

Written evidence by Professor Rosalind Gill [MISS0060]

1. Abstract

- This submission reports on current research with 220 18-30 year old young women and nonbinary people in the UK.
- Young women growing up today live in a world with an unprecedented number of visual images, and feel under intense pressure to look perfect and to present a perfect life. They navigate this with sophistication and impressive media literacy, but many say this is making them anxious and depressed.
- Social media play a key role in this, with the majority of young women spending several hours every day on Instagram, Snapchat, and (increasingly) TikTok. While posting can bring intense pleasure and the buzz of appreciative attention which many characterised as 'addictive', young women also experience severe anxiety about posting photographs and emphasised the many ways they could fail at this.
- Appearance pressures are getting worse for young women and appearance ideals are narrowing- though also arguably changing from a thin ideal to a 'slim-thick' ideal.
- The impact of celebrity and influencer beauty tutorials is having a significant (narrowing) effect on young women's sense of how it is acceptable to look.
- The magnification functions of smartphones exacerbate this, producing a tendency to forensically scrutinise oneself and others.
- Cosmetic surgery companies as well as the wider beauty industry promoting non-surgical interventions capitalise on young women's new visual literacies, and young women routinely receive adverts and push notifications for lip fillers, cosmetic dentistry etc.
- Photographic filters and editing software are playing a new and key role in young women's lives with 90% reporting using a filter or editing their photos before posting to even out skin tone, reshape jaw or nose, shave off weight, brighten or bronze skin, and whiten teeth.
- Most young women are very supportive of trends towards 'body positivity' but do not feel they have gone far enough, and report that most representations are still too thin, too white, too skewed towards heterosexual, cisgender and non-disabled bodies.
- Young women are wary of censorship and are deeply attached to 'not judging' others, but almost two thirds believe the government needs to act urgently to regulate media and social media, and to protect them from impossible pressures.

2. The author

Rosalind Gill is Professor of Social and Cultural Analysis at City, University of London, and Deputy Director of the Gender and Sexualities Research Centre. Her PhD (1991) was in Social Psychology, and she has since worked in the disciplines of Media and Communications, Psychology, Sociology and Gender Studies. She helped to establish the LSE's Gender Institute and was its first tenured academic between 1997 and 2007. She is a world-leading and prize-winning scholar in the fields of gender, media, and appearance – her work has been cited more than 20,000 times, and been translated into multiple languages including Chinese, German, Japanese, Spanish and Portuguese. She has published 12 books and more than 100 scholarly articles, and has also been committed to

sharing research beyond the academy through accessibly-written articles, contributions to the media, engagement with NGOs, and four documentaries. She has twice been selected to represent the UK as its leading expert on gender, media and new technologies at the UN's Commission on the Status of Women (in 2003 and 2018).

3. Basis of the evidence.

This submission is based on more than 25 years research concerned with media and embodied identity. Relevant research is found in the book Gender and the Media (Polity, 2007, 2nd edition forthcoming) which won the IGALA prize for the most outstanding book on gender and communication; New Feminities (Palgrave 2011, with Christina Scharff), and, most pertinently, Aesthetic Labour: Beauty politics in neoliberalism (Palgrave 2017, with Ana Elias and Christina Scharff), as well as numerous articles. This submission also draws on recent work on the promotion of body confidence as a new ideal for women: The Confidence Cult(ure) (co-authored with Shani Orgad) is in press with Duke University Press. Finally, the submission is based on brand new research conducted in June 2020 examining how social media use impacts body image. This study is so new it has not yet been published but the results are extremely important thus are being shared here, ahead of publication next monthⁱ.

4. Survey.

In June 2020, 220 young people took part in a detailed survey or in-depth qualitative interviews about media, social media, smartphone use and the body. The research was designed to gather the thoughts, feelings and experiences of as diverse a sample of young people as possible, aged between 18 and 30 and living in Britain.

- *Gender*: The survey attracted 189 full results, 82% of which were from women, 16% from men, and almost 2% from people who identified as gender non-conforming or nonbinary.
- *Race and ethnicity*: 72% of respondents were white, 27% were from BAME backgrounds including African, African-Caribbean, Indian or Pakistani, Arab, Chinese or mixed-race heritage.
- *Sexuality*: 79% of the respondents identified as heterosexual, 9.5% as bi-sexual, 3.5% as gay or lesbian, with just over 7% saying they were pansexual or had an alternative sexuality.
- *Disability*: 93% did not consider themselves to have a disability. 6% identified as disabled.
- *Age range*: 18 or 19: 22%; 20 or 21: 31%; 22-24: 23% 25-27: 16.5%; 28-30 7%

Other characteristics of the sample (e.g. employment status, parental status) can be found in the full reportⁱⁱ.

