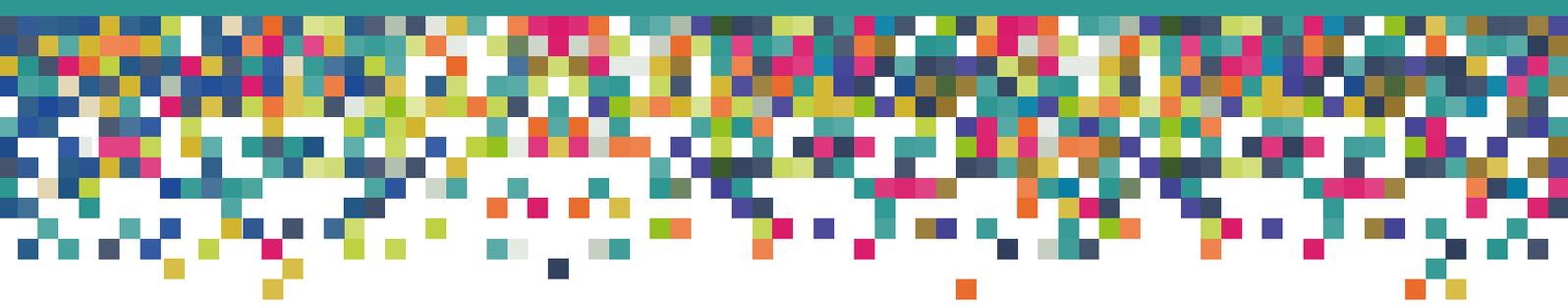




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The Quantified (Female) Self

**Examining the Conceptualisation of Female Health,
Selfhood and Embodiment in Fitbit Strategic
Communication Campaigns**

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1 ABSTRACT

This social sciences study considers the phenomenon of the 'Quantified Self' movement from a gendered perspective. Defined as the pursuit of self-knowledge through numbers, the quantified self movement has been intensified in the age of digitisation, as self-tracking technologies and wearable devices experience a period of rampant innovation. With more than 160,000 self-tracking apps available, and the global fitness trackers market predicted to generate more than \$62 million in revenue by 2023, the pervasiveness of the quantified self movement is evident. Supported by the neoliberal discourse of self-optimisation, the quantified self movement advances a culture of incessant self-monitoring, -measuring and -recording, inevitably impacting notions of health, selfhood and embodiment. Moreover, within the quantified self collective, women have formed niche tracking cultures, dedicated to addressing the inequalities and misconceptions surrounding female health. Despite 'female health tracking' being a large component of the quantified self movement, decisions regarding female health technologies are often made by men, resulting in an incongruence between the designer and the user of the technology. Given these concerns, this study seeks to determine the ways in which female health, selfhood and embodiment are conceptualised in Fitbit's strategic communication. Fitbit, a wearable technology company, was selected as the case study for this research due to its leadership and capital within the wearables industry. Conducting an audio-visual discourse analysis of two Fitbit strategic communication campaigns, this study effectively argues that Fitbit mobilises neoliberal and patriarchal sentiments, ultimately constructing narrow conceptualisations of female health, selfhood and embodiment. Though the results of the study indicated that there are exceptions to these 'narrow conceptualisations,' this study maintains that Fitbit's strategic communication content plays a significant role in sustaining gender normativity.

2 INTRODUCTION

2.1 Optimisation

As an increasing focus of computational design, 'optimisation' has been heralded as the ideal outcome of technology use (Yang, Koziel & Leifsson, 2014). Presented as a solution for maximising personal, institutional and societal efficiency, the concept of optimisation has penetrated the marketplace, resulting in the continuous development of 'smart' technologies, advanced algorithms, ubiquitous sensing, mobile applications (apps) and wearable devices. Moreover, designed to enable and encourage the simplification of organisation and management practices, technological optimisation has not only impacted social, civic and economic functioning, but also transformed the ways in which individuals practise self-governance within a neoliberal context (Moore & Robinson, 2015). Thus, on a micro-scale, the logic of optimisation is actualised in the creation of technologies aimed at increasing individuals' productivity in health, well-being, fitness, relationships and careers, ultimately fuelling a cultural orientation towards self-optimisation (Moore & Robinson, 2015).

Relying upon neoliberalist ideals which prioritise the pursuit of market-based values, the ethos of self-optimisation positions the 'self' as an idealised subject, urging individuals to become "entrepreneurs of themselves" (Hamann, 2009, p. 38; McGuigan, 2014, p. 229). Further, in establishing the individual as a "site of enterprise," self-optimising technologies enforce the regimentation of self-care, prompting individuals to engage in incessant self-reflection and self-improvement activities (Gane, 2008, p. 358; Lupton, 2016). As "increasing one's productive capacity [and] improving one's output" become a social imperative, individuals' bodies are continuously regulated by neoliberal demands (O'Dwyer, 2018, para. 8). Consequently, individuals seek to fulfil the duty to achieve personal innovation and growth through a reliance on technology, promised to 'enhance' and 'optimise' one's life (O'Dwyer, 2018). By participating in a constant cycle of "monitoring, measuring, and recording" one's own body, health, selfhood and embodiment are inevitably reimagined, resulting in the emergence of the 'quantified self' (QS) (Lupton, 2013, 2016, p. 1).

2.2 Self-Optimisation in Action: The 'Quantified Self'

The quantified self movement, seminally defined as the pursuit of self-knowledge through numbers, contends that individuals can become increasingly "optimal human being[s]" through the use of self-tracking tools and technologies (Lupton, 2016, p. 65; Quantified Self, 2019). Further, QS advocates argue that the generation of personal informatics and analytics

associated with behaviours and/or bodily functioning provides individuals with the data necessary to identify health patterns or concerns, satisfy curiosity and develop goals related to the improvement of “health, physical fitness [and] emotional well-being” (Lupton, 2016, p. 2; Quantified Self, 2019). Though QS practices predate the advent of Web 2.0 and subsequent technological developments, digitisation has intensified self-tracking cultures, introducing new forms of accessing, storing, sharing and analysing personal data (Lupton, 2016). With more than 160,000 self-tracking apps available, and the global fitness trackers market predicted to generate more than \$62 million in revenue by 2023, the pervasiveness of the QS phenomenon is evident (Loomba & Khairnar, 2018; Lupton, 2016). Among the novel tools used in contemporary self-tracking, wearable activity trackers, colloquially referred to as ‘wearables,’ have risen to dominance, as demonstrated by the prediction that the total number of individuals using wearable devices will soon surpass the total population of the U.S. and Canada combined (Lupton, 2016). Given this product saturation, it is critical to analyse the role of wearables in quantifying bodies, and the impact of this quantification on the conceptualisation of health, selfhood and embodiment.

2.3 Fitbit and Female Health

To explore the implications of self-tracking behaviours for health, self and body, this study will critically examine the strategic communication of Fitbit, the number one-rated fitness tracker on the market (Hodgkins, 2019; Peckham, 2019; Stables 2019). Founded in 2007 in Silicon Valley, California, a global hub of high technology and innovation, Fitbit has consistently maintained its strong market foothold, with more than \$120 million in annual revenue, and a 36 percent year-over-year increase in devices sold (Dignan, 2019; Fitbit, 2019a). The company’s diverse product line consists of smart watches, activity trackers, smart scales and accessories, which allow users to monitor and record exercise, calories burned, sleep cycles and heart rate, and to conduct ‘female health tracking,’ the devices’ newest tracking capability (Fitbit, 2019a).

Launched in 2018 in response to strong consumer demand, Fitbit’s female health tracking system provides comprehensive menstrual cycle tracking, prompting female users to input symptoms, track energy levels and moods and estimate both ovulation and peak fertility windows (Kosecki, 2018). Catering to a customer base that is more than two-thirds female, Fitbit boasted more than two million users of its female health tracking platform within the first month post-launch (Fitbit, 2018a; Liautaud & Picker, 2015). Encouraging female users to “opt in” by promising “better body knowledge,” “more productive doctor visits,” “personalized insights” and “much-needed innovation,” Fitbit effectively employs both neoliberal and QS rhetoric to propagate the notion that self-actualisation can be achieved

through self-tracking practices (Kosecki, 2018, para. 9-12). However, though credited for being a necessary venture into the burgeoning 'FemTech' industry, Fitbit's female health system has also been criticised for a lack of design insight, which fails to consider the nuanced and diverse nature of women's reproductive health experiences (Caddy, 2019; Low, 2018).

2.4 Implications and Research Aims

Fitbit's negligence is reflective of the staggering incongruence within 'FemTech' design between the creator and the user of the technology (The Medical Futurist, 2019). Despite the industry's reliance on and hypertargeting of women as consumers, only 11 percent of executive positions in Silicon Valley-based companies are given to women (The Medical Futurist, 2019). This disparity results in the implementation of a one-size-fits-all approach to women's health, excluding solutions for the monitoring of less-recognised concerns, such as "menopause, cancer detection, breastfeeding troubles [or] bladder control" (The Medical Futurist, 2019, para. 16). Subsequently, available self-tracking technologies are producing a narrow conceptualisation of women's health, limiting a woman's ability to achieve pure selfknowledge, the chief aim of the QS movement.

Considering the cultural salience of self-optimisation, the widespread adoption of QS practices and the effects of self-tracking behaviours on female health, selfhood and embodiment, this study will conduct an audio-visual discourse analysis of two Fitbit strategic communication campaigns targeted towards women, critically evaluating the ways in which its products are promoted in relation to the ideas of health, self and body. Relying on the conceptual frameworks of neoliberalism and postfeminism to understand the theoretical rationale for Fitbit's selected discourse, this study will answer the following research question:

In what ways are the concepts of female health, the female self and the female body constructed and negotiated through Fitbit's strategic communication content?

