

REJECTING SELF-TRACKING DEVICES: AN ANALYSIS OF REFUSALS OF NUTRITION AND FITNESS APPS

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THE STUDY

Self-tracking devices (phone apps that track and quantify fitness and eating habits) are more and more present in daily life. These tools change the way people monitor their eating and fitness habits and their health in general. While studies have started focusing on the day-to-day use of these “quantified-self” devices (Pharabod et al., 2013; Régnier, 2018), the reasons individuals refuse to use these applications are still widely unknown.

The goal of this study is to better understand the motivation and reasons behind the refusal to use self-tracking apps. Sociologists have already investigated the social inequalities regarding digital devices in general, but what social differences exist regarding the non-use of these specific tools? In other words, when studying those who distance themselves from these apps, what social patterns and disparities can we find?

INEQUALITIES IN DIGITAL USE: SOCIAL DIFFERENCES, GENDER- BASED DIFFERENCES

It has already been shown that working-class individuals use digital devices less frequently, as “the digitally underprivileged are most often, and above all, socially underprivileged (Seux, 2018).”

Gender based inequalities can be found in addition to these social inequalities (Pasquier, 2006), as it has been shown that women seem to underestimate their capabilities and skills regarding the Internet and technology in general (Hargittai et al., 2006).

In order to respond to these questions we analyzed 61 individuals who expressed rejection towards diet or fitness self-tracking apps during a semi-directive interview. The population sample consists of 36 women and 25 men, with an average age of 47 years, and these individuals come from a variety of social backgrounds (Hargis, 2018).

We will first present our analysis which identified four distinct refusals. Next, we will reveal the interweaving inequalities between social backgrounds and gender regarding these digital hesitations and refusals. Lastly we will expand on a gender-specific resistance among women regarding the self-monitoring of their bodies.

METHODOLOGY

This corpus was first submitted for content analysis, then a quantitative analysis was performed. Nineteen refusal accounts were identified and coded into dichotomous variables that were analyzed (refer to p. 2). A textual analysis was also conducted. The interviews were taken from three different projects lead at Aliss, INRA (Diet4Trans, FacilEat4All, Nutriperso). Each individual was asked the same question (concerning the use and knowledge of self-monitoring nutrition and fitness phone applications).





4 TYPES OF REFUSALS

Two major lines of differentiation emerge. The first one, “**familiarity versus unfamiliarity with self-measurement**” (axis 1), opposes individuals that are familiar and individuals that are unfamiliar with self-measure. The second one, “**personal self-measure refusal versus social refusal**” (axis 2), opposes individuals who refuse self-measure for personal reasons and those who refuse self-measure because they perceive it as being a practice imposed by society. Four clusters differed in their rejections of self-tracking apps.

“Digital unfamiliarity”

The first group consists mostly of men and there are a few more employees and manual workers (ouvriers) in this group compared to the others. These individuals refuse self-tracking apps because they are **unfamiliar** with them (particularly for the women in this group) or are **uninterested** in these types of technologies in general (particularly for the men). Overall, these individuals feel that certain types of technologies, such as self-measuring technologies, are useful to others (such as family members), but not for themselves personally.

“Rejecting technologization”

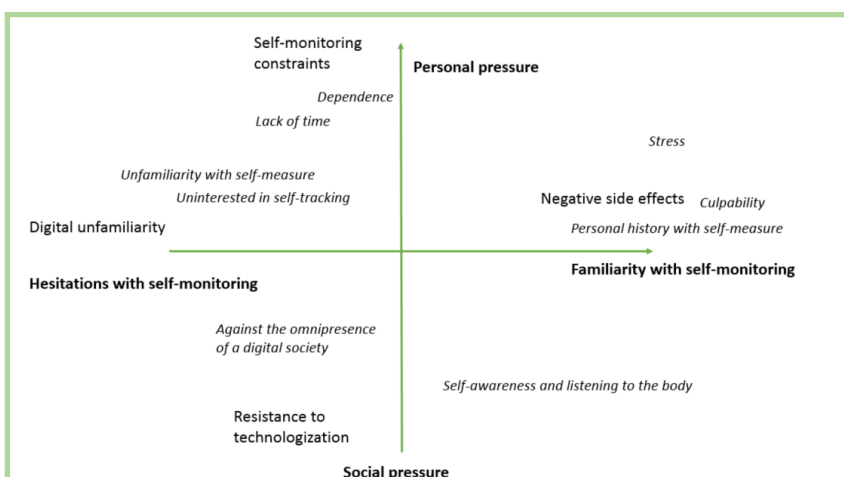
The second group consists primarily of women from middle class backgrounds. These individuals are characterized by their resistance to measuring food consumption, especially by using digital tools. In general, these individuals reject the omnipresence of quantification in society. This rejection is supported by a “**self-awareness**” argument, where what the body feels and senses is particularly important and more trustworthy than the data provided by technological tools.