5. In-depth qualitative interviews.

In addition, more than 20 hours of interviews were undertaken with a purposive sample designed to capture the diverse identities and experiences of young women. With one exception who identified as nonbinary, interviewees were all cis women, aged between 18 and 27, and included a doctor, a dancer, an acrobat, a scientist, a trainee vet, a fashion assistant, a journalist, an Instagram influencer, several retail workers, and several students. Interviewees came from a range of different regions across the UK. The sample was diverse

in terms of class, ethnicity, and sexual orientation, and included two women who were disabled.

6.Special considerations

Compared with most other research in the field of body image this study stands out for being reflective of the real diversity in society in relation to race and ethnicity, disability, gender identification and sexual orientation.

The research was conducted in June 2020 towards the end of the lockdown period in England, and after a period in which many (but not all) participants had been at home for 10 weeks. COVID and lockdown clearly had an impact on feelings and experiences relating to the body, and both the survey and the interviews were designed to explore this (see below). The research also coincided with the surge in anti-racist activism after the death in police custody of George Floyd. The Black Lives Matter movement was spontaneously discussed by a large number of participants in the free answers in the survey, as well as being extensively explored in relation to questions about the diversity of bodies in the media in both the survey and the interviewsⁱⁱⁱ

7.Social media

- Social media use is significantly higher among young women than men.
- Social media use has dramatically increased during the COVID crisis with 80% of young women saying that they are on social media more. However, posting on social media has dropped significantly with 40% of young women reporting they are posting less – largely due to not going out or travelling.
- Young women are spending significant proportions of their day on social media. It is typically the first thing they engage with when they wake up, and the last thing before they sleep. It is also keeping them awake (as discussed below). Only 13% said they spent fewer than two hours per day on social media, whereas 67% spent between two and six hours a day, with many describing how, when browsing, hours can go by without them noticing. 20% said they spent more than six hours per day on social media.
- Instagram is the most popular social among our sample, with nearly 90% of young women using it. Facebook remains popular (particularly Messenger function to keep up with friends) with Snapchat used by similar numbers. TikTok has grown in popularity during the lockdown and accounts for 7.5% of time spent on socials. WhatsApp is used primarily as a communication tool with friends and family, and Twitter as a source of news. YouTube accounted for 15% of social media use, characterised as random browsing or pursuing interests e.g. music or yoga or veganism.
- Young women use social media to support all aspects of their lives from keeping up with friends to following news, from taking part in hobbies to engaging with activism. Following influencers and celebrities were important activities, accounting for around 22% of their total social media use- the same as keeping in touch with friends' lives. These are the top two categories in terms of time spent. Nearly 17% of time on social media was described as 'random browsing' of videos, memes, and other material proffered by the platforms' algorithms.

8. Young women feel under intense pressure

Interviewees reported pressures to do well at college and University, anxieties about finding – and keeping – a job or jobs, financial worries about getting by, and being in a position to live independently. They also talked about worries about romantic relationships and about friendships. Pressures relating to the body and appearance fit into this wider context of anxiety.

9. Perfection is compulsory on social media

More than 95% of respondents answered 'yes' to the question: 'do you think people feel under pressure about their body image?' Women told us that on social media they feel pressure to look attractive (more than 90% agreed); they compare themselves to others (more than 90% agreed); feel under pressure to get likes, nice comments and shares (more than 75% agreed) ; and feel pressure to present a perfect life (70% agreed). More than 90% of the young women we surveyed said that social media made them feel that 'other people have more fun than you' and a similar number said they felt 'like other people are more successful than you'. Worryingly, more than 75% of the young women we surveyed said that they felt that they will 'never live up to the images you see', with around 60% saying that they sometimes felt 'depressed' as a result.

