

Volume 40  
issue 3 / 2021

Contracampo e-ISSN 2238-2577  
Niterói (RJ), 40 (3)  
sep/2021-dec/2021

Contracampo – Brazilian Journal of Communication is a quarterly publication of the Graduate Programme in Communication Studies (PPGCOM) at Fluminense Federal University (UFF). It aims to contribute to critical reflection within the field of Media Studies, being a space for dissemination of research and scientific thought.

## Gamification as a biopolitical strategy in health care apps

TÂNIA MÁRCIA CEZAR HOFF

Escola Superior de Propaganda e Marketing (ESPM) – São Paulo, São Paulo, Brazil.  
E-mail: thoff@espm.br  
ORCID: <https://orcid.org/0000-0002-3619-034X>

ANA CATARINA HOLTZ

Escola Superior de Propaganda e Marketing (ESPM) – São Paulo, São Paulo, Brazil.  
E-mail: anaholtz89@gmail.com  
ORCID: <https://orcid.org/0000-0002-7609-941X>

LUCAS LOPES FRAGA

Escola Superior de Propaganda e Marketing (ESPM) – São Paulo, São Paulo, Brazil.  
E-mail: lucaslf.fraga@gmail.com  
ORCID: <https://orcid.org/0000-0003-0259-3252>

TO REFERENCE THIS ARTICLE, PLEASE USE THE FOLLOWING CITATION:

Hoff, T. M. C.; Holtz, A. C.; Fraga, L. L. (2021) A gamificação como estratégia biopolítica em aplicativos de cuidado com a saúde. *Contracampo – Brazilian Journal of Communication*, v. 40, n. 3.

**Submitted on: 05/30/2021 / Accepted on: 10/20/2021**

**DOI – <http://dx.doi.org/10.22409/contracampo.v40i3.50256>**

## Abstract

In this article, we address the appropriation of gamification strategies by the health market, with the aim of problematizing gamification as a biopolitical strategy. In this perspective, we define the following question: how gamification strategies, present in health care apps, mobilize biopolitical convocations to produce subjectivities characteristic of neoliberal subjects? As for the theoretical foundation, we mobilized studies of biopolitics, biomedicalization, neoliberalism and gamification, which support the analysis of three contemporary health care apps. As a result, we identified two biopolitics-gamification approaches, which manifest themselves in two instances: i) a narrative instance, made possible by individual choices that occur within a controlled environment; and ii) a competitive instance, whose objective is to engage the subjects in the care of their health.

### Keywords

Communication and consumption; Gamification; Biopolitics; Healthcare apps.

## Introduction

In our neoliberal society (Dardot & Laval, 2016), health care has become an individual responsibility: we need to actively “identify risk factors, undergo preventive exams, change the way of life” (Lipovetsky & Serroy, 2015, p. 231). In this context, vigilance and performance become constitutive aspects of a way of life that constantly mobilizes us to optimize our bodies: it is not enough to be healthy; we also need to engage in self-care practices for the efficient management of life (Rose, 2011).

These self-care practices, according to Prado (2013), are founding elements of biopolitical calls, which circulate through the social fabric through media discourses. These calls promote “projects of good life” (Prado, 2013, p. 30), which serve as a kind of roadmap for personal success: what should or should not be done to achieve well-being, achieve a full life, live well. Inserted in a neoliberal context, biopolitical calls mobilize a performative body, subject to self-administration, engaged in the search for continuous enjoyment and optimization of life (Rose, 2011).

In a world increasingly crossed by digital communication (at least in certain social layers), biopolitical calls are multiplied by technological devices – which are the protagonists in the engagement and realization of individual self-care projects. In the original settings of certain smartphones, for example, it is possible to find apps (common short for application, a type of software installed and run-on electronic devices) aimed at health and “fitness habits”. With a simple swipe of the fingers, individuals will find reports and infographics that will inform them about their lifestyle habits: how many steps were taken on a given day, how many calories were spent, what is the average heart rate, and even how is the quality of the sleep. Many other habits can be monitored, suggesting increased surveillance and discipline, based on the collection of data provided by individuals who engage in self-care practices via smartphones.

These applications correspond to a phenomenon typical of neoliberal capitalism, which has extended to various fields of social life: the phenomenon of gamification, which concerns the appropriation of game logic to be used in non-game contexts (Busarello, 2018) with the objective of engaging the subjects, “motivate them to action, promote learning and solve problems” (Kapp, 2012, p. 10). This appropriation revolves around the use of playful and interactive elements in a controlled environment, which leads individuals through the achievement of specific goals - which, when achieved, generate immediate rewards for the player: trophies, points, stars, medals etc.

At first glance, these “health gamification” strategies seem to have a purely recreational character: we accumulate points, we share our achievements, we “play” with our health. However, a closer look at such applications reveals that gamification also mobilizes biopolitical calls, which invite us to manage our health, to modify our routine, to engage in constant self-surveillance practices. In this sense, gamification appears in neoliberal societies as “a new form of governmentality” (Johnson, 2019, p. 37) – a more efficient form, which contributes to the subjection of bodies according to the logics of the market and consumption.

In this article, we start from these discussions to problematize gamification as a biopolitical strategy mobilized in the health market – mainly from body self-management applications. We start from the hypothesis that gamification strategies are fertile to identify biopolitical calls that circulate in a society marked by neoliberal discourses – which elect as primordial the values of competition, success, and well-being. Thus, we investigate the following question: how gamification strategies, present in health care applications, mobilize biopolitical calls to produce subjectivities characteristic of neoliberal subjects?

To discuss this issue, we selected an illustrative corpus, consisting of three health care applications: i) the Nike Training Club<sup>1</sup>, which offers a series of workouts and physical conditioning exercises that fit the

---

<sup>1</sup> Retrieved July 21, 2021 from: <https://www.nike.com.br/LandingPage/Index/para-treinar/ntc/app-nike-training-club/>.

goals of the users; ii) Google Fit<sup>2</sup>, which monitors daily physical activities of the users, rewarding them with "heart points" (a sort of "health score") for every minute of activity performed; and iii) GPS da Saúde (Health GPS, in free translation to English), an application from the Brazilian laboratory Labi Exames<sup>3</sup>, which checks the health status of its users and offers them "suggestions for action" according to the results.

