolescence.[6,7] Childhood and adolescence are thus highly vulnerable periods for the onset of body image concerns. Indeed, adolescents of different genders and cultural groups have reported high rates of body dissatisfaction for decades,[8,9,10] with evidence suggesting that these concerns have further increased among youth since the onset of the COVID-19 pandemic.[11] Butterfly's Body Kind Youth Survey (2022) found that almost half of young people reported being dissatisfied with their looks, with nearly 1 in 3 (30%) being 'mostly' or 'completely' dissatisfied with how their body looks. The high prevalence of body dissatisfaction among young people is alarming because these concerns are a strong predictor for clinical eating disorders[12,13] and a predictor for future depressive episodes.[14] Heightened body dissatisfaction is also associated with greater engagement in unhealthy behaviours among adolescents including smoking and high-risk drinking behaviours[15,16] and use of anabolic steroids in boys.[17] Body dysmorphia, in relation to body shape and size, is a common symptom for individuals experiencing eating disorders. For these reasons, governments worldwide have labelled body image as a significant public health concern.

Social media users tend to view and selectively present the most attractive versions of themselves and others online, making societal beauty ideals highly prevalent on these platforms.[18,19] Beauty ideals are largely socially constructed and often change over time.[20] The ideals are gendered and

often restricted to one body size, shape or look, making them unattainable for most of the population, apart from a select number of individuals who are genetically predisposed to possess those physical characteristics.[21,22] Concernedly, beauty ideals may stray further from reality with the recent introduction of hyper-idealised and sexualised AI influencers (i.e., virtual avatars) entering the social media economy. The prevalence of AI influencers is likely to increase with the recent release of publicly available tools that make the creation of hyper-human AI influencers easy.

A large body of experimental evidence shows that viewing content on social media that contains and/or promotes beauty ideals can be harmful to viewers' body image, mood, and eating disorder symptoms[23, 24] because it facilitates negative appearance comparisons and internalisation of beauty ideals.[25, 26, 27] Research suggests that certain components of the social media domain, such as appearance-based comments or receiving a greater number of "likes", can further enhance the negative effects of viewing ideal social media content on body image.[23] Receiving or viewing positive comments or likes on appearance-related content may reinforce the internalisation of appearance ideals and the notion that one's appearance is highly valued above other aspects of self.[53] Reducing the prevalence of content containing or promoting unattainable beauty ideals on social media is vital to reduce the harm of these online environments on body image and eating disorders for all users, especially children.

Social media and other online platforms also allow for the creation and promotion of content in the form of images, videos, or comments, that actively encourage eating disorder thoughts and behaviours (i.e., pro-eating disorder content) either in public domains or private groups. While platforms have attempted to moderate and remove pro-eating disorder content from their platforms, and encourage help-seeking via a pop up with the Butterfly National Helpline contact details, current approaches are ineffective at circumventing the ever-evolving hashtags and terminology used to define such content within eating disorder communities. Additionally, eating disorder content can be highly nuanced, making it difficult for non-clinicians to identify potentially problematic content. Quickly and effectively identifying and removing pro-eating disorder content online is imperative to stop the development and maintenance of eating disorders among vulnerable youth.

The benefits for body image and eating disorders that social media and other online platforms facilitate

Social media can serve as a platform for promoting content that promotes appreciation and acceptance of all appearances and bodies through visual depictions of individuals with diverse types, shapes, and sizes and text conveying positive body image messages.[110] There is evidence that viewing this type of content improves various body image outcomes, including positive mood, body satisfaction, and body appreciation, in comparison to viewing idealised or non-appearance-focused posts.[108, 23, 109, 111] The strongest evidence available for positive body image content is for the benefits of looking at content depicting diverse bodies with different shapes and sizes.[23, 112] Emerging research also suggests that naturalistic content that has not been edited or enhanced and content with quotes challenging beauty ideals and the acceptance of all bodies may be less harmful to body image compared to idealistic content,[113-116] and may even improve users' body image outcomes.[117-119] Searching for body-positive or body-neutral content on social media often brings up harmful appearance ideal content. Thus, users must think critically when engaging with potentially positive content for body image within online environments. This is an emerging and evolving field of research, but it shows there is potential for some specific online content (e.g., natural and diverse bodies) to be beneficial for body image.