10. Living your best life (presenting your best self)

- The pressure to be perfect goes beyond appearance and extends to seeming cool enough, interesting enough, fun enough and even happy enough. That is, being perfect now extends to all aspects of self-presentation, including having the 'right' attitudes and dispositions- whether this related to the food that they posted pictures of or their support for BLM.
- Many young women put considerable thought into where their pictures are taken – to make sure they were in an interesting location that could be geotagged or show up in their pictures.
- Most young women expressed painful regret about not being able to be their full selves on social media, and regarded their Instagram as their 'show reel' (as several women put it). 'I'm too scared about being judged' was a typical response to open questions. Others said that 'posting sad or bad times' risks 'coming across as an attention seeker'.
- There was a consensus that it is difficult to be real on social media, particularly in relation to showing sadness or admitting that things are not going well. Although a 'vulnerability trend' and an 'imperfection trend' could be seen among some influencers, this was generally understood as performative, and many people commented on celebrities or influencers 'fake crying' that does not lead to red eyes or blotchy skin.
- They felt under considerable pressure to present themselves as fun, happy and sociable – as well as effortlessly beautiful- reflecting the ways that appearance pressures have extended into presenting 'a perfect self'. They reflected self-critically on every aspect of themselves including their clothes, shoes, style and looks, and often worried that they might 'bring friends down' in a group shot. It is hard to overstate the palpable sense of pressure they conveyed.

10. Young women feel judged and surveilled and anxious much of the time

Young women feel as if they are under constant surveillance about how they look and how they present themselves more broadly.

- On nights out with friends they report feeling that they are constantly being filmed. While they take care with close friends to ensure that everyone is happy with group photos before posting them, young women worry about showing up on other people's feeds and how they will look. As one woman put it 'it is like having a TV crew with you every time you go to a pub or club'. Many others described how they would be 'sucking my tummy in' or 'presenting my best side' all the time they were out – undermining the idea of a relaxing evening.
- Young women feel subject to constant judgment on social media for their pictures, stories and other posts
- Intense pleasure could come from getting likes and appreciative comments, but women also told us that they could have their confidence destroyed by a nasty comment, and that this would loom larger than all the nice comments put together
- What was experienced as a wider toxic culture on social media also had a very sobering effect on young women. They see the kinds of trolling and abuse that celebrities and others may receive and the ubiquity of cruel and brutal comments has a wider disquieting impact, contributing to a sense of fearfulness about being on the receiving end of such poisonous attention. Some women turned off their comments in order to avoid this.
- It is worth noting that young women also received significant amounts of sexual harassment on social media on a regular basis and were frequently sent unwanted 'dickpics'.

11. So many (contradictory) ways to fail: FGW (fear of getting it wrong)

A disturbing finding is the prevalence of severe anxiety among young women about 'getting it wrong'. This fear ranged over accidentally posting something (e.g. posting to a public account, when you meant to post to your friends), posting a picture that is not perfect enough, posting a picture that is too perfect, posting a picture that does not garner enough likes, or receives negative comments. The public nature of this was experienced as very exposing and potentially humiliating by young women. Being fake, trying too hard, looking like you are attempting to get likes are also all 'fails' as young women negotiate multiple contradictory demands around looking perfect but not too perfect, putting immense thought, care and work into your posts but not being seen to 'try too hard', and needing to be authentic but not being able to be real.

Excoriating social anxiety related to posting was interfering with the sleep of numerous participants in this study. They reported that if they posted a picture or story late in the evening (which was understood as the best time to post), they would be consumed by anxiety and would need to check and recheck the platform multiple times before they could go to sleep. A related fear was of having accidentally posted something unintended, with many young women comparing worry about this to the culturally familiar worry about 'having turned the gas off' – checking multiple times before being able to relax enough to go to sleep. Many women reported that if they woke up in the night they would feel anxious and check their phones to see if their post was being liked - even if it was 4 AM.

