
Embodying Data: Duoethnography as a Feminist Methodology for Studying Wearables

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Abstract

Wearable fitness trackers allow for health data to be collected passively; users simply have to remember to put on their fitness tracker in order to have their steps counted or heart rate monitored. Although these devices offer the promise of personalization through the collection of user-generated health data, they offer little customization and block access to the algorithms that translate the raw data into actual health statistics. This project argues that the generation of numerical data that can readily be graphed and compared to that of other users simplifies subjective and gendered experiences down to commensurable data points. We explore the use of duoethnography as a feminist methodology for examining the experiential and embodied aspects of self-tracking through the process of personal narrative.

Author Keywords

wearables; feminist methods; ethnography; self-tracking.

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous; K4.2 Computers and society, social issues

Introduction

The vast consumer market for wearable fitness trackers reveals that understandings of personal health have succumbed to a “measuring mania,” where health is numerically and visually represented in colorful graphs and pie charts. Deborah Lupton describes the phenomenon of digital health tracking as producing an “algorithmic subjectivity” that shapes and normalizes our understandings of bodies and behaviors; she describes these devices as “disciplinary” in their shaping of gendered bodies in ways that render them available and “amendable to monitoring, tracking and detailed analysis of the data thus generated” and collected [3]. Much of the rhetoric surrounding digital health tracking attempts to promote a sense of agency by encouraging users to take control of their health by collecting “accurate” forms of data; however, the ability to collect “user-generated” data is entirely defined by the affordances and limitations of the software and hardware design of wearable fitness trackers. Thus, the emphasis on quantification flattens the depth and complexity of personal health by relegating it to measurable physiological parameters and symptoms.

This project argues that the reliance on understanding personal health through measurable numerical representations that are passively collected can obscure subjective and gendered experiences and limit self-knowledge. As Geoff Bowker and Susan Leigh Star have powerfully argued, any technology of measurement and classification serves to legitimate particular forms of knowledge and experience, while rendering others invisible and illegible [1]. Using an intersectional feminist approach, we make the subjective and affective experiences of women visible by exploring the use of duoethnography as a feminist methodology for

examining the experiential and gendered aspects of self-tracking.

Methodology

The authors serve as the participants in the study. Using duoethnography as a methodology, the participants will explore the experiential and gendered aspects of health self-tracking through wearable fitness trackers. Duoethnography is a qualitative approach to studying how two or more individuals experience and give different meaning to a common phenomenon [4]. This methodology employs personal narrative to “simultaneously generate, interpret, and articulate data” about a common phenomenon, which in this case is the process of understanding one’s health through self-tracking [4]. The goal of the methodology is not to produce a single narrative but to celebrate difference in experience; thus, participants will discuss important differences within their larger shared experience [4].

Author 1 identifies as a cisgender straight female and a woman of color. Author 2 identifies as a cisgender queer female. Unlike autoethnography, in duoethnography the “self is not the topic of research but the site of the research” [2]. Each of the participants will engage in self-documentation through journal writing. Journals will be maintained for six months with a minimum of one weekly entry that will be a response to a shared prompt (semistructured question). The participants will be free to write additional entries. The prompts will focus on the affective and subjective experiences of self-tracking, such as physically wearing a tracker, sharing data with others, sharing data with corporations, reaching fitness goals, and failing to reach fitness goals. In addition to journal writing, the participants will engage in monthly

reflective conversations regarding the process of journal writing and the overall experience of using the self as a research site. Data analysis will occur in two phases. Phase I will occur throughout the process of writing where participants will integrate data collection and analysis processes as part of the journal writing process. Phase II will occur at the end of the six-month journaling period when responses will be coded using an iterative coding process.

Goals for Workshop

The project is still in the planning stages and we believe that we could benefit from workshopping the idea. In particular, we are interested in the following:

- Gaining feedback and ideas on the types of topics and prompts we should explore through the process of journal writing;
- Learning more about feminist methodology and the approaches that other scholars are using in their projects
- Identifying collaborators or other scholars who work on self-tracking or wearables
- Learning more about feminist design of software and/or hardware

References

1. Geoffrey C Bowker and Susan Leigh Star. 2000. *Sorting Things Out: Classification and its Consequences*. MIT Press, Cambridge, MA.
2. Rick A. Breault. 2016. Emerging issues in duoethnography. *International Journal of Qualitative Studies in Education*.
3. Deborah Lupton. 2014. Self-tracking cultures: towards a sociology of personal informatics.

In *Proceedings of the 26th Australian Computer-Human Interaction Conference on Designing Futures: the Future of Design* (OzCHI '14). ACM, New York, NY, USA, 77-86.
DOI=<http://dx.doi.org/10.1145/2686612.2686623>

4. Joe Norris. 2008. Duoethnography. In L. M. Given (Ed.), *The SAGE encyclopedia of qualitative research methods* (pp. 234-236). Thousand Oaks, CA: SAGE Publications Ltd. doi: 10.4135/9781412963909.n123