Educating people to critically question the messages and unrealistic images that they see may reduce the negative impacts of social media. Greater social media literacy can reduce the risk of developing eating disorders and improve resilience and wellbeing[45]. Increasing social media literacy skills can allow individuals to:

- Understand the role media plays in shaping our society views on beauty, health, and appearance;
- Identify how marketing and advertising works and the persuasive techniques used;
- Recognise the bias and misinformation and the ways they can be manipulated;
- Develop media messages that are positive and helpful; and
- Apply critical thinking to a wide range of issues.

The specific design characteristics that most likely lead to harms or risks for body image and eating disorders

The specific design characteristics on social media that we believe are most likely to harm the body image and eating disorders of users, especially children, are (1) the availability and ease of access to beauty filters, (2) the use of algorithms that can promote content containing beauty ideals or pro-eating disorder content, and (3) exposure to advertisements promoting appearance-altering products and procedures to meet beauty ideals (e.g., weight loss, cosmetic procedures).

Beauty filters

The availability and use of beauty filters on social media platforms further exacerbate the unattainability and promotion of restricted beauty ideals.[28] Beauty filters are virtual tools that allow users to enhance and conform their facial or bodily appearances to beauty ideals online in real-time and are freely available on many visually-based social media platforms.[1,3] Over time, social media platforms have increased the accessibility of beauty filters for users, with features such as Snapchat's "Lens Explorer" and "Lens Studio", and Instagram's "Browse Effects" which allow access to libraries of facial filters that users can freely explore and experiment with.[29,30] The endorsement of beauty filters among children is significant with a study reporting that 80% of girls have utilised a filter or an appearance-editing application to modify their appearances in photos by age 13[31] and another study reporting that female children as young as 10 years of age utilise beauty filters to create idealised versions of themselves on social media.[32] These beauty filters are often hyper-realistic, making it difficult for users to differentiate "filtered" appearances from reality, thus fostering unrealistic expectations about one's own appearance.[33,2] Further, beauty filters may increase negative self-perceptions by accentuating and highlighting certain facial features that individuals possess that do not meet current beauty ideals.[34] Adolescents who edit images of themselves report heightened body image concerns, increased tendencies to compare appearance with others, and critically over-evaluate their appearances.[35-37] Further, beauty filters have been linked with an increase in the prevalence of body dysmorphic disorder[38] and there is a growing body of evidence that links the use of beauty filters to greater consideration and

acceptance of cosmetic surgery.[39-45] Indeed, recent reports indicate that an increasing number of adolescents are undergoing cosmetic procedures, with rhinoplasty (i.e., reshaping of the nose) being the most popular procedure.[46,47] Further, there is anecdotal evidence of an increasing trend in cosmetic procedures in which individuals present to cosmetic consultations with filtered images of themselves to demonstrate their desired appearance.[48] Thus, the ease of access to beauty filters on social media is concerning for the body image of youth because those filters make the beauty ideals increasingly artificial, unattainable, and prevalent.

Algorithms/recommender systems

Social media platforms are profit-driven, and their business models often rely on advertising revenue and levels of user engagement.[55,97] This can incentivise platforms to prioritise content and features that maximise user engagement and time on social media, even if it means prioritising appearance-focused content that may contribute to negative outcomes for users. Algorithms play a significant role in determining what content users are exposed to. For example, the YouTube algorithm was reported to be responsible for 70% of what users viewed in 2018.[98] Algorithms learn and predict user preferences to deliver content that users are more likely to interact with (e.g., liking, resharing, or saving content).[99,100] This can create 'bubbles' in which users are repeatedly exposed to content that reinforces their existing beliefs and preferences.[100] If vulnerable youth seek out or engage with idealised or pro-eating disorder content initially, the algorithms may amplify its presence in their feed, creating a potentially toxic social media environment that is dominated by idealised content in which unattainable beauty ideals are constantly being promoted and reinforced. Constant exposure to unattainable standards of beauty can lead to increased social comparison, feelings of inadequacy, body image concerns, and lowered self-esteem.[25, 27]