In answering this question, this study effectively argues that Fitbit's strategic communication content mobilises neoliberal and patriarchal sentiments, ultimately constructing narrow conceptualisations of female health, selfhood and embodiment, which in turn sustains gender normativity.

3 THEORETICAL CHAPTER

This chapter will first outline existing academic literature that investigates the emergence of a quantified self, and the relationship between self-tracking and health, the self and the body.

Following this discussion, QS practices will be further examined from a gendered perspective, citing relevant literature which explores the feminist implications of the digitisation of health and fitness. The chapter will conclude with the statement of the research question, coupled with the presentation of the conceptual frameworks that will be deployed in analysis.

3.1 Literature Review

3.1.1 An 'Optimal' Self: Health, Self and Body in Self-Tracking Practices

In contextualising this study's research, it is necessary to identify the main tenets of QS, and subsequently, self-tracking practices, focusing specifically on the role of wearable technology. Though self-tracking is a largely "voluntary personal enterprise initiated by the person who is engaging in it," "there are various ways in which [it] is encouraged, or even enforced" on individuals (Lupton, 2016, p. 3). By positioning self-monitoring as an accessible and efficient means of managing health and maximising productive output, individuals are coerced into the sustained production of personal data (Lupton, 2016). Thus, considering the increasingly blurred distinction between voluntary and compulsory participation in self-tracking activities, the following sections will address the consequences of lifelogging practices for health, the self and the body (Sharon, 2015).

3.1.1.1. Health

Digital self-monitoring and tracking systems, such as wearable devices, are hailed as being a centralised and comprehensive healthcare solution, offering individuals a platform for personalised health data, self-diagnostic information and interventions for behavioural change (Piwek, Ellis, Andrews & Joinson, 2016). Further, proponents of self-tracking maintain that wearables facilitate preventative care, and aid in the management and mitigation of 'lifestyle' diseases, such as obesity, diabetes or cardiovascular concerns (Piwek et al., 2016; Ruckenstein & Schüll, 2017). Encouraged to 'self-hack' to improve sleep, manage stress or increase productivity, individuals rely on wearables to not only detect and predict health patterns, but also shape and modify behaviours (Piwek et al., 2016; Ruckenstein & Schüll, 2017). However, research indicates that wearable activity trackers are more likely to be purchased by individuals who already embrace healthy lifestyles, and are seeking ways to quantify their progress (Piwek et al., 2016). Moreover, there is little to no empirical evidence that the use of wearables results in tangible health improvements (Piwek et al., 2016). Therefore, the relationship between QS practices and health must be further explicated.

Despite enabling the monitoring of health patterns, scholars argue that the use of wearables to conduct health management has both disciplining and disempowering effects on users

(Lupton, 2013; Ruckenstein & Schüll, 2017; Sharon, 2015). As the discourse used to promote wearable technologies constructs a vision of health that is indistinguishable from productivity, “data tracking becomes an avenue for healthy citizenship, enacting cultural values of entrepreneurial, autonomous behaviour” (Real Life, 2018; Ruckenstein & Schüll, 2017, p. 265). Consequently, self-tracking through wearable devices acts as a form of covert distributed “dataveillance,” post-panoptic surveillance which functions by relying upon users to collect and aggregate personal data (Ruckenstein & Schüll, 2017, p. 264). Dataveillance establishes opaque regimes of management and control, such as the seemingly innocuous corporate wellness programmes, in which employers incentivise QS behaviours by providing free or discounted wearables to employees, and rewarding those who meet company-mandated health and wellness benchmarks (Ruckenstein & Schüll, 2017). Though positioned purely as a benefit for employees, corporate wellness programmes are often implemented as a way to supply insurance companies with additional employee health data, and to reduce premiums, ultimately serving as another means by which surveillance capitalism flourishes (Ruckenstein & Schüll, 2017).

Building upon the discussion of the relationship between QS practices and health, the promotion and use of wearable technologies reconceptualises health by appropriating the discourse of healthism (Lupton, 2013). Healthism “positions the achievement and maintenance of good health above many other aspects of life and features of one’s identity,” ensuring that individuals are constantly oriented towards this goal (Lupton, 2013, p. 397). Healthism supports neoliberal values by shifting the responsibility of health management from the state to the individual, facilitating the rise of the responsibilised self. Though a convenient ideology for “financially affluent, technologically savvy [and] culturally dominant” individuals, healthism as discourse fails to acknowledge the socioeconomic determinants of health, and the privilege necessary to purchase wearable devices, or participate in the QS collective (Lupton, 2013; Ruckenstein & Schüll, 2017, p. 271). By challenging individuals to take responsibility for their own health, the discourse of healthism idealises those who actively self-monitor and self-regulate, while deeming those who do not to be “inferior and morally deficient” (Lupton, 2013, p. 397).

3.1.1.2. Self

The privilege awarded to responsibilised individuals within the digital environment illustrates the ways in which selfhood is reconstituted in a QS culture. Embarking on a never-ending journey of self-discovery, the ‘self’ becomes a database, urged to make choices “in a manner of savvy, ever vigilant entrepreneurs” (Schüll, 2016, p. 8). Moreover, the pressure to achieve self-knowledge by engaging in rational and efficiency-maximising behaviours sets

normative expectations for how individuals *should* and *ought* to practise self-governance, resulting in the re-articulation of autonomy and personhood (Schüll, 2016).

In a QS setting, individuals become passive choosing subjects; though those who participate in self-tracking activities exert control by choosing to use digital technologies to record and refine behaviours, this choice is fundamentally passive (Schüll, 2016). Though these individuals seek to achieve self-knowledge, they lack the capacity to do so without the services provided by wearable devices (Schüll, 2016). In this sense, autonomy is altered, as it becomes dependent upon technological capabilities (Schüll, 2016). Further, this reconceptualisation of the self can be understood by applying Deleuze's notion of 'dividuals' (Schüll, 2016). As wearable users continue to produce data, "a type of selfhood that is distributed between different and constantly changing data sets" is created, resulting in the transformation of the self into an "endlessly sub-dividable collections of data points," or, a dividual (Schüll 2016, p. 9-10). The fragmented self that subsequently emerges within a QS context is thought to possess the "productivity, flexibility, responsiveness to change and entrepreneurialism" that is characteristic of an ideal, high-performing and successful neoliberal citizen, ultimately reimagining the concept of selfhood (Lupton, 2016, p. 68).

3.1.1.3. Body

As users of wearable devices are reproduced as "abstracted figures created from an amalgamation of data traces," personal embodiment is wholly reimagined (Ruckenstein & Schüll, 2017, p. 265). By equipping one's body with sensing capabilities, quantified bodies assume the role of a data-generating device, transforming how one is "touched, managed and visually displayed" (Lupton, 2013, p. 396; Schüll, 2016). Further, the "perfect(ible)" body that is made known through QS practices is highly scrutinised, as individuals are expected to become machine-like entities, focused on producing inputs and outputs that can be easily measured and quantified (Lupton, 2013, p. 396). The augmentation of the body via self-tracking devices demonstrates wearables' status as prostheses for selfhood and embodiment, ultimately mobilising the body as a digitised assemblage (Lupton, 2016). Therefore, considering the implications of self-tracking for health, self and body, the following section will re-examine the QS phenomenon through a feminist lens, in order to highlight the theoretical motivations for this study.

3.1.2 The Quantified Woman

From 'smart' tampons to connected breast pumps, FemTech development is rapidly expanding, with a projected revenue of \$50 billion by 2025 (Marks 2019; Segran, 2016). Within the growing suite of available products and services targeting women's health, selftracking

apps and wearable technologies have experienced immense popularity, underscoring the salience of the QS movement. Thus, as women increasingly make the decision to live connected lives and adopt QS practices, questions inevitably arise regarding the degree to which self-tracking technologies account for the complexities of women's health.

Though the mantra of the QS movement – “self-knowledge through numbers” – is a supposedly universal, genderless goal, the reality of current product functionalities reflects blatant design oversight (Eveleth, 2014). In addition to being largely designed by men, female health tracking platforms are often an afterthought, frequently incorporated into existing health tracking systems only *after* companies are confronted with consumer backlash (Eveleth, 2014). Grossly misrepresenting women's priorities pertaining to their bodies and their health, “fertility-tracking apps are a caricature of what straight, white men think about periods” (Eveleth, 2014, para. 13). Doused in pink tones and floral patterns, the majority of tracking apps erroneously merge menstruation- and fertility-tracking, centring women's health on pregnancy, and advancing the assumption that women's sole health concern is how to either facilitate or prevent conception (Caddy, 2015; Eveleth, 2014).

Recognising the need for gender-specific tracking capabilities, women-only QS collectives, such as QSXX and Women of Wearables (WoW), were organised, with the aim of supporting and connecting women with wearable technologies (Eveleth, 2014; Hassan, 2018; Women of Wearables, 2019). Though the QS movement claims to search for *universal* points, scores and metrics, members of the collective are largely male and upper-middle class (Abreu, 2014). Consequently, “defining what is in need of scientific explanation only from the perspective of bourgeois white men's experience leads to partial and even perverse understandings of things” (Abreu, 2014, para. 6). The formation of QSXX and WoW validate the need to interrogate QS practices from a feminist perspective, examining the “constellation of barriers and facilitators related to gender that can enable and constrain one's ability to use a [wearable device] as intended” (Esmonde & Jette, 2018, p. 1). As such, the following sections will discuss the key arguments regarding the neoliberal, patriarchal and hegemonic ideologies that operate to promote self-tracking tools and wearable devices to women.