12. Appearance pressures are intensifying

- A striking 100% of respondents agreed that society places significant importance on appearance. Moreover, more than 80% of young women said they felt under pressure to look a particular way. Of these, more than half said they experienced this pressure as intense ('a lot, a great deal').
- Compared with previous generations today's young women live in a world where visual images of women's bodies are ubiquitous across media, public space and especially online. In response to open questions women told us vividly how this made them feel: 'I don't look like that, I'll never look like that'. 'I see all these perfect bodies in bikinis and it makes me feel really low'
- Young women have grown up in a world in which attention to women's bodies and faces is increasingly forensic. Adverts showing images of magnifying glasses to look at pores and of tape measures to determine thigh circumference are completely routine. They encourage women not simply to look at themselves but to develop new visual literacies (particularly of the face) to measure, assess and *scrutinize* themselves, through what has been called a 'pedagogy of defect'^{iv}
- Compared with older women, this generation practice 'nano-surveillance'^v of their bodies. They quite literally see differently, with much greater attention to detail. In interviews participants talked in *extraordinary detail* about the things that they felt were wrong with their face and body. They apply similar scrutiny to others.
- This is facilitated by the magnification features of phones which allow spots, blemishes, undepilated eyebrow hair etc to be seen easily. Appearance pressures are dramatically intensified by this HD magnified technology.
- It is also facilitated by the proliferation of make up and makeover tutorials on YouTube, TikTok and other platforms, which a majority of young women told us they watch
- This generation of women have also been hailed both by proliferating make up sets and they have been targeted with 'personalised' beauty products. Influencers' 'basic' and 'simple' beauty routines that can easily feature upwards of 40-50 elements (a world away from the 'cleanse, tone, moisturise' mantra of yesteryear)
- All the women we interviewed and a significant number we surveyed said they regularly received promotions for cosmetic surgery particularly cosmetic dentistry and lip fillers. Everyone we spoke to in interviews (all were under 27) had friends who had already undergone cosmetic procedures, and many expressed a sense of inevitability that they too would succumb to this pressure. Social media algorithms could lead to young women being sent 'tailored' adverts e.g. for cosmetic surgery to get Kylie Jenner's look.
- Another way of revealing the intensification of appearance pressures is to see how minutely women have to deviate from the norm of perfection in order to be seen as very 'radical', 'daring', or 'badass'. For example, young women told us that they thought influencers were 'brave' or 'really pushing against images of perfection' if they posted images of themselves after eating or when sitting down – in both cases showing a gently distended belly – even when they were in all other respects beautiful, slim, toned, etc. The 'Instagram versus reality' trend is a particularly interesting example of this, as the 'real' photos differ so minutely from the 'Insta' ones^{vi}

13. Appearance pressures are extending

As well as intensifying, appearance pressures are also extending to new times of life (e.g. childhood, pregnancy, new motherhood), and to new areas of the body as the beauty industry and influencers set up new standards relating to thigh gap, bikini bridge, underboob and hot dog legs^{vii}. Many young women told us that beauty norms are changing – moving away from thin ideals to a newer ‘slim-thick’ ideal with a big bum and large breasts but a very small waist. This new ‘curvy’ ideal had not led to a relaxation of pressures on young women. Young women also felt overwhelmed by pressures to view themselves from all angles, particularly in the wake of social media trends for perfecting ‘side view’, ‘jawline’ and ‘back view’. The beauty industry has also moved inside the body with drinks and supplements to promote hair, skin, nails, while wellness trends push towards ‘clean’ eating and being perfect on the inside too.

14. Picture perfect: Filters and photo editing are adding to pressures

- Filters and photo editing are intensifying appearance pressures on women and raising the stakes on what counts as a good enough picture to post. This pressure is particularly acute when women post pictures on their own rather than as part of a group. Most women now filter or actively edit their photos before posting.
- 90% of young women sometimes use a filter when posting a selfie. Of these, more than half reported that they used a filter half of the time or more. These range from comedy filters (e.g. cat face) to sepia or black and white filters. A ‘grainy’ look is currently very popular and available on Instagram. Thousands of tutorials and lessons on YouTube instruct women on topics such as ‘how to edit your picture like Kim Kardashian’.
- 85% women also edit their photos using tools outside the platforms’ own tools using apps such as FaceTune. Besides cropping or reshaping a selfie or changing contrast or colour saturation, the main things women seek to edit are: skin tone, face contours, weight (to look slimmer), to brighten or bronze skin, to reshape nose or jaw, to make lips look fuller, to make eyes look bigger, and to whiten teeth.
- The use of filters and editing tools is fraught with problems for young women: on the one hand they want to make themselves look better – picture perfect - but on the other there is pressure to be authentic and not to be ‘fake’. For example one interviewee described being devastated when a carefully edited (improved) selfie she was happy with, received the comment ‘you look more filtered than London’s tap water’.

