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DTEM 1401

Final Paper

May 7th, 2019

Wearable Fitness Technology: An Unhealthy Obsession with Health

In the mid-1700's, Benjamin Franklin began keeping a "virtue journal", a daily record detailing his strides toward becoming a better man. While he never arrived at the perfection he sought, Franklin reflected on his experience, "...I was, by the endeavour, a better and happier man..." (McKay, "Ben Franklin's..."). This practice of defining one's worth using measurable means is alive and well today, most prominently in the form of wearable technology. While Franklin was not sporting a Fitbit, his journal marks a very early beginning to the quantified self. Today's society appears to be less intrigued by virtue and instead is fascinated by health statistics such as daily steps, calories consumed, and minutes spent working out. Devices that capture these measures are collectively understood to enhance well-being and quality of life. They are consumers' means to becoming "better and happier". Health trackers are marketed as a means of agency and improvement, all positive ambitions. This has created a societal pressure to join the movement of constant tracking because doing so is positively regarded. However, it is often overlooked that there are potential downfalls to cultivating a sense of self based heavily on data which fails to consider the user's individuality. At first glance wearable fitness technology appears to soundly serve society, but at what point do the costs outweigh the benefits?

To begin, it is important to transparently understand that the measures often associated with wearable fitness trackers are accepted to be sound and true with little insistence for proof of

their accuracy. A Pew report found that 60% of US adults track their weight, diet, or exercise regimens (Mahdawi, “The Unhealthy Side...”). The goal here is to attain the healthiest state one can reach, with numbers as a fearless and deeply trusted leader. In Sharon’s piece, he discusses this practice as “empowerment”, which allows for independence from medical sources in regard to individual health. He writes that wearable technology provides new means of informing users through “self-surveillance”, an experience he portrays positively (Sharon, “Self Tracking...”). However, simply because the user has access to data and is *more* informed does not mean they are *accurately* informed.

It is possible that data points users have been conditioned to believe are “healthy” are part of marketing ploys and not always medically sound. The most notable example is the 10,000 steps per day goal that has taken the fitness tracker world by storm. How can one number define “health” for every single person on the planet? A trick question. It simply cannot. Users are praised for reaching this specific number of steps, yet it is an objective goal that does not account for each individual body. The benchmark is praised as the epitome of a healthy lifestyle without question as to the science behind it. Or lack thereof, given that this arbitrary figure stems from a 1960’s Japanese marketing campaign for the first wearable step counter. Instead of using evidence-based findings to create a step goal, marketers, “...just felt that was a number that was indicative of an active lifestyle and should be healthy” (Cox, “Watch Your Step...”). While there are some research studies that have aimed to test the validity of this specific number goal, nearly all have been carefully designed to prove 10,000 as key. Usually this is done by making the point of comparison significantly lower, say 5,000 steps a day, resulting in the former inevitably proving better. What these studies don’t account for are ranges that fall in between, like 7 or

8,000. How do users know these aren't the ideal figure instead? Even Apple's health and fitness director, Jay Blahnik, remarks on a lack of science. "On the Apple watch, he confesses, "Some of the Watch's goals are just judgment calls...There's no science that suggests you need to stand up for a minute an hour for 12 hours a day..." (Lopatto, "What the Apple..."). These are merely two examples of data points that are marketed to consumers as one-size-fits-all. Why do users follow these statements blindly? The companies themselves have quite literally told us, *there's no science*.

A blend of positive reinforcement and societal expectations for success have allowed fitness trackers to thrive in popularity. In his book on addictive technology, Adam Alter speaks to the step obsession, "The gold standard is step milestones, or the number of steps the wearer walks each day. Reach the goal—ten thousand steps, for example—and the device emits a reinforcing beep" (Alter, *Irresistible*). Pavlov's dogs have become the Apple Watch's users, eagerly marching in place to receive a reward. Taking this logic one step further, users are encouraged to gameify their health journey by sharing their data with others in a competitive air. Discussing the use of Fitbit's social feature, Manouk Akopyan shares, "...We actually see in our data that those who are more socially connected with their friends are actually more likely to have higher activity rates" (Akopyan, "Fitbit's Marketing Strategy..."). Reflective here is a social pressure to fit in and a common understanding that engaging in these quantifiable behaviors will be rewarded with both good health and social acceptance. However, this is not always the case. Growing attached to arbitrary numbers and manifesting them as an identity can provoke obsessive and unhealthy tendencies.