3.1.2.1. Wearables as a Means of Patriarchal Power

In considering the role of women in the QS movement, and the impact of self-tracking technologies on female health, selfhood and embodiment, it is necessary to understand wearables' role as a mechanism for both neoliberal and post-feminist patriarchal surveillance. Strategically adopting the tone of a “sisterly invitation,” neoliberalist rhetoric continuously pressures women to be responsible, independent and empowered (Sanders, 2017, p. 51; Wissinger, 2017). However, in the QS context, the self-empowered woman is constantly pitted

against hegemonic commercial interests, left to fight for ownership of her data and consequently, of her body (Wissinger, 2017). Understanding this landscape, it is evident that wearables function as instrumental devices for “surveillance, normalisation and discipline,” thus augmenting and facilitating the “cooperation of neoliberal-era Biopower and postfeminist patriarchal power” (Sanders, 2017, p. 36).

Contemporary Biopower refers to the Foucauldian conception of “power that prioritises and problematises population health as a basis for the development and application of social and medical sciences of surveillance, analysis and regulation,” (Sanders, 2017, p. 40). While neoliberal Biopower is applicable in analysing the foundations and effects of self-tracking cultures, acknowledging the scope and research intentions of this study, more attention will be devoted to postfeminist patriarchy, and how it directly supports the discourse used by Fitbit to target female consumers (Sanders, 2017). Within a neoliberal and postfeminist climate, wearables are presented as fashionable devices, essential in the pursuit of beauty and health (Sanders, 2017). As such, wearables enable “rigorous body projects devoted to the attainment of normative femininity,” ultimately constructing new subjectivities and forms of embodiment (Sanders, 2017, p. 36). By challenging women to exercise autonomy and practise embodiment exclusively in ways that are oriented towards living ‘healthy’ lifestyles, wearables institutionalise self-improvement regimes (Sanders, 2017). Further, Sanders (2017) suggests that the use of wearables within the neoliberal, postfeminist context results in gender *retrenchment*, rendering women’s bodies more visible and amenable to unyielding regulation and scrutiny.

Through the use of wearable devices, women undertake normative body projects which involve the meticulous monitoring of diet and exercise (Sanders, 2017). These self-tracking practices act as “governance at a distance,” a defining characteristic of patriarchy in its postfeminist modality (Sanders, 2017, p. 40). “Having delegated the enforcement of gender norms, and thus the consolidation of heteronormative gender roles” to individual women, postfeminist patriarchy obfuscates its governing power (Sanders, 2017, p. 41). Moreover, distinguished by a grammar of individualism, postfeminist patriarchal rhetoric mobilises body panic, cultivating self-disciplinary mentalities, the internalisation of the male evaluative gaze and vigilant self-policing, ultimately ensuring that normative gender arrangements are stabilised (Sanders, 2017). Lastly, by amplifying women’s consciousness of an omniscient bodily visibility, wearable technologies strengthen surveillance mechanisms, producing the self-surveilling postfeminist subject (Elias & Gill, 2017; Sanders, 2017).

3.1.2.2. Self-Surveillance in a Postfeminist Context

Given the significant self-governing and self-surveilling capacity of wearable devices, it is critical to evaluate the ways in which female health, selfhood and embodiment are impacted by the postfeminist surveillant imaginary. The self-surveilling postfeminist subject is incited to conduct fine-grained, metricised and forensic self-monitoring, disciplining a body deemed to be inherently “unruly” by neoliberal culture (Elias & Gill, 2017, p. 8). The surveillance of women’s bodies in a postfeminist context is covert, disguised in invocations of choice, empowerment, agency and freedom (Elias & Gill, 2017; Gill, 2018). By concealing surveillant apparatuses in ‘voluntary’ behaviours, such as self-tracking, self-surveillance practices flourish, effectively re-territorialising the female body as a site of patriarchal control (Gill, 2018). Further, the neoliberal demand to perform body work, specifically through wearable technologies, provides support for the false notion that the body is the locus of womanhood, and the key determinant of a woman’s value (Gill, 2018). Thus, as digitisation and postfeminist modalities increasingly converge, women are subjected to relentless selfregulation, self-scrutiny and self-surveillance.

3.2 Research Question and Conceptual Frameworks

The relevant literature outlined in Section 2.1. has presented a comprehensive theoretical background for this study’s research. First, in highlighting the main arguments regarding the effects of self-tracking practices, Section 2.1.1. addresses the ways in which wearables contribute to the cultivation of a culture of healthism, the rise of an idealised, responsabilised and fragmented self and the augmentation of the body via perpetual data collection. Second, building upon the concerns raised in Section 2.1.1., Section 2.1.2. developed the concept of the ‘Quantified Woman,’ identifying the connections between self-tracking, neoliberalism and postfeminist patriarchy, and how these connections alter female subjectivity and embodiment.

This study focuses on the role of wearables in either subverting or sustaining normative femininity, thus exploring the following research question:

In what ways are the concepts of female health, the female self and the female body constructed and negotiated through Fitbit’s strategic communication content?

Given the popularity of the QS movement, and the concerns related to inequality in FemTech design established in Section 3.1.2., it is necessary to explore this research question, and determine how women’s perception of their own health, self and bodies is shaped through discursive means. Isolating health, self and embodiment as critical concepts in both QS and feminist scholarship, this research will examine Fitbit’s use of strategic discourse to target its female customers. To effectively analyse the images and messaging developed by Fitbit to

promote its products to a female audience, this study will rely on the conceptual frameworks of neoliberalism and postfeminism.

Framing this research within a neoliberal context provides sufficient background for understanding the ways in which Fitbit's promotional content functions. Characterised by political, economic, social and cultural rationality, neoliberalist ideology positions the individual as self-managing, autonomous and responsabilised (Elias & Gill, 2017). In addition, neoliberalism demands extensive aesthetic labour on the body, instituting regimes of self-perfectibility (Elias & Gill, 2017). Considering the entrepreneurial, self-optimising subject established by neoliberalism, Fitbit mobilises the neoliberal perspective, as it promises to give individuals the "freedom" to "seamlessly" "stay motivated" in reaching fitness goals (Fitbit, 2019a; Gill, 2018).

Further, the conventions of postfeminism structure Fitbit's gendered messaging by capitalising upon the 'double entanglement' that inhibits female agency in a neoliberal climate (McRobbie, 2004). 'Double entanglement' refers to the co-existence of hegemonic values and liberalised gender politics, which operate simultaneously to dictate women's choices, ultimately dismantling gender equality (McRobbie, 2004). Fitbit exemplifies the phenomenon of double entanglement by offering women the ability to take control of their health and fitness, but only within the parameters of normative femininity, which are enabled by its product capabilities. This tension ultimately rearticulates female choice as both a modality and a constraint (McRobbie, 2004).

Wilson (2015) builds upon the discussion of postfeminism in a neoliberal environment by arguing that the neoliberal agenda "extend[s] and deepen[s] gendered inequalities in order to sustain and strengthen the processes of global capital accumulation" (p. 1). Privileging a "'can-do' girl power" attitude, the postfeminist sensibility embraces liberated autonomy, while consistently orienting female subjects towards economic rationality (Gill, 2008, p. 442). As such, postfeminist ideology is inherently contradictory, in that it maintains that women are fundamentally free, yet invariably beholden to neoliberal, capitalist expectations to achieve maximised productivity and efficiency (Gill, 2008). Remaining cognisant of the centrality of the discourses of choice, agency and empowerment to both neoliberalist and postfeminist perspectives is essential to understand the means by which Fitbit's strategic communication discourse resonates among female audiences, providing robust frameworks to support the analysis and interpretation conducted in this study.

4 RESEARCH DESIGN AND METHODOLOGY

This chapter will state the rationale for the chosen methodology, detailing the specific components of this study's research design. This will be followed by a discussion of ethics and reflexivity.

4.1 Rationale for Methodology

To examine the conceptualisation of female health, self and body in Fitbit's strategic messaging, this study will conduct an audio-visual discourse analysis of two Fitbit campaigns. The first campaign analysed is Fitbit's 2019 U.S. Mother's Day campaign, which is comprised of one 30-second television spot, and 10 corresponding Instagram posts. Following this analysis, the research shifts to analyse Fitbit's campaign promoting its female health tracking system, discussed in Section 1.3., which consists of one 50-second television spot and five corresponding Instagram posts. Insights gathered from the interpretation of both campaigns will then be discussed collectively, with the aim of relating the observed content to macro-level themes, discourses and ideologies.

Given the auditory and visual nature of the materials that will be used in analysis, audiovisual discourse analysis is a suitable method for the evaluation of Fitbit's conceptualisation of health, self and body. As the research question seeks to identify the normative conventions and representations present within Fitbit's strategic communication content, and connect this content to broader conversations concerning hegemony, patriarchal power, postfeminist culture and neoliberal ideology, *discourse* analysis is an appropriate approach within the full audio-visual analytical method (Rose, 2012). Audio-visual analysis relies upon the notion that "particular forms of representation produced by [visual content] are important to understand," "because they are intimately bound to social relations" (Rose, 2012, p. 5). Considering this rationale, the selected method is well-suited to address the stated research question, as the question is intrinsically linked to and has implications for gender politics. Further, to strengthen the justification for mobilising audio-visual analysis within this study, it is necessary to reference Fyfe & Law's (1988) argument that:

To understand a visualisation is thus to enquire into its provenance and into the social work that it does. It is to note its principles of inclusion and exclusion, to detect the roles that it makes available, to understand the way in which they are distributed, and to decode the hierarchies and differences that it naturalises (Fyfe & Law, 1988, p. 1).

As such, examining the ways in which Fitbit constructs and negotiates visual content pertaining to female health, selfhood and embodiment by conducting an audio-visual discourse analysis will effectively illustrate Fitbit's role in either disrupting or stabilizing gender normativity.