Emerging research investigating the TikTok algorithm has shown that significantly more appearance-focused videos are shown to TikTok users with clinical eating disorders compared to those without eating disorders, and the number of appearance-focused videos shown to TikTok users is positively associated with the number of eating disorder symptoms they experienced that month.[101]

Further, the study found that it took an average of 3 minutes on the platform for a new TikTok user to be shown an appearance-focused video and new users were shown an average of 19 appearance-focused videos in their first 30 minutes on the platform.[101] These results are concerning given that being exposed to less than 2 minutes of appearance-focused TikTok videos can increase appearance dissatisfaction, negative mood, and self-objectification.[33]

Social media algorithms may inadvertently demote or limit the visibility of content containing larger and unedited bodies as they may not maximise user engagement or attract brand endorsements. This can further create an online environment that is biased towards a specific (thin-ideal) body type and contribute to the perpetuation of unrealistic beauty standards. Content with diverse body types may not reach a wider audience, which can hinder efforts to promote body positivity and body acceptance. Further, idealised and sexualised content are often subject to more user interactivity and engagement (i.e., more likes, comments, and shares),[123] which can lead to these posts being prioritised by platform algorithms. Brands may also be more inclined to advertise on or sponsor this type of content, further promoting it and making more diverse content less prominent on users' social media feeds.[97] This dynamic can create 'echo chambers' where content that aligns with narrow beauty ideals gains more visibility and sponsorship, while diverse and less harmful content may not be disseminated as widely. This can impede efforts to diversify representations of beauty and make it more difficult for users to view body-positive content, contributing to unrealistic beauty standards. Overcoming these barriers requires more inclusive algorithms and content policies that promote diverse and unedited bodies.

Advertisements

Social media platforms are host to advertisements promoting appearance-altering products and procedures to meet beauty ideals.[56, 57] Research suggests that viewing advertisements promoting cosmetic procedures, weight loss or management, muscle building or other appearance alterations increases body dissatisfaction.[58-62] Although some social media platforms have provided guidelines for advertisers to follow,[63] marketing through influencer partnerships is becoming increasingly common,[64] which can bypass these guidelines to promote their products and procedures to consumers.[65] Influencer

marketing has been reported to be more effective than traditional forms of advertising[66] and research has found that social media users find it difficult to differentiate between advertising and non-advertising content on social media, particularly when influencers present and edit these types of content similarly.[67] Thus, children are likely to be exposed to advertisements for appearance-altering products on social media that could be harmful to their body image and risk eating disorders.

Current approaches by platforms to reduce harm to body image and eating disorders

Current policies implemented by social media platforms to protect against body image and eating disorder harms include content regulation (e.g., Instagram utilises machine learning to identify and subsequently screen/remove hashtags that share eating disorder content[104]) and advertisement policies that restrict the promotion of certain goods and services (e.g., unsafe weight loss products and plans[63]). Further, TikTok has banned advertisements for fasting apps and weight loss supplements[105] and Facebook and Instagram advertisements are restricted from including 'before' and 'after' images.[63] A recent inquiry made by the U.K. Parliament found that current policies and measures are insufficient in protecting users from body image harms on social media and that more needs to be done.[106]

Implementing policies that restrict or prohibit advertisements promoting appearance-altering products and procedures for youth can protect vulnerable users from potentially harmful messaging and ensure that any content related to appearance enhancements is presented responsibly and transparently. Removing beauty filters from platforms can help counteract the propagation of unrealistic beauty standards. Artificial intelligence (AI) can be applied to both exacerbate and alleviate risks of harm in this area. It is crucial for platforms and developers to carefully consider the ethical implications of these technologies and implement them in ways that prioritise the well-being and safety of children. AI has the potential to help alleviate harm to the body image of children through AI-powered content moderation and via algorithms promoting diverse representations of bodies and appearances. AI could be utilised to detect and remove harmful content to create a safer environment for children, such as removing images or videos with unrealistic beauty standards, risky appearance-altering practices, and pro-eating disorder messages.[108, 109] Further, platforms could offer age-based algorithms for adolescent

accounts (e.g., algorithms that filter out sexualised content) to promote a safer, more positive online experience for children.