In an Arianna Huffington article on the limitations of quantifying oneself, she cites an example of tracking devices as normalizing disordered behavior. In regard to sleep, she observes, “According to [a *Journal of Clinical Sleep Medicine*] study, a growing number of people are convincing themselves they have a sleep disorder because they’re relying more on information from their sleep trackers than on other inputs, like how they feel” (Huffington, “The Limits of the...”). Huffington draws attention to a serious consequence of a numbers-based existence: the loss of intuitive living. As humans, health needs are individualized and cannot possibly be identical across the board. That being said, the ability to intuitively listen to one’s body and understand its needs based on the signals it provides is critically important to wellbeing. For those with histories of eating disorders and other obsessive disorders, growing preoccupied with data points that are masked as “healthy” can backfire on the user. Huffington cites Joanna Imse, an eating disorder specialist, who remarked that these devices, “...might cause children to solely focus on the device’s command, rather than empowering them to intuitively listen to their bodies” (Huffington). Fitness trackers can mute one’s ability to intuitively respond to their own body and make choices based on their needs, not what they are conditioned to believe are their needs. Sharon also touches on this in his piece, noting, “As one’s trust in numbers grows, it is feared, one’s trust in subjective, embodied, and intuitive knowledge decreases” (Sharon, 105). A similar train of thought emerges when fitness trackers are understood as addictive technologies.

In his book, *Irresistible*, Alter quotes an addiction expert who analyzes, “...focusing on numbers divorces you from being in tune with your body. Exercising becomes mindless, which is ‘the goal’ of addiction.” (Alter). Wearable technology does not factor in individuality,

complicating access this intuitive knowledge. This point is best understood by utilizing personal anecdotes. Elizabeth Lopatto makes a strong case for this point when she explains her situation:

The constraint on the Move goal is my rest days. I don't do yoga on Tuesdays or Thursdays. Instead, I cook, usually in big enough portions that I can use the leftovers for lunch the next day. The relevant thing here is that cooking takes time; I can't work out *and* cook at the same time. Without rest days, I hardly cook at all, which means I spend more money on takeout, which is generally worse for me than the foods I prepare myself....The Apple Watch doesn't care about any of this (Lopatto, "What the Apple Watch...")

In this example, it is clear that the Apple watch is programmed to make overarching assumptions about what defines health in an objective sense. For vulnerable consumers, following these unsupported, fabricated standards can steer them in the wrong direction.

While fitness trackers encourage users to make healthy lifestyle changes, it must be noted that this is the case for the average person, not all people. A study by Simpson and Mazzeo analyzed the relationship between fitness trackers and eating disorders in undergraduate students. They found that, "'fitness tracking... emerged as a unique indicator of ED [eating disorder] symptomatology. This finding suggests that activity monitoring might be more aligned with disordered eating attitudes...'" (Schreiber and Hausenblas, *Psych Today*). These devices will not necessarily cause eating disorders in the average person, but can target those at a higher risk for developing an illness by masking their use as healthy and in the best interest of the individual.

Such a loss of intuition can disrupt one's trust in their own health journey, leading them to think what is objectively touted as healthy is also healthy for them... even if it's not.