15. Other appearance apps

Other appearance apps being used include:

- apps to scan your skin to check for blemishes or acne (e.g. Meitu or TroveSkin) ,
- apps in which you enter your measures and the app will create a ‘virtual you’ to show where you need to improve (e.g. lose weight),
- apps to try out new hair colours, eyebrow shapes etc (most of the cosmetics companies now have these e.g. virtual brow bars), and
- apps that give you ‘ratings’ – ie that allow you to submit a photo and receive a ‘score’ plus feedback based on questions such as ‘how pretty do I look?’, ‘how fat do I look’ etc. Often these apps give rise to push notifications for cosmetic surgery^{viii}

16.COVID, lockdown and body image

The pandemic and associated lockdown has had various effects on young women's appearance-related experiences.

- They spent much more time than usual on social media, but posted less than usual
- Transformation videos (particularly on TikTok) were watched by many and fed into pressures to lose weight, improve tone and perfect the body and face
- Some experienced lockdown as a welcome break from appearance pressures as they frequently only saw family members
- Some, by contrast, experienced increased pressure on appearance as their social lives were conducted online (e.g. Zoom pub quizzes, FaceTime catch-ups with groups of friends etc) where they felt they needed to look perfect
- A significant proportion of young women used the period of lockdown to allow one or more aspects of their body to 'recover' from regular beauty processes: many women reported taking off nail varnish or acrylic nails to let their nails 'breathe'; others reported taking out hair extensions or weaves; some reported taking off fake eyelashes and using the time to apply conditioning serum to their lashes. While this could be considered 'aesthetic rest'^{ix} it was not understood as a relaxing of appearance pressures, but rather a longer term investment in one's appearance
- More generally many young women experienced the lockdown as an opportunity to add value to or capitalise their appearance e.g. through weight loss or exercise programmes, or intensive skin treatments
- By the end of lockdown, many young women told us they felt worse about themselves – that they didn't like looking in the mirror, that they were scared of being out in the world again and being judged. There was also a very widespread sense of disappointment in themselves that they had not achieved the desired transformations (e.g. in weight or tone) and therefore that they had 'wasted' lockdown.

17. 'Media do not represent me'

- Questions about media and social media provoked *huge passion* among participants. Women told us clearly and categorically that *they do not see themselves represented in media*. Nearly 75% answered no to the question 'Do media representations reflect your life?', while 94% answered 'Yes' to the question 'Do media promote unrealistic images'. Free space to elaborate on these responses produced more than 150 detailed answers in which women expressed anger, hurt and disappointment. For example: 'They portray a perfect life which is not real' said one woman. 'Social media only portrays people's best bits' said another. Another commented 'My body type is almost never represented in the media. In most media women's bodies are slim, toned, tanned and hairless. This is not realistic for me or for most people I know, yet the media still tells us that the reason our bodies do not look like this "ideal" type is because we haven't worked hard for it yet. This allows companies to sell products to us which promise to help us improve our flaws – flaws which would not have been considered a flaw in the first place had it not been for the media'.
- Major concerns about the bodies represented in media were that they lacked diversity, were too thin, were too sexualised, looked too perfect. The dominance of

white women, the absence of disabled women, the lack of representations of nonbinary people, and the prevalence of young women were all mentioned as major problems in media representations. Reality TV was highlighted by many young women as an area of concern for them, with *Love Island* being particularly criticised.

- A majority of respondents expressed the view that media imply that an attractive appearance is the most important thing for a woman – regardless of whether she is an athlete, a politician, a newsreader, a singer, etc. More than 70% of women felt that media images of women were ‘too perfect’.

18. Body positivity

There is huge enthusiasm among young women for the idea of body positivity – understood as a greater range of representations of women of different shapes, sizes, ages, ethnicities, religions, styles and appearances.