The Amendment to the Determination

We support the significant changes that the Amendment, if passed, will make to the Expectations. We believe that these changes have the potential to make the online environment safer for Australians. We note, in particular, that the Amendment adds a requirement to the Determination for service providers to 'take reasonable steps to ensure that the best interests of the child are a primary consideration in the design and operation of any service that is used by, or accessible to, children'.

With this in mind, we refer to our comments earlier in this submission about children being negatively impacted by seeing countless images of the beauty ideal on social media, among other issues that can harm children online. Consequently, we respectfully suggest that other Amendments are made to the Determination in a similar vein:

1. section 11 of the Determination currently requires service providers to take 'reasonable steps' to try to reduce certain material, such as 'cyber-bullying material targeted at an Australian child' and 'a non-consensual intimate image of a person'. We suggest that this section is modified so that material that promotes narrowly defined beauty ideals that are unattainable for most people without appearance altering procedures or products are included in this section; also the removal of pro eating disorder content including content that depicts restrictive eating or food compensatory behaviours;
2. the Determination allows vetted researchers to have access to data from social media that is in the public interest. This is particularly important for body image, since the documents that whistleblower Frances Haugen released from Meta showed that Instagram contributed to its users' body image challenges but its staff chose not to implement significant changes to address this.[124]
3. the Determination mandates transparency and independent audits of algorithms to ensure that they do not promote harmful content to children. Further, algorithms aimed at promoting user engagement are removed entirely for children's accounts. This would reduce the prevalence of harmful content being promoted to children.
4. stopping appearance-altering advertisements from children's social media accounts, which would require more accuracy concerning the age of account holders; and
5. removing beauty filters from children's accounts.

We strongly believe that the above are significant, practical changes that are feasible from a legal perspective.