Moreover, audio-visual discourse analysis operationalises three modalities: technological, compositional and social (Rose, 2012). While various analytical approaches within visual analysis privilege different modalities, the social modality functions in perfect concert with this study's research aims. Referring to the institutions and practices that surround an image, and the economic, social and political relations through which it is interpreted, the *social* modality aligns with the selection of *discourse* analysis (Rose, 2012). In addition, audiovisual discourse analysis hinges upon the connections between texts and their meanings, particularly noting patterns, intertextualities, complexities, contradictions, absences and exclusions (Rose, 2012; Lemke, 2012).

To further determine the effectivity of the audio-visual analytical method, a pilot study was conducted on one one-minute film trailer, topically relevant for a different study. The trialling of analysis in the pilot revealed that in order for a discursive approach to audio-visual analysis to be effective, the sample size must be large enough to provide insight into broader, more nuanced themes in play within the text. Thus, this study's research design has been modified to account for the limitations experienced in the pilot, adjusting the sample size to allow for a more extensive interpretation. Having rationalised the selection of audio-visual discourse analysis as this study's research method, the following sections will describe the key features of the research design, beginning with the sampling strategy.

4.2 Sampling

Constructing a purposive sample, audio-visual discourse analysis was conducted on two commercials, both less than one-minute in length, and 15 Instagram posts, which consisted of still images and short videos. The criteria for inclusion within the sample were as follows:

4.2.1 Selected content must be categorised as strategic communication material, defined as "the purposeful use of communication by an organization to fulfil its mission;" e.g., marketing, corporate messaging, advertising, public relations or social media content (Hallahan, Holtzhausen, van Ruler, Verčič, & Sriramesh, 2007, p. 3).

4.2.2 Selected strategic communication content must have been deployed by Fitbit, as this study seeks to leverage the notoriety and capital of the Fitbit brand to draw larger conclusions

about the relationship between self-tracking practices and female health, selfhood and embodiment.

4.2.3 Selected strategic communication content must be developed for and derived from Fitbit's main corporate, U.S.-based channels. The rationale for focusing solely on Fitbit's U.S.-based channels is threefold: first, the study's research has been conducted in the U.S. and is focused on the U.S. sociocultural context; second, Fitbit cites its U.S. channels as its primary corporate channels; and, lastly, Fitbit's U.S. YouTube and Instagram channels, the two channels which are analysed in this study, have larger followings than the company's other global accounts (Fitbit, 2019a; Fitbit, 2019b; Fitbit, 2019c).

4.2.4 Selected strategic communication content must be no more than two years old, in order to ensure that content is timely, pertinent and culturally-relevant, given the sociocultural implications of this study.

4.2.5 Selected strategic communication content must be specifically targeted towards women, as this study's main aim is to determine the impact of QS discourse on the conceptualisation of *female* health, selfhood and embodiment, ultimately contributing to the growing academic conversation regarding quantified female subjects.

A non-probability, purposive sample is well-suited to address this study's research question, as purposive sampling "is the deliberate choice of [material] due to qualities [it] possesses" (Etikan, Musa & Alkassim, 2015, p. 2). Further, the use of a purposive sampling strategy requires the researcher to select materials that contain the information necessary to adequately answer the research question (Etikan, et al., 2015). Therefore, in the context of this study, the sample must be comprised of strategic communication content that contains representations of women directly engaging in self-tracking practices, or highlights the supposed benefits that self-tracking provides for the responsabilised, entrepreneurial woman.

4.3 Material Selection

Considering the sampling strategy and criteria outlined in Section 3.2., the materials selected for analysis in this study are a combination of still and moving images from Fitbit's 2019 U.S. Mother's Day campaign and the promotional campaign surrounding the launch of the company's female health tracking platform. Fitbit's Mother's Day campaign reflects a two-pronged creative strategy. First, the 30-second television spot titled "Motherhood is Incredible" features diverse representations of motherhood, opening with a mother in labour, and concluding with a woman and her partner discovering that she is pregnant – all of which

occur while the mother, the central figure in each scene, is wearing a Fitbit (Fitbit, 2019d). The nuances and specificities of each scene within the “Motherhood is Incredible” television spot will be expanded upon in the results and interpretation chapter (Section 4) of this study. Next, the second component of Fitbit’s 2019 U.S. Mother’s Day campaign is a series of 10 Instagram posts, shared to Fitbit’s primary corporate channel (@fitbit), showcasing the company’s female employees who are also mothers or daughters. Each post highlights selected employees’ parenting experiences, which are moderated and simplified by the use of a Fitbit (Fitbit, 2019b).

The second portion of this study’s analysis will focus on Fitbit’s campaign promoting its female health tracking capabilities. The 50-second television spot developed to introduce the tracking system presents different young women engaged in various activities, drawing attention to the functionalities of the tracking platform, and how it can be seamlessly integrated into female Fitbit users’ lives, ultimately enhancing their health, and facilitating an organised, optimised lifestyle (Fitbit, 2018b). To accompany this spot, Fitbit published five Instagram posts, which demonstrate the platform design and capabilities (Fitbit, 2019b).

4.4 Analytical Strategy and Coding Scheme

To analyse the materials outlined in the previous section, this study will rely on audiovisual discourse analysis as its primary research method. As such, the materials will be evaluated and interpreted according to the following analytical coding scheme:

4.4.1 Denotative Dimension

On the most micro-level of analysis, identifying elements within the denotative dimension will provide the information necessary to contextualise the selected materials, serving as the foundation for macro-level assumptions and conclusions to later be drawn (Rose, 2012). The denotative dimension examines camera work, such as angles, frames, focus and shot continuity and cohesion, in addition to lighting properties and the interaction of images and sound (Rose, 2012). In the context of this study, the analysis will focus on the denotative elements used to conceptualise health, selfhood and embodiment.

4.4.2 Binary Oppositions

Building upon the denotative analysis, the selected materials will be examined to identify the following oppositions: what is present versus what is absent, what is backgrounded versus what is foregrounded and what is obscured versus what is prominently visible (Rose, 2012). In addition, each opposition will be observed in relation to the concepts of health, self and

body; e.g., the focus on and visibility of the Fitbit smart watch or activity tracker in certain shots, yet the blurring and obfuscation of the human subject *wearing* the Fitbit device.

4.4.3 Discursive Meanings

The knowledge collected through denotative and oppositional analysis will then inform the discursive meanings of the selected materials. In this level of analysis, the intention is to determine the social power relations that are covertly operating to cement specific representations of female health, self and body within the selected texts (Rose, 2012).

4.4.4 Intertextuality

In extracting the discursive meanings of the selected texts, the analysis will also make note of any intertextual references that allude to meta-narratives or themes (Rose, 2012).

4.4.5 Ideologies

Lastly, the analytical framework used will identify the ideologies that are embedded in and support the creation of the materials selected for analysis (Rose, 2012). By conducting a thorough and comprehensive audio-visual discourse analysis that deconstructs the structures of meaning present within the selected Fitbit texts, specifically related to health, selfhood and embodiment, this study will effectively answer the research question:

In what ways are the concepts of female health, the female self and the female body constructed and negotiated through Fitbit's strategic communication content?

4.5 Ethics and Reflexivity

There were no significant ethical challenges presented in the undertaking of this research, as the study only analyses publically-available commercial materials, and does not involve human participants, or infringe upon data protection regulations. Further, in using screenshots of Instagram posts to demonstrate the analytical process, usernames of individual users who commented on the posts were redacted, in order to protect anonymity. Nevertheless, it is important to note my role as a researcher, and the personal subjectivities that position me in relation to this topic.

The selection of Fitbit as an example of the actualisation of the QS movement, and subsequently the focus of this study, was an objective decision based on the company's extensive product line, dominantly female customer base, range of products available specifically for women and firm status as the wearables category leader. However, it is important to disclose my past involvement with Fitbit in a professional capacity as the

Corporate Public Relations Intern at FleishmanHillard San Francisco, one of Fitbit's public relations agencies, from February to May of 2018. Although I did not work directly on the Fitbit account, I am reasonably more familiar than the average person with Fitbit's strategic communication initiatives. I was not involved in any capacity in the strategising, development or execution of any of the materials analysed in this study. Therefore, despite this connection, the selection of Fitbit was unbiased, is justified by the statistics presented in Section 2.3. and was not influenced by my employment history.

In addition, it is necessary to address the inevitable subjectivity that is inherent to discourse analysis as a method. Discourse analysis relies upon the individual researcher's ability to decode meaning, a process which is dependent upon the researcher's knowledge of the social world (Shaw & Bailey, 2009). Considering that this knowledge is shaped and framed by one's sociocultural location and identities, it is probable that multiple, competing interpretations could be drawn from the same content (Shaw & Bailey, 2009).

To ensure an unbiased research design, I have provided robust theoretical context to explicate the motivations for pursuing an answer to the stated research question, sufficient rationale to justify each methodological choice made within this study and received ethical approval from an external ethics committee.

5 RESULTS AND INTERPRETATION

This chapter will present the results obtained from conducting an audio-visual discourse analysis of the two Fitbit strategic communication campaigns summarised in Section 3.3. Adhering to Rose's (2012) best practices for conducting visual analysis, the results and subsequent interpretation will consider the conceptualisations of female health, self and body within the selected Fitbit campaigns, in accordance with the relevant literature and conceptual frameworks outlined in Section 3. This chapter will then conclude by connecting the research findings to hegemony, patriarchal power, postfeminist culture and neoliberal ideology in the discussion section. Considered holistically, the results will provide an answer to this study's research question:

In what ways are the concepts of female health, the female self and the female body constructed and negotiated through Fitbit's strategic communication content?

5.1 Fitbit 2019 U.S. Mother's Day Campaign

The following sections will analyse the strategic communication materials developed for Fitbit's 2019 U.S. Mother's Day campaign. The analysis begins by examining the 30-second television spot, followed by the Instagram content developed for the campaign.