For the theoretical foundation for the development of the problematization in this article, we mobilize scholars of biopolitics, such as Michel Foucault (1999; 2008; 2013) and Nikolas Rose (2011; 2012); on biomedicalization, Adele Clarke (2003); on "neoliberal philosophy" and consumption practices in that context, Pierre Dardot & Christian Laval (2016) and Gilles Lipovetsky (2010); and from the studies of gamification, Raul Busarello (2018), Mark Johnson (2018) and Randy Nichols (2021).

The article is organized into two topics. In the first one, we start from biomedicalization studies (Clarke et al., 2003) to reflect on the current context of the health market, considering the neoliberal practices of self-management of bodies and the contemporary dynamics of "connected self-care", characteristics of "eHealth" (Holtz, 2017). In the last topic, we will carry out a non-exhaustive analysis of the corpus, aiming to problematize the biopolitical-gamification interrelationships, which are evidenced by the biopolitical calls present in self-care applications with health.

## Health market in perspective: biopolitics, biomedicalization and self-management of bodies

To problematize gamification as a biopolitical strategy, it is necessary firstly to pay attention to the contemporary scenario of the health market. In this regard, we can start from the studies by Adele Clarke et al. (2003) on "biomedicalization" – understood as a context that marks the transition from a medicine of large populations, centered on a human body divided into parts (cardiological, circulatory etc.), to a model that comprises the organism from genes and molecules. For the author, biomedicalization promotes shifts in the power-knowledge relationship: while "classical" medicine was centered on the figure of the physician - who would be considered holder of the knowledge and represented the authority and legitimacy of discourse (Foucault, 2015) -, biomedicine presents new agents, new subjects of discourse, such as data scientists, application programmers, information technicians. In this sense, the new ways of organizing medical power-knowledge would have shifted the role of the health professional to the so-called "well-being" platforms and programs.

The context of biomedicalization can be illustrated by artificial intelligence platforms, which show new forms of organization of medical power-knowledge. One example is Watson, a platform developed by IBM which crosses medical literature content and patient clinical data to find the most promising treatment for a given disease. Although the doctor/scientist still plays a key role in this relationship – since it will be their research that will feed the platform – Watson can process big data, crossing references in a way faster than the human brain.

From an optimistic view of technology, these platforms would help physicians in making diagnosis, reducing the possibility of failures or mistakes. However, this "platformation" of body care hides certain economic movements (such as the extraction of data related to our health, for example), and finally reproduces logics and discourses typical of neoliberalism (such as the promotion of self-management of bodies). In addition, these new health techniques and technologies allowed for the development and offer of customized services (Clarke et al., 2003), which promote new paradigms and demands for patients – who also start to assume new responsibilities and greater autonomy in relation to health itself. In this

---

<sup>2</sup> Retrieved July 21, 2021 from: <https://www.google.com/fit/>.

<sup>3</sup> Retrieved July 21, 2021 from: <https://labiexames.com.br/gps-da-saude>.

context of biomedicalization, the individual is summoned by the logic of consumption, as a patient and consumer, in a supposedly autonomous condition, to choose products and applications that would help in the management of their own body.

The context of biomedicalization is also conducive to promoting self-diagnosis (Mazzilli, 2019): information technologies linked to medicine provided resources for the “personalized management” of bodies, mediated by consumption practices. Mazzilli (2019), when analyzing mobile applications with a focus on personal development and well-being, identified a large market offer of communicative platforms – such as apps – that promise to optimize the lives of its users. On these platforms, you may observe

a kind of interlocutor different from a family member, friend, doctor, analyst, or therapist. Whereas, in principle, it is possible to investigate deviations, pathologies or any dissatisfaction without any third-party judgment. (Mazzilli, 2019, p. 111).

Health self-management platforms multiply in the context of biomedicalization and are part of a widespread phenomenon in the media, “eHealth”, that is, “the use of information and communication technologies in the entire range of functions that affect health” of the individuals (Silber, 2004, p. 3). In this way, in the contemporary scene, individuals are crossed by digital communication devices, which sometimes take away from health professionals the role of mediation between subjects and their health.

Thus, from a market guided by biomedicalization, self-diagnosis and the “platformization” of body care, we see emerging a form of subjectivity related to a connected self-care - which implies not only the existence of monitoring apps and gadgets, but also the circulation of speeches that produce a kind of personalized consumption of health. Holtz (2017) calls this capitalism phenomenon “eHealth”, a vision of health engendered from neoliberal values, in which health itself becomes an object of consumption.

Therefore, “eHealth” can only be understood when we consider the crossing of neoliberal discourses in the health area: even in the care of our bodies, we are mobilized as “self-entrepreneurs” (Rose, 2011), subjects called to “act on themselves to strengthen themselves and thus survive in the competition of life” (Dardot & Laval, 2016, p. 319). In this appealing for “acting on the self”, consumption appears as a central element: goods (both material or immaterial) offer contemporary consumers the means to achieve well-being (Lipovetsky, 2010). Brands mediate our health care, applications call us to review our habits, TV programs mobilize ideal ways of life; and so, health becomes a consumer major segment, in which the neoliberal subject can appropriate customized goods (such as apps) to manage their own body in search of optimizing their existence.

In this way, “eHealth” implies a neoliberal self-manager subject/consumer who, in search of their own quality of life, “informs, consults professionals, monitors the quality of products, weighs and limits risks, corrects their life habits, delays the effects of age, makes general revisions” (Lipovetsky, 2010, p. 54). The customization of health and the personalization of products are engendered in services that promise better results, personalized treatment capable of not only curing diseases, but also optimizing and enhancing the relationship of the consumers with their bodies.