References

[1] Haines, A. (2021). forbes.com/sites/annahaines/2021/04/27/from-instagram-face-to-snapchat-dysmorphia-how-beauty-filters-are-changing-the-way-we-see-ourselves/?sh=5321ff9d4eff [2] Pescott, C. (2023) theconversation.com/how-beauty-filters-like-tiktoks-bold-glamour-affect-tweens-using-social-media-203383 [3] Pew Research Center. (2018). pewinternet.org/2018/05/31/teens-social-media-technology-2018/ [4] Cash (2004). 10.1016/S1740-1445(03)00011-1 [5] Dohnt & Tiggemann (2006). 10.1007/s10964-005-9020-7 [6] Mitchison et al. (2020). 10.1017/S0033291719000898 [7] Voelker et al. (2015). 10.2147/AHMT.S68344 [8] Bucchianeri et al. (2013). 10.1016/j.bodyim.2012.09.001 [9] Neumark-Sztainer et al. (2004). 10.1080/10640260490444989 [10] Presnell et al. (2004). 10.1002/eat.20045 [11] Lessard & Puhl (2021). 10.1093/jpepsy/jsab071 [12] Stice (2002). 10.1037/0033-2909.128.5.825 [13] Stice & Van Ryzin (2019). 10.1037/abn0000400 [14] Bornioli et al. (2021). 10.1136/jech-2019-213033 [15] Bornioli et al. (2019). 10.1016/j.socscimed.2019.112458 [16] Gonçalves et al. (2023). 10.1177/00315125221137678 [17] Jenssen & Johannessen (2015). 10.1016/j.bodyim.2014.08.009 [18] Fox & Vendemia (2016). 10.1089/cyber.2016.0248 [19] Shafie et al. (2012). 10.1016/j.sbspro.2012.11.102 [20] Dimitrov & Kroumpouzos (2023). 10.1016/j.clindermatol.2023.02.006 [21] Brownell (1991). 10.1016/S0005-7894(05)80239-4 [22] Harrison (2003). 10.1023/A:1022825421647 [23] de Valle et al. (2021). 10.1016/j.bodyim.2021.10.001 [24] Fioravanti et al. (2022). 10.1007/s40894-022-00179-4 [25] Jarman et al. (2021). 10.1016/j.bodyim.2020.11.005 [26] Roberts et al. (2022). 10.1016/j.bodyim.2022.03.002 [27] Thompson et al. (1999). 10.1037/10312-000 [28] Tiggemann (2022). 10.1016/j.bodyim.2022.02.012 [29] Matney (2018). techcrunch.com/2018/07/10/snapchat-debuts-a-library-of-selfie-filters/ [30] Rao (2022). guidingtech.com/how-to-search-instagram-filters/ [31] Dove Canada. (2021). newswire.ca/news-releases/it-s-time-to-have-the-selfie-talk-new-dove-self-esteem-project-research-finds-80-of-canadian-girls-are-using-photo-editing-apps-by-the-age-of-13-866468860.html [32] Pescott (2022). 10.1080/03004279.2022.2095416 [33] Gurtala & Fardouly (2023). 10.1016/j.bodyim.2023.06.005 [34] Isakowitsch (2022). 10.1007/978-3-031-26438-2_19 [35] Bell (2019). 10.1016/j.ijcci.2019.03.002 [36] Chua, & Chang (2016). 10.1016/j.chb.2015.09.011 [37] McLean et al. (2015). 10.1002/eat.22449 [38] Sadati & Radanfar (2022). 10.1111/jocd.15483 [39] Chen et al. (2019). 10.1001/jamafacial.2019.0328 [40] Maes & de Lenne (2022). 10.1080/17482798.2022.2079696 [41] Maisel et al. (2018). 10.1001/jamadermatol.2018.2357 [42] Martel et al (2020). 10.1111/jocd.13456 [43] Rajanala et al. (2018). 10.1001/jamafacial.2018.0486 [44] Shome et al. (2020). 10.1111/jocd.13267 [45] Varman et al. (2021). 10.1177/0748806820985751 [46] American Society of Plastic Surgeons. (2019). plasticsurgery.org/documents/News/Statistics/2018/plastic-surgery-statistics-full-report-2018.pdf [47] American Society of Plastic Surgeons. (2021). plasticsurgery.org/documents/News/Statistics/2020/plastic-surgery-statistics-full-report-2020.pdf [48] Wang et al. (2019). 10.1111/jocd.13118 [49] Fatt & Fardouly (2023). 10.1016/j.bodyim.2023.101621 [50] Paddock & Bell (2021). 10.1177/07435584211034875 [51] Schreurs & Vandenbosch (2022). 10.1016/j.chb.2022.107364 [52] Kvardova et al. (2023). 10.1016/j.bodyim.2023.101630 [53] Papageorgiou et al. (2022). 10.1007/s12119-022-10022-6 [54] Smith (2021). nytimes.com/2021/12/05/business/media/tiktok-algorithm.html [55] TikTok. (2020). newsroom.tiktok.com/en-us/how-tiktok-recommends-videos-for-you [56] Ingram (2023). nbcnews.com/tech/internet/ozempic-weight-loss-drug-ads-instagram-wegovy-semaglutide-rcna88602 [57] King (2021). cranfield.ac.uk/som/thought-leadership-list/looking-good-feeling-not-so-good-the-impact-of-advertising-and-social-media-on-body-image [58] Ashikali et al. (2014). 10.1037/ppm0000022 [59] Ashikali et al. (2016). 10.1024/1421-0185/a000187 [60] Ashikali et al. (2017). 10.1037/ppm0000099 [61] Austin et al. (2017). 10.1016/j.eatbeh.2016.03.037 [62] Or et al. (2019). 10.1016/j.jadohealth.2019.03.005 [63] Meta. (n.d.). transparency.fb.com/en-gb/policies/ad-