5.1.1 "Motherhood is Incredible"

Fitbit's 30-second television spot titled "Motherhood is Incredible" opens with a scene of a woman in labour, supported by her husband, who grasps her hand while sporting a Fitbit device. The scene is punctuated by the Fitbit logo, followed by text that reads, "1 Best Day Ever" (Appendix A, Figures 1-2; Fitbit, 2019d).

The focus then shifts to a scene of a mother finding her young son playing in the middle of the night, joyfully interrupting her "8 Hours of Sleep" (Appendix A; Fitbit 2019d). Next, the proceeding scene features a White, same-sex, female couple at the grocery store with their two children, who are both African-American, accompanied by the text, "402 Steps to Checkout" (Appendix A; Fitbit 2019d). The subsequent scenes depict an older woman playing with a child, who is presumably her grandson, an experience quantified by the text, "2 Kids at Heart," and a mother walking with her disabled son on his graduation day, as the text, "1001 Milestones" flashes on screen (Appendix A; Fitbit, 2019d).

The penultimate scene is the only moment within the sequence in which a woman appears alone, though the audience can reasonably assume that she is also a mother (Appendix A; Fitbit, 2019d). The woman is portrayed completing a run, engaging in "45 Minutes of Me Time." The scene concludes with the woman tearfully gazing into the distance, grateful for her time of solitude (Appendix A, Figures 9-11; Fitbit, 2019d).

Finally, in the concluding scene, a couple discovers that they are expecting a child, a moment which is once again marked by the presence of a Fitbit device, and the text, "Motherhood is Incredible." The spot ultimately closes with the reappearance of the Fitbit logo and the call to action: "Know Your Body Better" (Appendix A, Figures 12-13; Fitbit, 2019d).

In analysing the denotative dimensions and oppositions within this text, auditory narration is noticeably absent, and is replaced by upbeat, thoughtful, instrumental music. Further, the tempo of the music fluctuates to match the rewards and challenges of motherhood depicted within the scenes. The female subject is always in focus in the shot, and is framed by muted colors and warm lighting.

To create cohesion between the diverse representations of motherhood constructed within Fitbit's "Motherhood is Incredible" spot, two elements are used. First, the spot attaches a numerical value to the activities that each mother is engaged in, effectively quantifying both the momentous and mundane experiences of motherhood. To complement this quantification, at least one, if not all, individuals present in each scene are wearing a Fitbit device, though only two of the women are seen directly interacting with the device (Appendix A, Figures 5 & 10). Further, the spot's closing text, "Know Your Body Better," alludes to the mission of the QS movement, self-knowledge through numbers. Thus, Fitbit's creative decisions within this spot effectively ground the concept of motherhood in the principles of the QS movement and in self-tracking cultures.

Returning to this study's focus on the conceptualisation of female health, selfhood and embodiment, it is important to note the ways in which the commercial's creative elements impact gender politics. While the material exhibits a deliberate effort to create diverse portrayals of race, sexual orientation, age and disability, women are nevertheless positioned in normative gender roles. Normative conceptions of motherhood and femininity are sustained by the depiction of mothers participating in stereotypical activities, such as grocery shopping, or bearing the responsibility of waking up with a child in the middle of the night. Moreover, the conceptualisation of female embodiment within the text aligns with the QS vision of the body as a machine-like entity. This claim is evidenced by the omnipresent wearable within each scene, regardless of the nature of the activity that the female body is engaged in. As such, the wearable is effectually likened to a bodily appendage or prosthetic, as it intrudes even in the moment of childbirth, the most intimate and traumatising female bodily experience. In addition, the normative conceptualisation of female embodiment is emphasised in the equation of 'me time' – a period of time designated for reflection, mindfulness or relaxation – with exercise. The convergence of 'me time' and 'fitness time' echoes neoliberal sentiments which enforce a responsibility to perform rigorous body work. However, though the inclusion of the 'me time' scene functions as a reinforcement of hegemonic female *embodiment*, the scene simultaneously disrupts conventions regarding female *selfhood*. By acknowledging that women have individual identities and desires *excluding* those related to their roles as mothers, the text restores female agency and autonomy. Consequently, though "Motherhood is Incredible" has progressive elements, interpreted holistically, the material ultimately *sustains* gender normativity through its reliance on neoliberal and QS discourse.

5.1.2 “Real Fitbit Moms”

The second component of Fitbit’s 2019 U.S. Mother’s Day campaign is its Instagram content, which highlights “Real Fitbit Moms” (Appendix B; Fitbit, 2019b). The series of posts is introduced by two short video clips, combined in one post, which feature four of Fitbit’s female employees sharing anecdotes that detail what they enjoy most about motherhood (Appendix B; Fitbit, 2019b).

The first post introduces Karla, the Technical Director of Device Engineering, Jen, the Vice President of Communications, Kate, the Director of Brand Partnerships and Cristina, the Senior Manager of Performance Marketing. The subsequent eight posts within the campaign are dedicated to showcasing each individual employee. Each employee is given two dedicated posts, one being a graphically-designed key quote from their interview, combined with a still image derived from the video content, and the second being the designated employee’s full video clip. Each employee post follows this pattern, excluding the post dedicated to Jen, who focuses her story on her relationship with her mother, rather than with her own children (Appendix B; Fitbit, 2019b). The concluding post in the campaign is a motion graphic which displays the text, “You Inspire Me,” as pastel pink, purple and periwinkle colours fade throughout the background (Appendix B; Fitbit, 2019b).

The video content used within the “Real Fitbit Moms” campaign embraces neutral tones and bright lighting, and is scored by joyful, upbeat, instrumental music. Each employee narrates her corresponding scene, which is composed of behind-the-scenes footage, and playful, light-hearted shots of the women interacting with their children, or, in Jen’s case, her mother. This creative decision gives the video content organic, genuine and authentic qualities. The graphics that precede each video clip diverge from the neutral aesthetic, relying on purple and lavender – stereotypically feminine – tones to convey the content (Appendix B, Figures 2, 4, 6, 8, 10). Lastly, excluding the young children present within the scenes, all individuals featured within the video are wearing a Fitbit device.

In considering the ways in which Fitbit’s “Real Fitbit Moms” campaign contributes to the construction and negotiation of the concepts of female health, selfhood and embodiment, it is important to note the language used by the featured Fitbit employees to describe their experiences in motherhood, and the parallelism between this language and the discourse employed by the QS collective to promote self-tracking practices. While Kate explains how she and her son, Cooper, “find [their] fit together,” Cristina claims that motherhood motivates her to be healthy, so “[she] can see [her] grandkids” someday (Fitbit, 2019b). Moreover, the final post in the campaign boasts the text, “You Inspire Me.” Though this post is seemingly directed towards the numerous mothers who ‘inspired’ the campaign, it also serves as a deliberate

reference to two of Fitbit's most successful and profitable activity tracker models, the Fitbit Inspire and Fitbit Inspire HR. Mobilising tropes of motivation and inspiration, Fitbit's strategic language not only draws on the discourses of the QS movement, but also of healthism, ultimately functioning to construct the narrative that, in order to be good, 'inspirational,' mothers, women must prioritise their health and "find their fit."

To conclude the analysis of Fitbit's 2019 U.S. Mother's Day campaign materials, it is necessary to address the strong intertextual references that form the "Real Fitbit Moms" campaign. As discussed in Section 1.4., Silicon Valley companies have been repeatedly criticised for maintaining staggering gender disparities within leadership roles. Therefore, Fitbit's decision to "[look] for inspiration within," and embrace "real moms that work at Fitbit" in the development of its strategic communication content serves as both an acknowledgement and remediation of the company's role in upholding the gender status-quo (Fitbit, 2019b). Further, the female employees that are included in the campaign all possess senior-level roles, ultimately demonstrating a dismantling of structures of gender inequality, and propagating a conceptualisation of female selfhood that supports dynamic and capable women.

5.2 Female Health Tracking Campaign

In order to present a comprehensive interpretation of Fitbit's conceptualisation of female health, selfhood and embodiment in its strategic communication materials, the following sections will analyse the components of Fitbit's campaign to promote its female health tracking platform. The analysis will first focus on the 50-second television spot titled "Introducing Female Health Tracking," then will conclude by examining the five Instagram posts developed for the campaign.

5.2.1 "Introducing Female Health Tracking"

Fitbit's 50-second television spot titled "Introducing Female Health Tracking" opens with an image of the Fitbit Versa, the brand's premier smart watch, immediately establishing the text's commercial nature (Appendix C, Figure 1). This image is then followed by a shot of a woman paddle boarding, though her face is obscured by backlighting and the text overlay, "Introducing Female Health Tracking" (Appendix C, Figure 2; Fitbit, 2018b). The text overlay remains on-screen for the next two scenes, one of which features two women jogging, while the other presents a woman awakening next to her partner, instinctively checking her female health app on her Fitbit Versa from the moment she awakens (Appendix C, Figures 3-6). During these scenes, the narrator states that "Fitbit's goal is to help you reach your goals," a mission that is supposedly reinvigorated by the development of the female health tracking system (Fitbit, 2018b).

The sequence progresses to reveal the app interface, before introducing the spot's next character, a mother (Appendix C, Figures 7-9). The mother is seen playing with her two children, doing yoga and preparing a meal, all of which are guided by the tracking platform's ability to "connect the dots between what's going on with [her] cycle, and what's going on in [her] life" (Appendix C, Figures 10-12; Fitbit, 2018b). While the following scenes depict women engaged in various health- or fitness-related activities, what is important to note is the accompanying narration throughout these scenes. The narrator states:

With a better understanding of what's happening in your body, and when it's going to happen, you'll know what to pack for your next vacation, when you've got to get some gym time, and when it's 'go time' (Fitbit, 2018b).

The narration continues by stating that it is 'about time' women saw the 'big picture' related to their health, implying that a woman's reproductive health status is fundamentally unknowable without the use of a Fitbit device.