- A large majority of respondents were extremely positive. Free questions garnered answers that said ‘it’s brilliant’ and ‘I love it’ and ‘it is so good finally to see women of different shapes and sizes’.
- However, around 15% expressed concerns about body positivity leading to the ‘promotion’ of obesity or unhealthy weight.
- Other widely held views were that ‘body positivity has not gone far enough’ – that the range of images is still far too narrow, too white, too slim, too normative in its representation of gender and sexuality, and with nowhere near enough images of disabled women and people who are trans or nonbinary.
- Many people told us that the number of ‘body positive’ images is still only a tiny minority of the millions they see in any one day, and that every time a brand does something different e.g. shows a bigger body, a woman in a hijab, or someone with a skin condition ‘it makes the news’ so it definitely isn’t accepted or normal.
- Young women are extremely media literate and savvy and expressed considerable anger expressed about brands ‘appropriating’ movements for fat acceptance or Black Lives Matter, but doing so in a way that was insincere or tokenistic. Others argued that this was less significant than the visual discourse changing overall.
- While there was a strong endorsement of the view that it is important to ‘feel comfortable in your own skin’ it is important to note that this view did not necessarily lead to criticism of appearance pressures, but could instead be used to justify doing *more* beauty work, since this would lead to feeling better and having greater self-esteem. This is an interesting example of the way that anti-beauty-pressure discourses could be ‘hacked’ and rerouted to support the beauty industry.

19. We’re not judging but we want regulation and protection

This generation of young women are clear in the emphasis they place on personal choice and freedom.

- While they feel surveilled and judged in their own lives they place great emphasis upon not judging others. This translates into ‘not judging’ women, for example, for decisions they make about cosmetic surgery or work in the sex industry.
- Young women also express a suspicion of government censorship, and (as noted above) of brands cynically appropriating ‘diversity’
- However, they also feel strongly that something has to be done. 63% of young women felt that the government should regulate media images. Others also

suggested that social media platforms should do more to protect women from the effect of ubiquitous perfect bodies.

- Some of the ideas young women expressed included: rejecting images of women who were unhealthily thin; banning airbrushing or photo editing of women in magazines and adverts; including warnings on all images that have been digitally altered to make them more perfect; removing the features that make 'likes' visible to others in order to reduce pressure on young women; regulating adverts for cosmetic surgery; regulating companies offering 'non-surgical' appearance procedures such as botox or lip-fillers.

20. Concluding remarks

This submission highlights a number of disturbing findings about the nature and extent of the appearance pressure young women experience, and how this translates into significant anxiety and distress. This is having an impact on young women's mental and physical wellbeing, their sleep, their relationships and many other aspects of their lives – to say nothing of the 'opportunity costs' of this intense focus on appearance.

This submission contains a number of new findings about

- the intensifying pressures on young women;
- the way that social media's picture-perfect cultures are lived and experienced;
- the dynamics of young women's relation with celebrities and influencers and the way they scrutinize each other;
- the tailored nature of individual beauty advertising (including for cosmetic procedures);
- attitudes to body positivity and brands uptake of it;
- and the role that filters and photo-editing apps play in relation to contradictory imperatives to be perfect and to be authentic.

More research is urgently needed on all these issues in order to gain a fuller understanding. It seems important to end by highlighting that, although experiencing significant levels of distress, women are not passive dupes in this, but rather operate with ingenuity and sophistication. Many young women spoke about their coping strategies (turning off comments, temporarily deleting the apps) and support networks (mothers, sisters and close friends off line) and also about diverse forms of resistance to the pressures elucidated here—these included supporting people who are doing things differently, posting 'process rather than outcome' pictures, and following and liking posts by other women, other people of colour, other queer and other disabled people. It has not been possible in this submission to break down in detail the ways in which aspects of identity beyond gender shape experience, but these results will be available shortly in the major report.

ⁱ Gill, R. (2020) Challenging the perfect picture: Social media, smartphone use and COVID-19. London

ⁱⁱ *ibid*

ⁱⁱⁱ *ibid*

^{iv} Bordo, S. (2004). *Unbearable weight: Feminism, Western culture, and the body*. Univ of California Press.

^v This term is borrowed from Ana Elias

^{vi} Gill, R. (2020) Challenging the perfect picture: Social media, smartphone use and COVID-19. London

^{vii} Orgad, S. & Gill, R. (2020) *The Confidence Cult(ure)* Duke University Press

^{viii} Elias, A.S. and Gill, R., 2016. Beauty surveillance: The digital self-monitoring cultures of neoliberalism. *European Journal of Cultural Studies*, 21(1), pp.59-77.

^{ix} Dosekun, S. (2017). The risky business of postfeminist beauty. In Elias et al (ed) *Aesthetic Labour* (pp. 167-181). Palgrave Macmillan, London.

September 2020