Traversed by a neoliberal philosophy that “commodifies” health, individuals are called to self-surveillance: they need to be proactive, “no longer consuming only medicines, but also broadcasts, articles for the lay public, web pages, guides and medical encyclopedias.” (Lipovetsky, 2010, p. 53). In this search for quality of life and to remain young, individuals are encouraged by biopolitical calls (Prado, 2013) that offer scripts for managing their own health: how to prevent, how to have a “healthy” lifestyle, how to feed and minimize risks and so on.

This constant monitoring highlights aspects of the “control society” (Deleuze, 1992), characterized by a continuous and uninterrupted process of control based on self-surveillance, in which the subject needs to be always in motion, in constant transformation and, above all, in constant vigilance of himself same. For the author, control is a subtle and effective form of domination, producing new behaviors in

many areas of life, such as in Medicine:

In the hospital regime, the new medicine "without doctor or patient", which rescues potential patients and at risk, no way demonstrates a progress towards individuation, as they say, but replaces the individual or numerical body with the figure of a "dividual" matter to be controlled (Deleuze, 1992, p. 229).

Biopolitics today entails a significant change in the way of managing life: from government investment in population groups, that is, from acting at the macro level, to acting at the micro level, aimed at the individual, in accordance with neoliberal rationality and consumption logic. In this way, the biopolitical orders of our neoliberal and consumer society, manifested in media appeals, evoke individuality and beckon to issues related to the body, which in turn address health - a dimension that would justify investments of all kinds.

The shift from contemporary biopolitics to the micro level transforms power-knowledge relations: on the one hand, the power-knowledge of the government, its authority in managing the lives of populations, shifts to the market, which presents itself as an instance capable of exercise "a governance function at the local and global level" (Vaccaro, 2014, p. 52). On the other hand, the power-knowledge of doctors, authorities with legitimacy to make diagnoses and define treatments, seems to have been attributed to health care applications and similar kind of services, which evoke "subjects capable of activating themselves autonomously and, therefore, capable of self-government" (Ibid, p. 51).

In this contemporary scenario, marked by a biopolitics centered on the individual and attached to the logics of consumption, gamification strategies emerge as tools at the service of neoliberal capitalism: a mode of governmentality (Johnson, 2018) of the bodies that mobilizes the subjects to the constant self-vigilance and conforms them to market dynamics. In the following topic, we will discuss the biopolitical-gamification approach, based on two points that we identified in the analysis of the health apps: i) a narrative instance, made possible by the choices that occur within a controlled environment; and ii) a competitive instance, which aims to engage, motivate, and mediate the subjects' interpersonal relationships (Busarello, 2018, p. 120).

## Gamification and biopolitical calls in health care applications

In the previous topic, we discussed how the current health market – crossed by neoliberal discourses, by the logics of biomedicalization and the "commodification" of health care – mobilizes a subject engaged in self-surveillance, a self-administrator. This scenario marked by the advancement of information technologies and "platformization" of health made possible the expansion of gamification dynamics in the field of so-called well-being, which encourages the care of bodies - a care that, as we have seen, is mediated by the consumption logic.

Of course, gamification is not restricted to the health universe. In general, this is a phenomenon typical of neoliberal societies, whereby capital appropriates the logic of games in non-game contexts, as a way of engaging individuals in certain activities (Kapp, 2012; Warmelink et al., 2020). Because of its propensity to encourage the productivity and efficiency of players, gamification is particularly used in work environments, where it is "designed to encourage workers to work hard and earn false rewards in exchange for their real work" (Johnson, 2018, p. 35).

Thus, it is possible to state that gamification is not a neutral tool (Woodcock & Johnson, 2017); rather, it needs to be considered from the perspective of power relations that permeate neoliberal societies and that mobilize certain ways of being. In a way, especially when considering the advancement of digital technologies, gamification has been used as a manner to keep individuals in constant optimization: we are always connected, always in search of self-improvement, guided according to the dynamics of digital



capitalism (Sadowski, 2020). When we voluntarily hand over the care of our bodies to the power of platforms, we are also handing over to capital a huge amount of data that "results in economic value, almost exclusively for the benefit of corporate and government actors" (Nichols, 2021, p. 186).

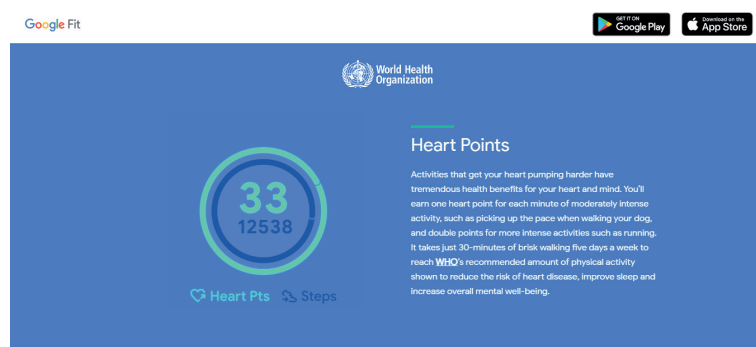
There is, however, another point that interests us in this article. In addition to encouraging a state of permanent connection – whereby individuals produce value for capital – gamification also unveils a new mode of governmentality that emerges in neoliberal societies. From this perspective, gamification can be considered a "technique" that guarantees the voluntary subjection of bodies, attracted by the appeal of games, and mobilized to become "self-companies, seeking more efficient ways to improve their own human capital" (Woodcock & Johnson, 2017, p. 7). Through these strategies, any activity - such as caring for the body and health - becomes the target of psychic investments, something "that can be tracked, thought about, and consequently optimized" (Johnson, 2018, p. 35).

When we think of gamification as a form of governmentality, we can problematize contemporary biopolitics, based on competition and performance. In this perspective, biopolitics and gamification come together in the current communication scenario, notably in the ways in which they are addressed to the "neoliberal subject/consumer" in the discourses of "eHealth" (that is, the discourses that mobilize health as a consumer good) call subjects to a must-do, stipulating certain scripts for success and well-being. The competitive environment, the signs of success, the playful and competitive language (elements mobilized by the gamification strategies) can contribute to engaging consumers in the monitoring and surveillance of their bodies: they share information about their health, compete for "awards", and they deal with information that was previously largely restricted to doctors and experts.