The spot concludes with several images of women checking their Fitbit device or female health app, ultimately closing with the reappearance of the Fitbit Versa, complemented by the text, "Live Your Best Life" (Appendix C, Figure 25; Fitbit 2018b).

The spot's narration is coupled with upbeat, techno music, and a bright, clean color scheme, featuring crisp imagery. In addition, while the materials analysed in Section 4.1. positioned the female subject as the main focus of each scene, and the Fitbit device as a secondary, yet visible accessory, the "Introducing Female Health Tracking" spot devotes more screen time to the Fitbit products. The inclusion of multiple scenes in which the female subject is only recognised by her hand, bedecked with a Fitbit Versa, conceptualises female selfhood and embodiment as practices that are linked to self-tracking behaviours. Building on this argument, the spot lacks the character development exhibited in the materials presented in Section 4.1., as demonstrated by the appearance, and disappearance, of several women whose only purpose within the spot is to be a vessel for a Fitbit device (Appendix C, Figures 13, 15, 17, 21, 24). The reduction of the female subject in these scenes reinforces notions of a fragmented self, and the augmentation of the body, which emerge in the QS context.

Moreover, throughout the spot, women are engaged in active, exercise behaviours or behaviours related to health and wellness. As such, the dominance of normative femininity is asserted within this material. Women are offered Fitbit's female health tracking system as a solution to 'living their best lives,' lives which are conceptualised by Fitbit as being oriented towards activities such as selecting outfits for a vacation, maintaining a rigorous gym schedule and exercise routine, or determining when to engage in sexual activity, based on an ovulation

window. The combination of these elements constructs a narrow, hegemonic vision of femininity, excluding numerous aspects of a woman's life. The most jarring exclusion within the material is the lack of any reference to a woman's professional life or career, an oversight which ultimately diminishes the perception of women's role in the workplace.

Lastly, the language used within the spot is directly borrowed from the discourses used to promote the QS movement. Most notably, the spot's concluding call to action, "Live Your Best Life," has considerable implications for health, selfhood and embodiment. Though determining what constitutes living one's 'best life' is a subjective process, it is clear from the materials presented the ways in which a 'best life' is quantified and measured according to Fitbit. Through the use of buzzwords, such as "easy," "the big [health] picture" and "knowledge," combined with the responsibility placed on women to be in control of and managing their own health, this material supports both QS and neoliberal discourse (Fitbit, 2018b).

5.2.2 Female Health Tracking Instagram Campaign

The final materials that will be analysed in this study are the five Instagram posts that support the launch of Fitbit's female health tracking system. The first post shared to announce the launch of the female health tracking platform contains two photos, both of which feature female subjects positioned alongside Fitbit devices, and the female health tracking app. The first photo within the post presents a woman, dressed in athletic attire, sitting down while looking at the Fitbit female health tracking app. The colours in the photo are bright, embracing quintessentially feminine tones, such as pink and purple. While the Fitbit devices are foregrounded, the female subject is backgrounded. In addition, though the subject's head is blurred out of focus, her body remains sharply in focus, as do the Fitbit device and app interface that are connected to her body. The denotative dimensions operationalised within these images contribute to the reconceptualisation of the female self, and female (dis)embodiment, as the images portray a woman's subjectivity to be intrinsically linked to a wearable device.

The second photo within the post is composed of fewer elements, and features a woman, dressed in casual-chic attire, walking down the street. The colours and lighting used mirror those used in the previous image; however, in this instance, the female subject's face is shown and in focus, though only from the profile. Unlike the previous subject, this woman is not directly engaged with the Fitbit she is wearing, although it is prominently featured within the image. Again, the Fitbit devices are foregrounded, while the female subject is backgrounded (Appendix D, Figure 1; Fitbit, 2019b).

To maximise the visibility of the devices and app interface, Fitbit shared a photo of two phones, displaying the female health tracking platform, and three devices, arranged in a puzzle-like fashion. While the devices display notifications related to a tracking capability, such as “9 days until fertile window,” or “4 days until next period,” the app interfaces showcase the ‘calendar’ and ‘trends’ pages within the app (Appendix D, Figure 2; Fitbit, 2019b). The colours used to arrange this image are various shades of pink and blue, colours frequently used in relation to fertility and childbirth.

The final posts shared to promote the launch of the female health tracking system are three motion graphics, all set against pale blue backgrounds. The first graphic features the text “Your Body, Your Cycle, Your Fitbit” flashing in a sequence (Appendix D, Figure 3; Fitbit, 2019b). While the word “your” appears in white text and does not move, the subsequent words appear in red text and change every second. The repetition of the word “your” emphasises the concept of responsabilised selves, drawing on neoliberalist and postfeminist ideals of empowerment, choice and agency. The second graphic highlights Fitbit’s female-centric design intentionality by flashing the words “For Women, by Women” with the second use of the word “women” multiplying and flashing several times in red text. Similar to the “Real Fitbit Moms” campaign outlined in Section 4.1.2., this post serves as a nod to the incongruence in FemTech design between the creator and the user of the technologies, and as an iteration of Fitbit’s commitment to maintaining gender equality. The third and final graphic in the series draws attention to the tracking capabilities possible within the female health tracking app, specifically: trend generation, mood and symptom logging and menstrual cycle tracking (Appendix D, Figure 5; Fitbit, 2019b). This graphic adheres to the same colour scheme as the previous two graphics, and depicts each functionality through the use small, flashing icons. The color scheme, motion element and brief visual language used within these posts gives the content a fun and whimsical nature. This creative decision combats the typically clinical approach to discussing female health, an already marginalised topic. By approaching female health in a creative and light-hearted style, Fitbit normalises and enlivens the discussion surrounding periods.

5.3 Discussion

Considering the results and analysis presented in Sections 4.1. and 4.2. of this study in conjunction with the relevant academic conversations identified in Section 2, the following section will evaluate the ways in which the results answer the stated research question, and both corroborate *and* call into question this study’s hypothesis:

Fitbit's strategic communication content mobilises neoliberal and patriarchal sentiments, ultimately constructing narrow conceptualisations of female health, selfhood and embodiment, which in turn sustains gender normativity.

Although the majority of the study's findings reflected Fitbit's role in stabilising gender normativity through their targeted strategic communication content, the results also revealed that there are exceptions to this statement. First, in the example of Fitbit's inclusion of a 'me time' moment in its "Motherhood is Incredible" television spot (Section 5.1.1.), Fitbit highlights that women have multiple roles and dynamic identities, diverging from hegemonic, normative representations which limit women to their domestic identities. Next, Fitbit's dedication to self-awareness exhibited through the creative strategies employed in the "Real Fitbit Moms" television spot (Section 5.1.2.), and "Designed for Women by Women" Instagram post (Section 5.2.2.), illustrates the company's commitment to challenging the patriarchal leadership that is characteristic of Silicon Valley companies. Thus, Fitbit's efforts to diversify their strategic communication content should be recognised for briefly offering non-normative conceptualisations of female health, selfhood and embodiment.

Despite these initiatives, when considered holistically using the conceptual frameworks of neoliberalism and postfeminism, the results of the study indicate that Fitbit's construction and negotiation of the concepts of female health, the female self and the female body ultimately support the proliferation of gender normativity. Though effectively concealed in the 'progressive' representations of female health, selfhood and embodiment, neoliberal and postfeminist ideologies fundamentally structure women's engagement in self-tracking cultures, self-optimising behaviours and consequently, their use of wearable devices. Thus, even in 'diverse' conceptualisations, patriarchy, postfeminism and neoliberalism are always in play. For example, the 'me time' moment in the "Motherhood is Incredible" spot (Section 5.1.1.) loses its merit when it is analysed through a neoliberal, postfeminist lens. The sole act of engaging in 'me time' feeds into the postfeminist tension between a woman's 'liberated autonomy,' and her social obligation to self-monitor and self-regulate. While the female subject featured in the 'me time' moment exercised autonomy by choosing to take time for herself, she did so within the boundaries of the QS movement, equating the act of self-care with health and bodily management. Thus, examples such as the 'me time' moment, combined with the more overt examples of patriarchal, postfeminist and neoliberal power outlined in Sections 5.1. and 5.2. sufficiently answer the stated research question, and corroborate this study's hypothesis.

5.3.1 Methodological Limitations and Implications for Future Research

The conducted research advances the argument that the targeted promotion of wearables to women constructs narrow conceptualisations of female health, selfhood and embodiment, ultimately stabilising gender normativity. However, in the interest of maintaining reflexivity as a researcher, it is necessary to note the methodological limitations of this study, and the implications of this study's findings for future research. First, given the limited scope of this study, a niche sampling strategy was used. As such, the examination of strategic communication content developed by other wearable device brands was excluded, and the analysis focused exclusively on content developed within an American sociocultural context.

Second, though the selected materials contained valuable information that provided for a fertile analysis, the television spot material proved to be more insightful than the social media content. In addition, the audio-visual analysis conducted on the Instagram posts did not consider the information contained in the post captions, as this study is primarily concerned with interpreting auditory and visual conceptualisation.

Lastly, this study is largely theoretical, focusing on the ways in which abstract concepts are represented, and the impact of these conceptualisations on maintaining or threatening specific ideologies. Thus, the study does not address the ways in which these conceptualisations tangibly impact the lives of women who engage in self-tracking practices, or gauge their individual perceptions of their own health, selfhood and embodiment. Despite these limitations, this study provides ample evidence to support the claim that QS practices, self-tracking behaviours and wearable devices play a significant role in fuelling patriarchal, postfeminist and neoliberal ideologies, thus establishing this work as a meaningful contribution to the growing academic conversations regarding the development of the 'quantified woman.'