Nearly all fitness trackers encourage tracking calories or food intake, providing praise if the user is well-behaved in terms of staying under a specific number. In this sense users are indirectly told to eat less because this is commonly seen as healthy. However, for someone with a history of disordered eating, the device's message could trigger unhealthy restrictive and self-harming behaviors that the user can justify in the name of this false health claim. When asked about her opinion on fitness trackers, masters student Nathalie Qin confessed, "The fact that it was an app made it feel like it was scientifically based and therefore justified my restriction...It didn't feel like I was arbitrarily making a decision to eat less, I was 'following a program.'" (Roberts, "Can Fitbit Retrigger..."). While Qin spoke about Fitbit specifically, all fitness trackers fit this description of appearing to promote health for all users, especially at a scientifically justified level. Looking at the iOS 8 as another example, one can see that the Health app is pre-downloaded and has no option to be deleted. It is forced on the user. Clearly there is a social pressure to join the fitness and health tracking movement. There is quite literally no escape. Michele Kabas, a licensed clinical social worker who specializes in eating disorders shares her opinion on this decision by Apple, arguing, "That's irresponsible—that's not thinking about how this might impact some people, and how some people might not want it" (Larson, "Are Fitness Trackers Dangerous..."). Companies are aggressively sending a message to consumers that they need to be tracking their health data and therefore understand themselves as numbers. Are they justified in doing so?

It turns out many of these companies are well aware they are not scientifically backed in their measures, and even go as far as to address this themselves. In an article for *Fool.com*, Robert Duprey quotes Fitbit as confirming, “The trackers aren't scientific or medical devices...” (Duprey, “Can You Trust...”). Thanks to careful marketing and scare tactics, consumers see these fitness tracking products as answers to health problems that they can trust, the same way they'd trust a licensed and thoroughly trained professional. A professional who physically examines them and focuses on their personal, individual health complications and issues. However, companies state themselves that this is not the case. They are not filling this role, but society has assumed this to be the case regardless. Fitness trackers should be marketed as transparently as possible. Until then, they will continue to take advantage of a vulnerable consumer market that is convinced health is not only objective, but that quantifying themselves by the means of arbitrary measures will grant them good health and happiness.

Arwa Mahdawi takes this analysis further by exposing fitness trackers as normalizing disordered behavior. She observes, “With society increasingly embracing a sort of ‘techorexia’ that rewrites compulsive behaviour as healthy, it is becoming easier for people with serious eating disorders to pretend there's nothing wrong.” (Mahdawi, “The Unhealthy Side...”). Mahdawi raises the point that the act of quantifying oneself can quickly become an obsessive tendency. Since doing so is masked as a health-forward initiative with a positive connotation, it is rarely questioned...even by those who should be questioning it. Eating disorders thrive on extremes; fitness trackers push users to these extremes by promising good health as a reward. The culture of wearable technology is built on social pressure to prove that one is taking initiative of their health journey. For those with eating disorders, this journey looks starkly

different than the average person. Instead of achieving an excessive amount of movement, people in recovery may be instructed to move as little as possible in order to restore their health. Instead of obsessively tracking their intake, people in recovery may be instructed to mend their relationship with food and heal anxiety by learning to eat intuitively. How does this play out in the world of Fitbit and Apple Watch? These practices would elicit disapproval from not only devices, but also from fellow users. The socially constructed version of “health” that wearable technology culture has created tries desperately to shape wellness as one-size-fits-all. For those with special case health situations, there is little remorse.

Fitness trackers and wearable technology have paved a path for individuals to take charge of their health. It is no stretch of the imagination to say that these devices have helped the average person move their body, eat healthier, and overall lead a more health-conscious lifestyle. These positive outcomes act as a highlight reel. The conversation on wearable technology and the quantified self rarely steers away from these benefits. Fitness tracking has become a socially constructed means of communicating one’s health to those around them. These devices reward users for aligning themselves with health standards that dismiss the notion that health is a subjective journey. For those predisposed to addictive behavior or eating disorders, growing obsessed with these reward-based systems can cause distress. Health is an individual journey that simply cannot be standardized. The social pressure to conform is at an all time high. If one’s wrist is bare, it is assumed that they do not care; about their health, their wellbeing, their future. Until the companies behind these practices execute a stronger effort in clarifying this to their consumer market, those at risk will stay at risk.

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