In this part of the article, we will analyze three products that, to a greater or lesser degree, make use of gamified dynamics and/or aesthetics as biopolitical strategies that mobilize contemporary consumers, offering scripts and incentives for self-care with health. We chose the following applications: Nike Training Club, Google Fit and GPS da Saúde (from the Brazilian laboratory Labi Exames), as they are not exclusive, but complementary.

Google Fit proposes to serve as a private and personalized coach that sets general goals for optimizing health and well-being. From the tracking of user activities, the application produces daily reports with information about their routine: number of steps, calories burned, hours spent etc. The app then gathers this information and rewards the user with heart points, a kind of "trophy" that measures how healthy the individual would be – revealing an appropriation of gamification strategies (Busarello, 2018; Kapp, 2012). These awards, as seen in print screen 1, are based on the World Health Organization's recommendations to "reduce the risk of heart disease, improve sleep quality, and improve overall well-being".

Print screen 1 – Google Fit website

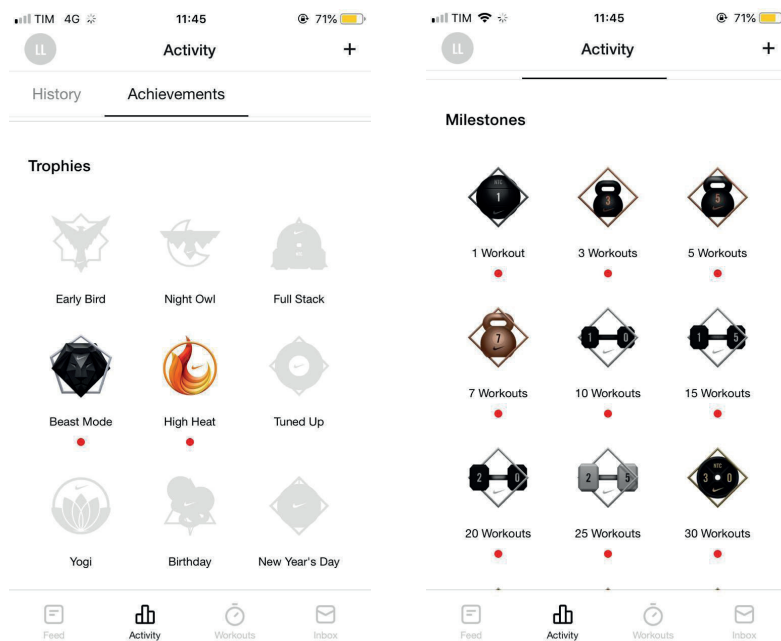


Google Fit<sup>4</sup>

<sup>4</sup> Retrieved July 25, 2021 from: <https://www.google.com/fit/>.

This application, in turn, can be complemented by Nike Training Club, which offers specific training for different types of goals - such as physical conditioning, weight loss, resistance etc. The activities are guided by videos and a series of commands, which lead the user in the autonomous training practice, without the presence of a physical trainer. Following the logic of gamification, each exercise performed marks a milestone (print screen 2) in the roadmap towards the user's main objective; and as you progress towards your goals, you are also rewarded with trophies (print screen 2) - which vary according to the difficulty of the exercises and the day the exercise was done (birthdays, Christmas, New Year's Eve), which can be shared on social media. This data, in turn, can be transported to Google Fit, where it will be transformed into health reports - and will also serve to accumulate heart points.

Print screen Captura de tela 2 – Aplicativo Nike Training Club App



Nike Training Club<sup>5</sup>

Finally, we have GPS da Saúde – an app produced by the laboratory Labi Exames, which promises to enable medical and laboratory services and make them accessible “in a smarter way”<sup>6</sup>. The GPS consists of a simple test that analyzes habits and lifestyles as a way of “drawing the best route to help you keep an eye on your health”<sup>7</sup>, offering a kind of “simplified history” – in other words, a diagnosis of problems that allows plan medical care. Although, here, gamification strategies are not present as patently as in the other two objects of this analysis, we can still verify some of their dynamics – for example, in classifying the health of the users by a score from one to five stars.

<sup>5</sup> Retrieved April 21, 2021 from: <https://www.nike.com.br/LandingPage/Index/para-treinar/ntc/app-nike-training-club/>.

<sup>6</sup> Retrieved April 26, 2021 from: <https://saudebusiness.com/voce-informa/labi-exames-expande-atuacao-e-inaugura-unidade-no-grande-abc/>.

<sup>7</sup> Retrieved April 25, 2021 from: <https://labiexames.com.br/gps-da-saude/>.





Labi Exames website<sup>8</sup>

The complementarity between these three applications lies in the fact that they trace routes of well-being and self-care with health. Google Fit acts as a coach that sets goals to be achieved and reports on physical activity; Nike Training Club organizes workouts and provides an exercise routine; and GPS Saúde serves as feedback that would check whether the individual efforts are resulting in a good “state of health” - all of this calculated and mediated by exams, check-ups and other services offered by Labi Exames.

Based on considerations of Prado (2013) about biopolitical calls and problematizations we have carried out so far, we will make an approximation of the mechanics of gamification and biopolitics that are presented in neoliberal capitalism. We developed the analysis considering the two instances of approximation: i) the automated narratives produced by health apps; and ii) the competitive scene mobilized in their dynamics.