6 CONCLUSION

The findings of this study have demonstrated that Fitbit's strategic communication content constructs and negotiates the concepts of female health, the female self and the female body in ways that align with normative femininity, and neoliberal, postfeminist ideologies. By consistently positioning the female subject as an idealised, responsabilised self, driven by the constant orientation towards self-regulatory behaviours, Fitbit's strategic communication embraces the neoliberal and postfeminist notions that a woman's body is a site of enterprise, in constant need of monitoring and improvement.

The reconceptualisation of women as self-optimising subjects has significant theoretical implications, as it raises fundamental questions regarding what constitutes female personhood in the neoliberal, postfeminist sociocultural context. For this reason, and the reasons listed in Section 5.3.1., future research should further interrogate the conceptualisation of female health, selfhood and embodiment by expanding upon this study's research design. In widening the sample to incorporate global strategic communication content from Fitbit and its competitors, future research will be able to draw more macro-level conclusions regarding female health, selfhood and embodiment. Moreover, in order to investigate the connection between the promotion of wearable devices and its impact on women's lived experiences, subjectivities and perceptions, it would be useful to translate this study into empirical research, using interviews as the proposed method. In doing so, more in-depth and tangible insights could be gathered.

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APPENDICES

Appendix A – “Motherhood is Incredible”

Video URL: <https://youtu.be/2ltpJD5WKvM>



Figure 1.



Figure 2. (Annotated)



Figure 3.

The Quantified (Female) Self

Jourdan Webb



Figure 4.



Figure 5.



Figure 6.

The Quantified (Female) Self

Jourdan Webb



Figure 7.



Figure 8.



Figure 9. (Annotated)

The Quantified (Female) Self

Jourdan Webb



Figure 10.

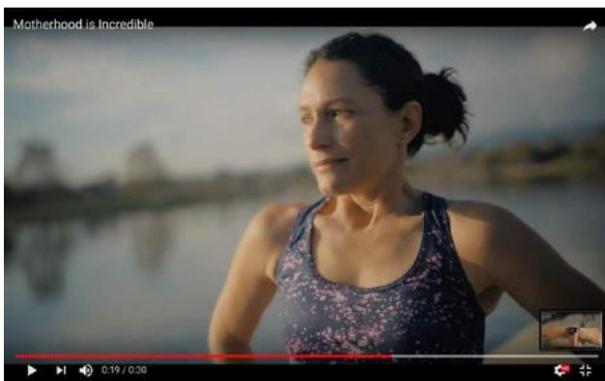


Figure 11.



Figure 12.

The Quantified (Female) Self

Jourdan Webb

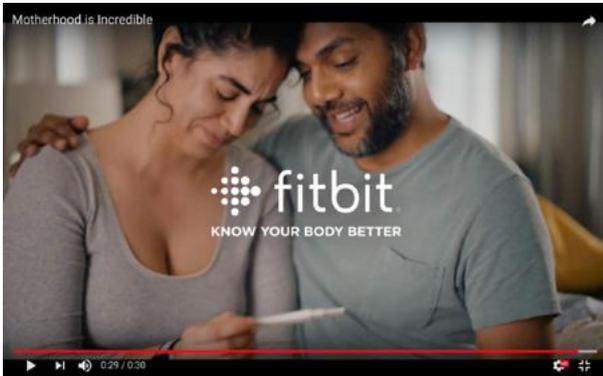


Figure 13.

Appendix B – “Real Fitbit Moms”

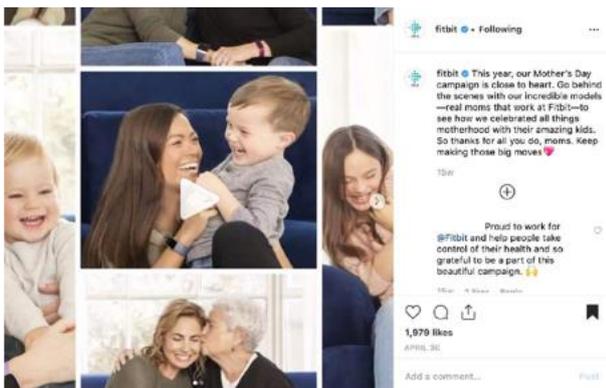


Figure 1. URL:

https://www.instagram.com/p/Bw471sEhWyf/?utm_source=ig_web_copy_link



The Quantified (Female) Self

Jourdan Webb



Figures 2.

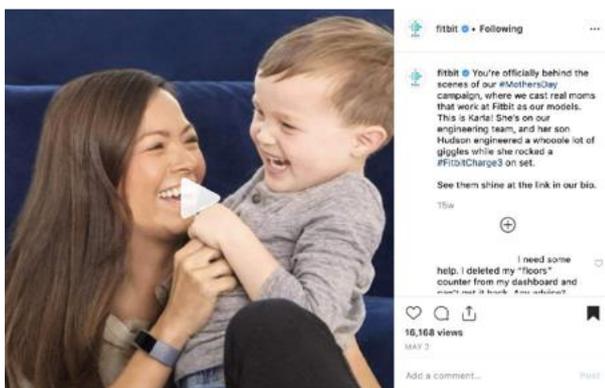


Figure 3. URL: https://www.instagram.com/p/Bw-WzZ4BUyK/?utm_source=ig_web_copy_link



The Quantified (Female) Self

Jourdan Webb



Figures 4.

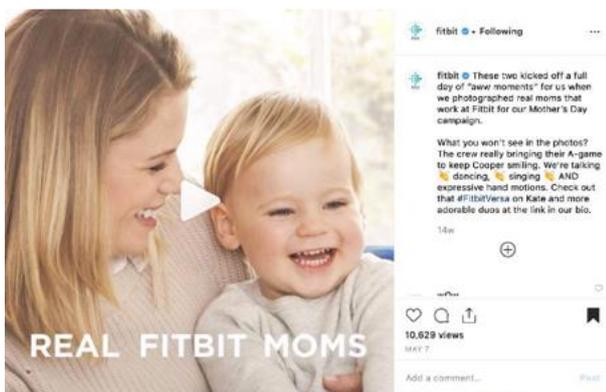


Figure 5. URL:

https://www.instagram.com/p/BxKqA9rBbUq/?utm_source=ig_web_copy_link



The Quantified (Female) Self

Jourdan Webb



Figures 6.



Figure 7. URL:

https://www.instagram.com/p/BxP_raalFxx/?utm_source=ig_web_copy_link



Figure 8.

The Quantified (Female) Self

Jourdan Webb

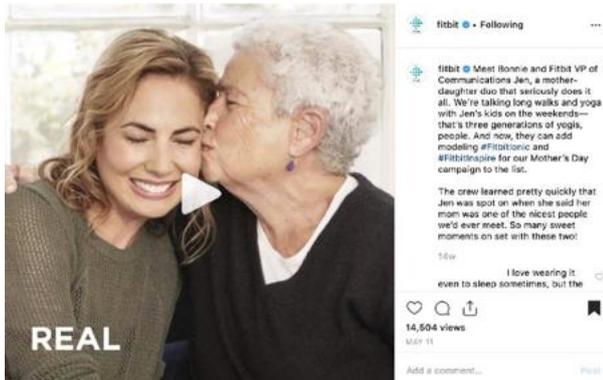


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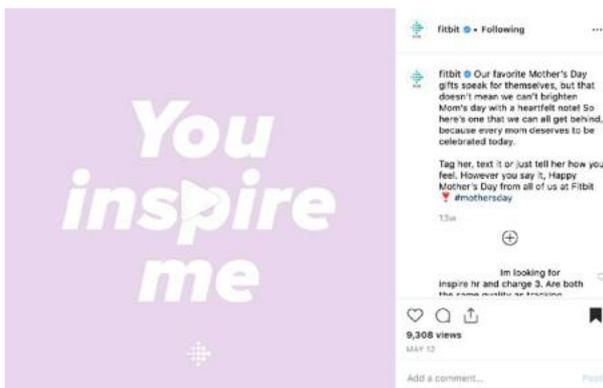


Figure 10. URL:

https://www.instagram.com/p/BxXeCmcFUEP/?utm_source=ig_web_copy_link

Appendix C – “Introducing Female Health Tracking”

Video URL: <https://youtu.be/pfDf4q1-vjw>

The Quantified (Female) Self

Jourdan Webb



Figure 1.



Figure 2.

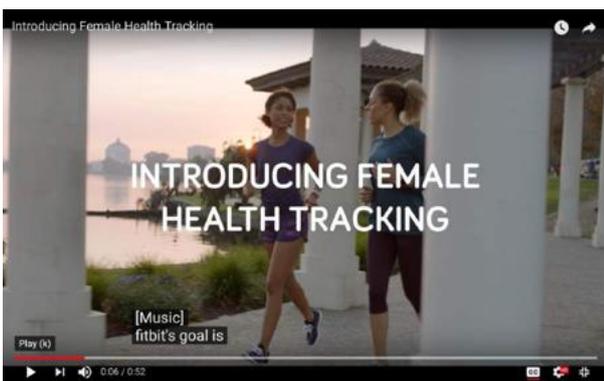


Figure 3.

The Quantified (Female) Self

Jourdan Webb



Figure 4.



Figure 5.



Figure 6.

The Quantified (Female) Self

Jourdan Webb

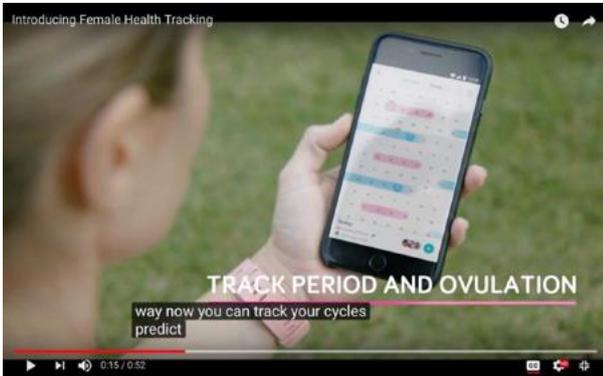


Figure 7.