“Personal side effects”

In the third group, composed of younger individuals (20 to 40 years old), there are more women than men. These individuals refuse self-tracking apps because they see them as harmful as they can cause **negative effects such as stress and culpability**. This posture is often linked to complex personal experiences in the past towards eating habits and weight. Using self-tracking apps would disrupt new-found balanced daily rhythms.

“Self-quantification as a constraint”

Finally, the last group is comprised of more men than women, the majority of whom are from upper- and middle-classes. These individuals refuse self-monitoring through apps because they simply **do not have time and are not interested in recording** everything they eat or all exercising habits of the week. They also do not wish to be dependent on these types of devices and some express **hesitations towards the storage and use of their data**.



Four Types of Refusals

QUANTIFYING DISCOURSE

Based on previous methodology (Régner et al., 2018), a principal component analysis was carried out on the 19 active variables determined by the type of refusal. The first three axis', accounting for 28% of the total variance of the sample, were used as active variables in order to determine coherent groups of individuals that share common refusals.



SOCIAL AND GENDER INEQUALITIES IN USING DIGITAL TOOLS

Less at Ease and Less Familiar: Hesitations concerning women and the working-classes

In our population sample we found that it was **mostly women who were unfamiliar with new technologies** in general and in particular with self-tracking apps. We also observed that the majority of these individuals come from **working-class and middle-class backgrounds**.

These results confirm previous studies that show that individuals from the working-classes are less familiar with new digital tools. In addition, women seem to be less comfortable and less confident with technology compared to men (Seux, 2018; Hargittai et al., 2006). This typical lack of self-confidence and unfamiliarity with these devices clearly transpires through Virginia's testimony:

"I'm not really that tech-savvy and everything, I hate all that" (Soraya, employee)

"I'm afraid to have a smart-phone, I'm not sure I'd know how to use it" (Cathy, employee)

*"[The digital watch] is pretty complicated. Maybe a bit **too complicated for me** to use."*

Refusing a Digital Society: Hesitations concerning men and the middle- and upper-classes

"I like human contact, I really like talking to people" (Julien, manager)

"It seems like you're super connected but really it just isolates people, they spend more time on their phones than talking together » (Farid, intermediate profession)

Conversely, a **majority of men and individuals from middle- and upper-class backgrounds** who refuse self-tracking apps argue that they are opposed to a society where digital tools seem to take over social, professional and personal spheres. These individuals explain that these tools create frustrations and can, like Farid stated, *"isolate people"*.

These individuals actively refuse to use self-tracking apps because they are particularly **hesitant and suspicious regarding the omnipresence of digital devices in today's society**. In addition, some men refuse to use these apps because they are wary concerning the storage and use of data. As François stated *"where is the data stocked and how is it protected?"*.

The word "data" was mentioned only by men during the questions and discussions regarding self-tracking.





AVOIDING MEASURE AND CONTROL: CHARACTERISTICS OF WOMEN

A “natural” preference when dealing with diet and fitness habits

The **differences in discourses between women and men** were the strongest in our population sample. Many women in our sample, from various social backgrounds, express preferences for a natural and instinctive relationship with the body regarding eating habits and physical activity, rather than counting on measuring and controlling these activities in a quantified way. Studies have, for example, shown that self-tracking tools increase sexual and reproductive control over women’s bodies (Lupton, 2014).

“Our bodies speak for themselves” (Ariane)

“If I don’t want to eat, I don’t eat” (Sally)

“It’s instinctive” (Celia)

This confirms other studies that show an opposition between the representations of women’s and men’s bodies related to technical and natural components: “the representations of the female body rely on natural models while the representations of the male body rely on the technical sphere” (Rémaury, 2000). **Many women in this study distance themselves from these technical tools that add to the already existent daily management and control of their bodies.** Women therefore are faced with health and beauty standards and “listening to the body becomes an important part of understanding oneself” (Rémaury, 2000).

Karine: *“My husband...he has an app and when we go biking, on day trips, in the Beaujolais, we go on these big trips and he, well he measures everything. It’s a guy thing. How far we go, how steep, the average speed. I make fun of him, I don’t care one bit. I just wanna go biking and see the Beaujolais. For me, this sort of thing doesn’t have anything to do with exercise”.*

WHAT WORDS DO WOMEN USE?

The textual analysis we conducted confirms the strong differences in testimonies between women and men. Because these self-measuring tools are perceived as controlling, women are particularly reluctant to using them because of the negative effects they produce (stress, dependence).

The words **“count”** and **“control”** were particularly used by women during their interviews concerning the non-use of these apps. The word **“scared”** was also used by women in regard to unfamiliarity with digital tools as well as in regard to their bodies (the word **“weight”** was also used mainly by women – 19 out of 26 times).

CONCLUSION

These refusals concern not only the hesitations associated to the unfamiliarity of these tools but also the rejection of these tools because of their negative side effects. These tools also imply self-monitoring pressure, whether personal or social. This study underlines the **social inequalities in regard to self-tracking fitness and diet tools**, and the differences between men and women prove to be the most evident. Ultimately, these refusals tell us more about **the gender-based differences** regarding the use and perception of digital tools.

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