## Automated narratives

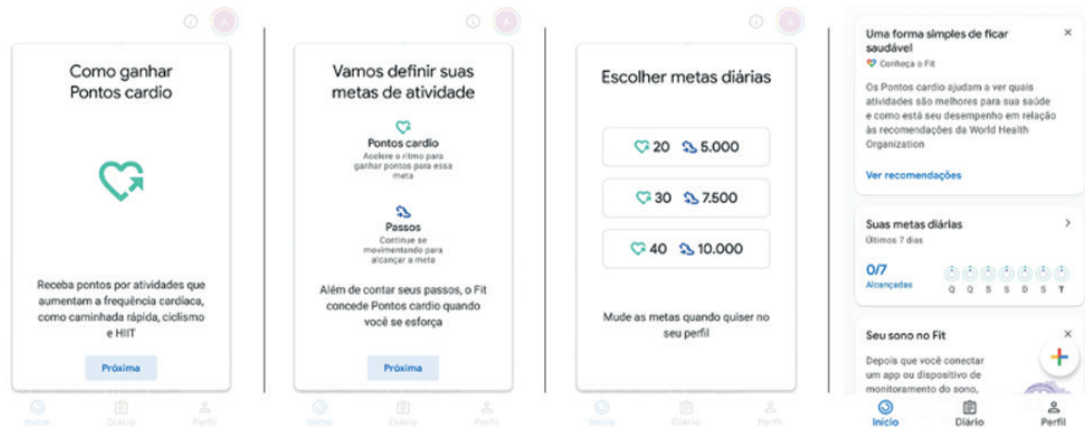
One of the characteristics of gamification is the presence of a narrative that promotes engagement and creates paths to achieve the proposed goals (Aarseth, 1997). This is an appropriation of a dynamic characteristic of games, in which the players immerse themselves in a fictional universe and can interfere in its course, acting as the protagonists of their own stories. In this process of fictional immersion, the individual tacitly accepts the rules by which he leads his steps towards a final goal (Murray, 2003). In gamification - that is, in the use of these game rules in other social environments -, the narratives contribute to exploring "stories of experiences, and these experiences are fundamental to constitute the memory, communication and knowledge of individuals" (Busarello, 2018, p. 121).

As we have said, the apps we have reviewed in this article provide roadmaps that guide users

<sup>8</sup> Retrieved July 21, 2021 from: <https://labiexames.com.br/gps-da-saude/>.

toward their health self-care goals. When using Nike Training Club, for example, the individual is guided by videos and tutorials, which help him to trace a personalized story of overcoming difficulties in which he/she is the protagonist. Likewise, the customized Google Fit goals (print screen 4) and GPS da Saúde feedbacks also serve as instruments that guide (but not determine) users, guiding them in the construction of their self-care narratives.

Print screen 4 – Google Fit settings



Google Fit<sup>9</sup>

Similarly, Nike Training Club also guides individuals to build their own narratives: they can select the sport, training goals, available resources, body regions they want to change or exercise. According to the website<sup>10</sup>, users have access to “several types of free workouts ranging from strength and cardio to yoga and mobility sessions, no matter what your fitness level is, or whether you have limited space for yourself to move at home”. In fact, the only choice unavailable in Nike Training Club is “no training”.

In this sense, we can bring these gamification strategies closer to discussions about biopolitical calls, since the applications in question offer scripts that guide users towards a supposed success - determined by these same products. These scripts, in turn, are mediated by goods, services and brands that seem to offer users the opportunity to prepare for the future (Prado, 2013). The automated narrative provided by the apps analyzed here would consist, in thesis, in a power of choice, a supposed power to guarantee good health.

In the cases analyzed, we found statements that put the individuals as responsible for their own development - and, therefore, for their success or failure. Nike Training Club goals, Google Fit heart points, GPS da Saúde status - all these dynamics transfer to individuals the responsibility of taking care of themselves: they must exercise, eat well, and earn the rewards. Thus, an approximation with contemporary biopolitics is characterized by appeals that establish the conduct to be followed, the rules about how and when to act (Rose, 2011; 2013). In this context, there is the neoliberal subject, entrepreneur of oneself, incited to control, self-surveillance, and the "choice" of effective means to take care of one's own health.

It is worthy to point out that the apps analyzed use references to medical and scientific terms (GPS da Saúde), international institutions (Google Fit) and celebrity-athletes (Nike Training Club) - a strategy that serves both to legitimize the apps, as well as to help arouse emotions of identification, leadership and responsibility in users.

<sup>9</sup> Retrieved July 21, 2021 from: <https://www.google.com/fit/>.

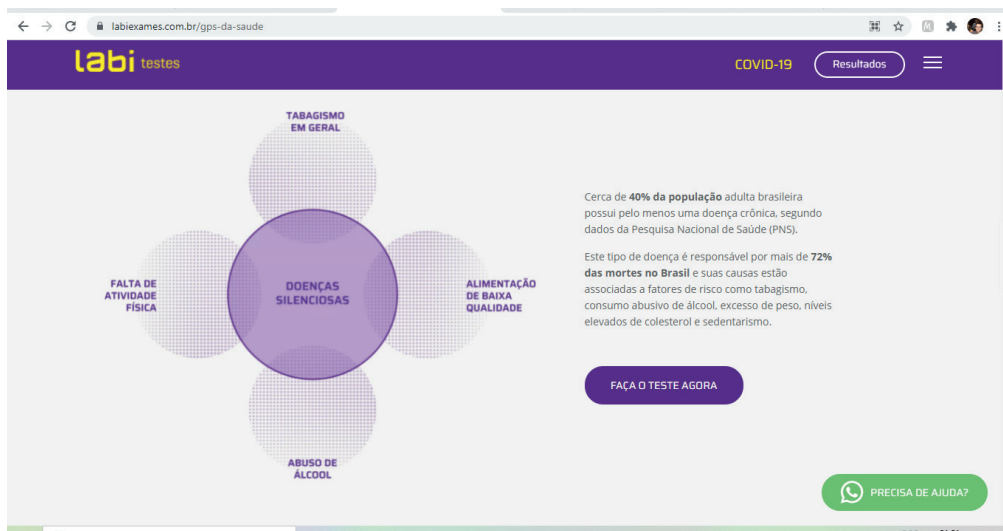
<sup>10</sup> Retrieved July 21, 2021 from: <https://www.nike.com.br/LandingPage/Index/para-treinar/ntc/app-nike-training-club/>.