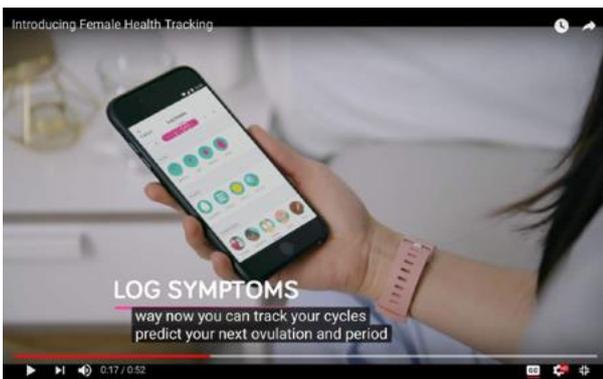


Figure 8.

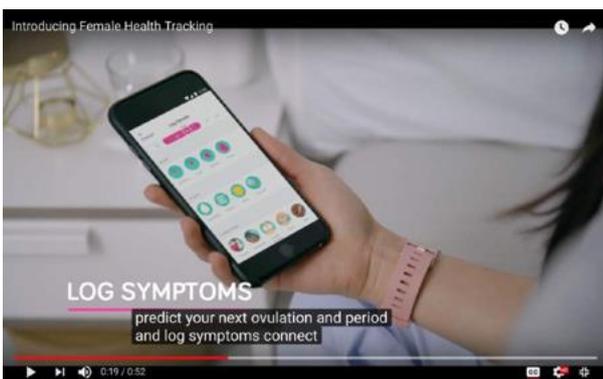


Figure 9.

The Quantified (Female) Self

Jourdan Webb



Figure 10.



Figure 11.



Figure 12.

The Quantified (Female) Self

Jourdan Webb

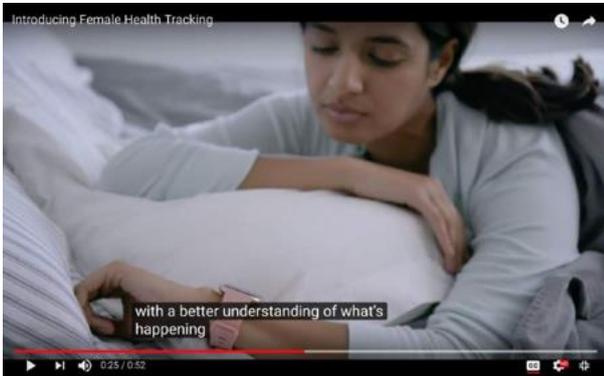


Figure 13.



Figure 14.

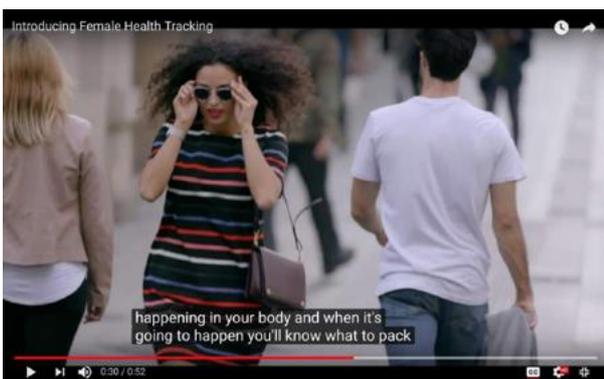


Figure 15.

The Quantified (Female) Self

Jourdan Webb



Figure 16.



Figure 17.

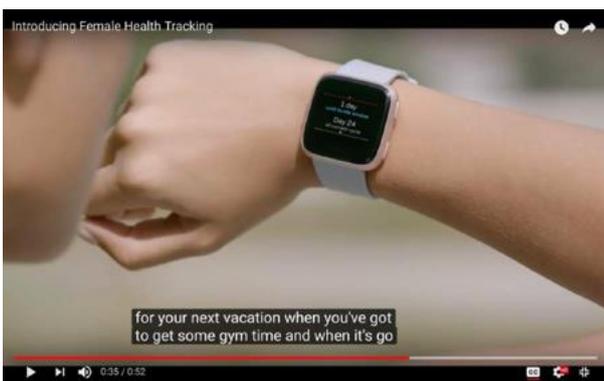


Figure 18.

The Quantified (Female) Self

Jourdan Webb



Figure 19.



Figure 20.



Figure 21.

The Quantified (Female) Self

Jourdan Webb



Figure 22.

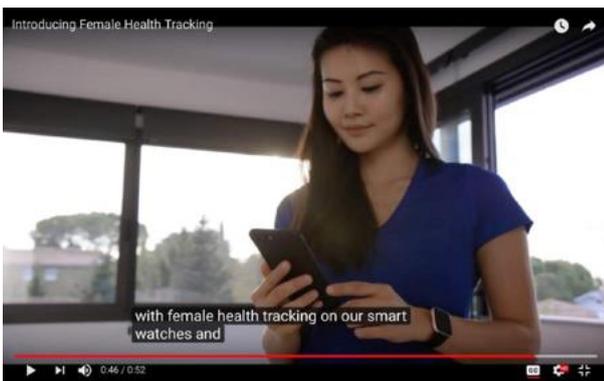


Figure 23.



Figure 24.

The Quantified (Female) Self

Jourdan Webb

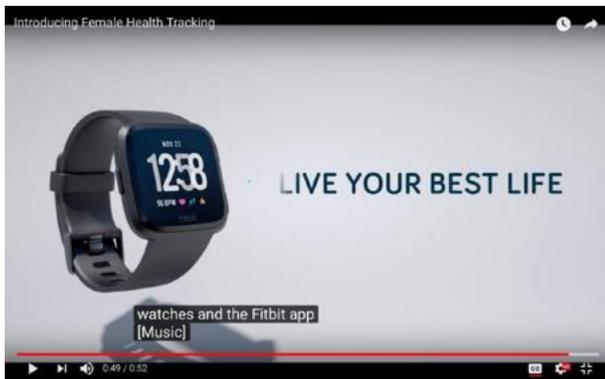


Figure 25.

Appendix D - Female Health Tracking Instagram Campaign



Figures 1. (Annotated)

The Quantified (Female) Self

Jourdan Webb

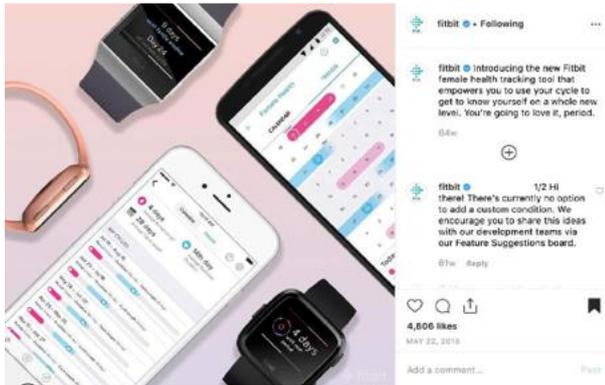


Figure 2.

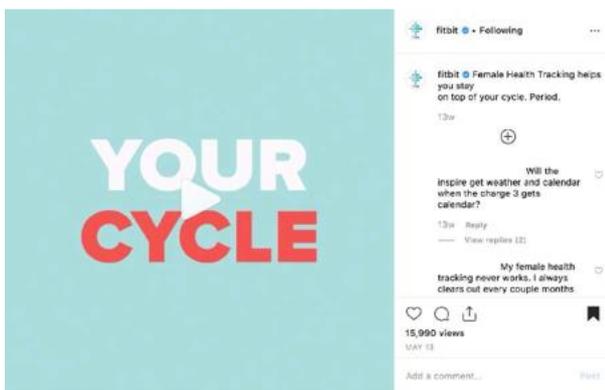


Figure 3. URL: https://www.instagram.com/p/Bxar-vCFa6_/?utm_source=ig_web_copy_link

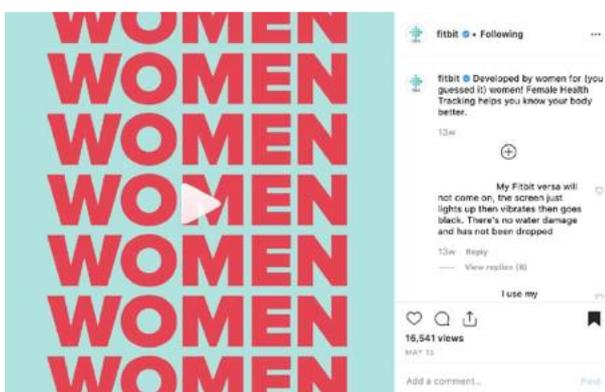


Figure 4. URL:

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The Quantified (Female) Self

Jourdan Webb

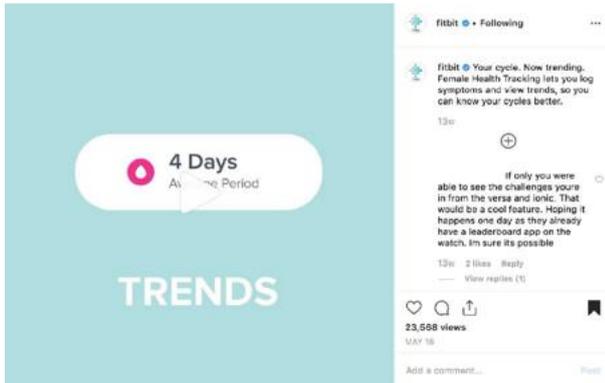


Figure 5. URL:

https://www.instagram.com/p/BxiXkn3DRUr/?utm_source=ig_web_copy_link