standards/?source=https%3A%2F%2Fwww.facebook.com%2Fpolicies_center%2Fads [64] Delbaere et al. (2020). 10.1002/mar.21419 [65] Willis et al. (2022). 10.2196/29422 [66] Enberg (2020). emarketer.com/content/influencer-marketing-in-the-age-of-covid-19 [67] Advertising Standards Authority. (2019). asa.org.uk/static/uploaded/e3158f76-ccf2-4e6e-8f51a710b3237c43.pdf [68] Bromberg & Halliwell (2016). 10.32613/undalr/2016.18.1.1 [69] Levush (2012). loc.gov/item/global-legal-monitor/2012-03-26/israel-restrictions-on-depiction-of-underweight-models-in-commercials/ [70] Gutreich (2017). m.knesset.gov.il/EN/activity/mmm/me04076.pdf. [71] Rodgers & Laveway (2021). 10.3390/laws10030062 [73] Bromberg (2016). 10.32613/undalr/2016.18.1.1 [74] Krane (2021). stortinget.no/no/Saker-og-publikasjoner/Saker/Sak/?p=84478 [76] The General Court of the Commonwealth of Massachusetts (2021). malegislature.gov/Bills/191/HD2881 [77] Legislative Assembly of Ontario (2018). ola.org/en/legislative-business/bills/parliament-41/session-3/bill-29/status [79] UK Parliament (2019). bills.parliament.uk/bills/2778 [80] BBC News (2006). news.bbc.co.uk/2/hi/europe/5341202.stm [81] REUTERS (2007). reuters.com/article/us-italy-fashion-anorexia-idUSL1924991520061219 [82] Transport for London (2019). https://content.tfl.gov.uk/tfl-advertising-policy-250219.pdf [87] McComb & Mills (2020). 10.1016/j.bodyim.2019.10.010 [88] Fardouly & Holland (2018). 10.1177/1461444818771083 [89] Paraskeva et al. (2017). 10.1177/1359105315597052 [90] Rodgers et al. (2019). 10.1016/j.bodyim.2019.06.002 [91] Frisén & Holmqvist (2010). 10.1016/j.bodyim.2010.04.001 [92] McAndrew & Jeong (2012). 10.1016/j.chb.2012.07.007 [93] Knauss et al. (2007). 10.1016/j.bodyim.2007.06.007 [94] Skowronski et al. (2021). 10.1007/s11199-020-01187-1 [95] Holland & Tiggemann (2016). 10.1016/j.bodyim.2016.02.008 [96] Saiphoo & Vahedi (2019). 10.1016/j.chb.2019.07.028 [97] McFarlane et al. (2022). investopedia.com/stock-analysis/032114/how-facebook-twitter-social-media-make-money-you-twtr-lnkd-fb-goog.aspx [98] Rodriguez (2018). qz.com/1178125/youtubes-recommendations-drive-70-of-what-we-watch [99] Harriger et al. (2022). 10.1016/j.bodyim.2022.03.00 [100] Farthing (2022). au.reset.tech/uploads/insta-pro-eating-disorder-bubble-april-22-1.pdf [101] Griffiths, S. (2023). fass.nus.edu.sg/psy/events/brown-bag-talk-by-dr-scott-griffiths-on-tiktok-and-eating-disorders-a-big-data-investigation/ [104] Facebook & Instagram. (n.d.). committees.parliament.uk/writtenevidence/7920/pdf/ [105] Wadhwa (2020). newsroom.tiktok.com/en-us/coming-together-to-support-body-positivity-on-tiktok [106] UK Parliament. (2021). publications.parliament.uk/pa/cm5801/cmselect/cmwomeq/274/27410.htm#_idTextAnchor061 [108] Cohen et al. (2019). 10.1177/1461444819826530 [109] Fardouly et al. (2023). 10.1016/j.bodyim.2022.12.008 [110] Cohen et al. (2019). 10.1016/j.bodyim.2019.02.007 [111] Stevens & Griffiths (2020). 10.1016/j.bodyim.2020.09.003 [112] Rodgers et al. (2021). 10.1016/j.bodyim.2021.03.009 [113] Fardouly & Rapee (2019). 10.1016/j.bodyim.2019.01.006 [114] Kleemans et al. (2018). 10.1080/15213269.2016.1257392 [115] Politte-Corn & Fardouly (2020). 10.1016/j.bodyim.2020.07.001 [116] Tiggemann & Zinoviev (2019). 10.1016/j.bodyim.2019.09.004 [117] Barron et al. (2021). 10.1016/j.bodyim.2021.01.003 [118] Sullivan et al. (2022). digitalcommons.pepperdine.edu/scursas/2022/posters/35/ [119] Taylor et al. (2023). 10.1007/s12646-023-00748-0 [120] Cortés (2022). thecut.com/2022/05/bereal-app-solve-social-media-problem.html [121] Palaniyappan (2022). uxplanet.org/the-case-for-bereal-3ec81224a37 [122] Zhou (2022). refinery29.com/en-au/bereal-app-experience [123] Yan et al. (2022). 10.1007/s12119-021-09915-9 [124] Wells, Horwitz, & Seetharaman (2021). https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739?mod=article_inline