Print screen 5 – International references on Google Fit and Nike Training Club



Google Fit<sup>11</sup>

Print screen 6 – Scientific references on GPS da Saúde



GPS da Saúde<sup>12</sup>

These references also show an approximation between the dynamics of gamification and those of biopolitics, as they serve as symbolic enunciators (Prado, 2013) that contribute to the constitution of biopolitical maps, which motivate and guide individuals to action. In autonomous narratives, choices need to be conditioned to the rules established in the gamified environment (Murray, 2003), so that the user is constantly called to action, since, in order to advance in the narrative, he is asked to choose at all times. This is particularly evident in the Google Fit app (print screen 7), which, in addition to grouping data into playful graphics, also sends out periodic reminders such as “drink water”, “go for a walk”, or “time to meditate”.

<sup>11</sup> Retrieved July 21, 2021 from: <https://www.google.com/fit/>.

<sup>12</sup> Retrieved July 26, 2021 from: <https://labiexames.com.br/gps-da-saude/>.

Print screen 7 – Google Fit screens



B9<sup>13</sup>

Another interrelation between the dynamics of gamification and biopolitical calls is that both dynamics require subjects able to permanently prove their value, which is measured through performance evaluations - "effectiveness, efficiency, flexibility, competitiveness, innovative capacity, inventiveness and proactivity" (Gadelha & Duarte, 2014, p. 158). From the perspective of neoliberal governmentality, both the game and life must be converted into something measurable and computable, which highlights the protagonism of self-management and self-control operations attributed to individuals. In other words, managing all situations, whether in the game or in life, is a founding aspect of the corporate ethos, strongly marked by economic premises, which characterizes the contemporary neoliberal worldview.

Considering that introducing "market regulation as a general regulatory principle of society (...)" rather means establishing a business society, anchored in competitive mechanisms" (Gadelha & Duarte, 2014, p. 157), we can see that the gamification and biopolitics dynamics work as auxiliaries in disciplining individuals who, guided by must-do statements, try to take control of their own stories, outlining some strategies to manage their habits - all with the help of elements playful and interactive that translate life into the language of virtual narratives. Convocation and gamification, therefore, go together in the mobilization of self-managed subjects: like traffic signals, biopolitical calls guide the actions of individuals/players towards their "personal success".

## Competitive scene

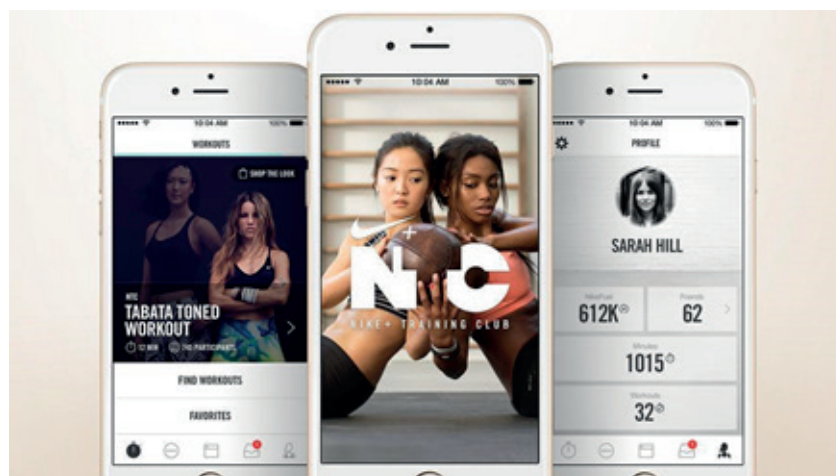
Busarello (2018) explains that a key characteristic of games concerns the existence of a competitive scene, marked by goals, challenges and rankings. The game is generally built around the "victory" element: it is mainly played to overcome stages, win prizes, and gain recognition. In this sense, Huizinga (2001, p. 40) recalls that "what is essential in the game is the desire to be better than others, and to be rewarded for this fact".

<sup>13</sup> Retrieved April 27, 2021 from: <https://www.b9.com.br/107004/google-fit-o-app-de-saude-do-google-esta-disponivel-para-ios/>.

Although the Dutch author wrote his text in 1938 - in a context prior to the concept of gamification -, the dynamics of playfulness that were addressed in *Homo ludens* (2001) can be observed in gamification strategies, in which game logics of competition are used in other social scenes aiming engage individuals and “elevating the participants' positive interpersonal relationships” (Busarello, 2018, p. 120). In the gamified competitive environment, players devise their own strategies in the search for prizes: form teams, manage schedules, study the best courses of action. It is for this reason that gamification was particularly explored by the corporate world to encourage proactive attitudes (Santaella, 2018); and by marketers to engage consumers in the consumption journey – supported by apps and gadgets that dress in the guise of entertainment. Neoliberal governmentality is based on the idea of management, from the commoditization of human relations (or self-entrepreneurship), in such a way that competition becomes a fundamental aspect of the subject: the dynamics of gamification and biopolitical calls emphasize such aspects.

In the analyzed apps, there are important points that illustrate how the logic of the competitive scene is present in health-related products. At Nike Training Club, for example, the consumer is asked to establish a “mission”: maybe he/she wants to “lose 10kg or 22 pounds” or “gain endurance”, and for that he/she will need to go through several weekly goals (milestones). Every day, the smartphone screen is lit with some motivational message (“you can do it”, “don't give up”, “it's almost there”), which serves as a call to health care. All this information is grouped in the “user profile” (print screen 7), which indicates how many exercises were done in a given period. It is also possible to add training buddies with whom the user can compete in rankings and compare performances (print screen 8). By the app logic, adding friends would be a way to “find motivation”(print screen 9).

Print screen 8 – Nike Training Club interfaces

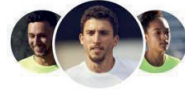


Nike<sup>14</sup>

<sup>14</sup> Retrieved April 24, 2021 from: <https://news.nike.com/nike-training-club/>.

Print screen 9 – Nike Training Club feed

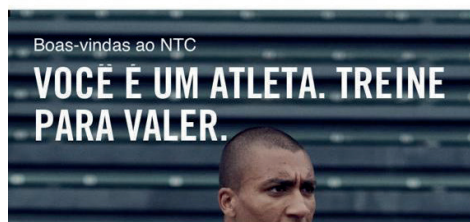
## Feed



### **MORE FRIENDS. MORE MOTIVATION.**

Add friends to see each other's Nike Training activity, compete on leaderboards, and show off your stats.

**FIND FRIENDS**



Nike<sup>15</sup>

The competitive environment promoted by Nike Training Club mobilizes subjects and stimulates their goals (Busarello, 2018, p. 117). The elements of the games - prizes, rankings, milestones - are appropriated by the gamified application and function as statements that stimulate subjects to engage in caring for their bodies, perpetuating their presence in the “game for health” proposed by the app. This can also be found on Google Fit, especially in heart points – which, similarly to Nike Training Club, can be shared with friends and serve as a monitoring of daily goals established by the user in the app.

In the case of GPS da Saúde, the competitive scenario is more subtle: there are no rankings that mobilizes an open competition. However, the competition is characterized by the quality of the user’s status: their “health level” translates into a scoring system (up to 5 stars), which can be shared on social media - and thus give the users the opportunity to publicize their good performance, which would imply resilience and personal improvement. In addition, even if they choose not to share their achievements, consumers are still called upon by GPS da Saúde to present a “better version of themselves” - a call that, according to neoliberal thinking, transfers the responsibility to the individual for the care of their health. The complexities of life and human body are analyzed by the app and explained in simple terms, based on traffic references: the consumer may be “in the right direction” or “almost there”, may need to “keep their distance” or “watch the yellow light”, or you must “step on the brake”.

Still in relation to GPS Saúde, it is interesting to note how the app's guidelines are directly associated with consumption practices - which, as we have seen, is consistent with the commodification of body care, characteristic of “eHealth” (Holtz, 2017) . This contributes to a “therapeutic empowerment” of the consumer (Mazzilli, 2019), as it promotes self-diagnosis and the possibility of solving their own problems. We can see this, for example, in the feedbacks offered by the app, which are always accompanied by some suggestions that guide purchase journeys:

<sup>15</sup> Ibidem.



- “Right Direction” means that the consumer has earned 5 stars – that is, he/she follows a lifestyle that would bring many benefits to health. However, GPS da Saúde warns about the need to always be on the lookout, just to ensure that everything remains fine. For this, it is recommended to carry out a fitness check-up, a package with 20 routine exams for being an active person.
- “Almost There” is the result for whoever won 4 stars. For this consumer, there is very little left to achieve a healthy lifestyle. The Health GPS, then, suggests some routes to reach the desired health: new habits, a more protected routine, the adoption of more sports practices etc. In this status, there is also personalized indication of tests designed to identify the current health condition.
- “Keep Distance” is the advice to the users who received 3 stars. The GPS advises that this individual must include some daily habits in routine and keep “away” from illnesses resulting from a sedentary life. To protect themselves, consumers are faced with a series of personalized promotional combos “just a click away”.
- “Yellow Sign” represents the 2 stars and indicates that the consumer is “a little far from their destination for a healthy life”. According to GPS da Saúde, this is an alert to improve the lifestyle and hire Labi Exames in the search for unknown health problems.
- Finally, “Streading on the brake” is assigned to the consumer who received 1 star. According to the GPS, this individual needs to interrupt their harmful habits, which are for sure impeding the path to a healthy life. Thus, the result emphasizes self-vigilance, given the urgent need to seek a healthy life, and recommends a battery of “essential” tests to diagnose possible health problems.

Google Fit heart points, Nike Training Club achievements and GPS da Saúde status represent competitive thinking that is manifest in a society in which “the company has become a model of subjectivation” (Prado, 2019, p. 61): in the neoliberal world, individuals live as if they were enterprises, “developing a lifestyle that will maximize the value of existence for themselves” (Rose, 2011, p. 218). Gamification strategies, therefore, promote behaviors based on neoliberal rationality: individuals are compelled to adopt a proactive attitude towards their health; overcoming difficulties, outlining strategies and constantly remaining motivated and engaged in managing their own lives.

## Final considerations

From what we discussed in this article; we can infer that the gamification-biopolitics interrelationships show characteristics of contemporary neoliberal capitalism. Biopolitics, driven by the logic of consumption, are engendered in everyday practices – whether those of entertainment and competition, or those of health care. In this perspective, gamification reveals itself as a strategy that reinforces and reiterates behaviors that lead the subject to the optimization of life, a practice that constitutes an updated version of biopolitical orders in the digital scenario.

The shift of medical knowledge to health platforms, the possibility of self-diagnosis, characteristics of the biomedicalization context (Clarke et al., 2003) – as well as the “commodification” of health care, the result of neoliberal discourses and features of “eHealth” (Holtz, 2017) – show the consumer's responsibility for health and the production of subjectivities related to a “connected self-care”. It is a biopolitics that acts in a capillary way in daily practices, enabling the circulation of must-do statements that call individuals to self-entrepreneurship and to try managing their own lives.

The spread of gamification strategies and their engendering in contemporary biopolitical systems

signals the intensification and sophistication of capitalism in our days when the rationalization of biological processes becomes an imperative. Just as gamification processes take place in a controlled environment (within which automated narratives are built from logics of competition), biopolitics is limited to the limits of the market - a controlled environment in which competition is the rule, and in which individuals are called to be masters of their own narratives. In the context of neoliberal capitalism, self-entrepreneurship and the optimization of life are ideals reiterated in the most varied products on the health market. In this way, the game, although playful, mobilizes perceptions and reactions, in such a way that gamification underpins the production of contemporary subjectivities.

## References

Aarseth, E (1997). *Cybertext: Perspectives on ergotic literature*. Baltimore: The Johns Hopkins University Press.

Busarello, R (2018). Fundamentos da gamificação na geração e na mediação do conhecimento. In: Santaella, L; Nesteriuk, S; Fava, F. (Eds.). *Gamificação em debate* (pp. 115-126). São Paulo: Blucher.

Clarke, A.; Shim, J.; Mamo, L.; Fosket, Je.; Fishman, J. Biomedicalization: Technoscientific Transformations of Health, Illness, and U.S. Biomedicine (2003). *American Sociological Review*, 68, pp. 161-194.

Dardot, P; Laval, C. (2016). *A nova razão do mundo: Ensaio sobre a sociedade neoliberal*. São Paulo: Boitempo.

Deleuze, G. (1992). *Conversações*. São Paulo: Editora 34.

Foucault, M. (1999). *Em defesa da sociedade*. São Paulo: Martins Fontes.

Foucault, M (2008). *O nascimento da biopolítica: Curso dado no Collège de France (1978- 1979)*. São Paulo: Martins Fontes.

Foucault, M. (2013). *Microfísica do poder*. São Paulo: Graal.

Gadelha, S.; Duarte, A. (2014). O policiamento comunitário como dispositivo neoliberal de governo no campo da segurança pública. In: Vaccaro, S.; Avelino, N. (Eds.). *Governamentalidade/Segurança*. São Paulo: Intermeios.

Holtz, A (2017). *Medicando órfãos: análise discursiva sobre as doenças raras e os pacientes a partir do laboratório farmacêutico Novartis*. Dissertação (Master in Communications and Semiotics) – Pontifícia Universidade Católica de São Paulo.

Huizinga, J. (2001). *Homo ludens*. São Paulo: Perspectiva.

Johnson, M. (2021). Fifteen Million Merits: gamification, spectacle, and neoliberal aspiration. In: McSweeney, T.; Joy, S. (Eds.). *Through the Black Mirror: Deconstructing the side effects of the digital age* (pp. 33-42). London: Palgrave MacMillan.

Kapp, K. (2012). *The gamification of learning and instruction: Game-based methods and strategies for training and education*. San Francisco: Pfeiffer.

Lipovetsky, G. (2010). *Felicidade paradoxal*. São Paulo: Companhia das Letras.

Lipovetsky, G.; Serroy, J. (2015). *A estetização do mundo: Viver na era do capitalismo artista*. São Paulo: Companhia das Letras.

Mazzilli, P. (2019). *Turbinando nossos selfs: Um estudo exploratório sobre os aplicativos de autoajuda no cenário brasileiro*. Thesis (Doctorate in Clinical Psychology) – Pontifícia Universidade Católica de São Paulo.

- Murray, J. (2003). *Hamlet no bolodeck: O futuro da narrativa no ciberespaço*. São Paulo: Unesp.
- Nichols, R. (2021). This is Gig Leisure: games, gamification, and gig labor. In: Dolber, B.; Colocino-Rodino, M.; Kumanyika, C.; Wolfson, T. (Eds.). *The gig economy: Workers and media in the age of convergence* (pp. 177-189). Nova York: Routledge.
- Prado, J.L.A. (2013). *Convocações biopolíticas dos dispositivos comunicacionais*. São Paulo: EDUC.
- Prado, J.L.A. (2019). Perversão clean na cultura do consumo. *MATRIZES*, 1(13), pp. 49-70.
- Rose, N. (2011). *Inventando nossos selfs: Psicologia, poder e subjetividade*. Petrópolis: Vozes.
- Rose, N. (2013). *A política da própria vida: Biomedicina, poder e subjetividade no século XXI*. São Paulo: Paulus.
- Santaella, L. (2018). O hiato entre o game e a gamificação. In: Santaella, L.; Nesteriuk, S.; Fava, F. (Eds.). *Gamificação em debate* (pp. 199-204). São Paulo: Blucher.
- Sadowski, J. (2020). *Too smart: How digital capitalism is extracting data, controlling our lives, and taking over the world*. Cambridge, MA: MIT Press.
- Silber, D. (2004). *The case for eHealth*. *Studies in Health Technology and Informatic.*, 100, pp. 3-27.
- Vaccaro, S. (2014). Governança e Governamentalidade. In: Vaccaro, S; Avelino, N. (Eds.). *Governamentalidade/Segurança* (pp. 43-58). São Paulo: Intermeios.
- Warmelink, H.; Koivisto, J.; Mayer, I.; Vesa, M.; Hamari, J. (2020). Gamification of production and logistics operations: Status quo and future directions. *Journal of Business Research*, 106, pp. 331-340.
- Woodcock, J.; Johnson (2017), M. Gamification: what it is, and how to fight it. *Sociological Review*, 3(66): pp. 1-17.

---

Professor of the Postgraduate Program in Communication and Consumer Practices at Escola Superior de Propaganda e Marketing (ESPM), Tânia Márcia Cezar Hoff holds a PhD in Communication and Semiotics from the Pontifícia Universidade Católica of São Paulo (PUC), and coordinates Communication, Discourses and Research Group on Consumer Biopolitics (BIOCON). In this article, she contributed to the conception of the research design; development of theoretical discussion; interpretation of data and support in writing and reviewing the manuscript.

---

Ana Catarina Holtz holds a master's degree in Communication and Semiotics from Pontifícia Universidade Católica of São Paulo (PUC) and she is a doctoral candidate in Communication and Consumer Practices at Escola Superior de Propaganda e Marketing (ESPM). She is a member of the Research Group on Communication, Discourse and Biopolitics (BIOCON), with a full grant from PROSUP / CAPES. In this article, she contributed to the conception of the research design; development of theoretical discussion; interpretation of data; writing and reviewing the manuscript and reviewing the foreign language version.

---

Lucas Lopes Fraga is a doctoral candidate in Communication and Consumer Practices at Escola Superior de Propaganda e Marketing (ESPM), and member of the Research Group on Communication, Discourse and Consumer Biopolitics (BIOCON). In this article, he contributed to the conception of the research design; development of theoretical discussion; interpretation of data; writing the manuscript and reviewing the article and reviewing the foreign language version.