

Algorithmic exhaustion: digital influencers, platform work, and mental health

Exaustão algorítmica: influenciadores digitais, trabalho de plataforma e saúde mental

Agotamiento algorítmico: *influencers* digitales, trabajo en plataformas y salud mental

Issaaf Karhawi^{1,a}

issaaf@gmail.com | <https://orcid.org/0000-0001-9907-0129>

Michelle Prazeres^{2,b}

mprazeres@casperlibero.edu.br | <http://orcid.org/0000-0002-7695-7656>

¹ Paulista University, Graduate Program in Communication. Sao Paulo, SP, Brazil.

² Casper Libero College, Graduate Program in Communication. Sao Paulo, SP, Brazil.

^a Doctoral degree in Communication Sciences from The University of Sao Paulo.

^b Doctoral degree in Education from The University of Sao Paulo.

ABSTRACT

This work aims to connect the notions of technology, work, health, and digital influencers and call for this connection to be an object of investigation for the field of communication. Specifically, we seek to understand the features of the exhaustion experienced by digital influencers from a literature review and presentation of examples (obtained by spontaneous observation). As a result, the notion of ‘algorithmic exhaustion’ is proposed, a sensation reported by digital influencers that one is going through ‘psychological problems’ generated by the pace of work dictated by what they recognize as ‘the algorithm’. ‘Exhaustion’ is characterized by a permanent feeling of dissatisfaction, discouragement and exhaustion, lack of creativity, fear of platform penalties and ‘not getting it done’.

Keywords: Digital influencers; Platform work; Algorithms; Algorithmic exhaustion.

RESUMO

Este trabalho tem como objetivo articular as noções de tecnologia, trabalho, saúde e influenciadores digitais e reivindicar essa articulação como objeto de investigação para o campo da comunicação. Especificamente, busca-se entender as particularidades do esgotamento vivido por influenciadores digitais, a partir de revisão bibliográfica e exposição de exemplos (coletados a partir de observação espontânea). Como resultado, propõe-se a noção de ‘exaustão algorítmica’, uma sensação relatada por influenciadores digitais relacionada

aos ‘problemas psicológicos’ vivenciados por eles e gerados pelo ritmo de trabalho que vem sendo ditado pelo que reconhecem como ‘o algoritmo’. A ‘exaustão’ caracteriza-se por um sentimento permanente de insatisfação, desânimo e esgotamento, ausência de criatividade, medo de penalidades das plataformas e de ‘não dar conta’.

Palavras-chave: Influenciadores digitais; Trabalho de plataforma; Algoritmos; Exaustão algorítmica.

RESUMEN

Este trabajo tiene como objetivo articular las nociones de tecnología, trabajo, salud e *influencers* digitales y reivindicar esa articulación como objeto de investigación para el campo de la comunicación. En concreto, buscamos comprender las particularidades del agotamiento que experimentan los *influencers* digitales a partir de una revisión bibliográfica y exposición de ejemplos (obtenidos por observación espontánea). Como resultado, se propone la noción de ‘agotamiento algorítmico’, sensación reportada por *influencers* digitales de que se está pasando por ‘problemas psicológicos’ generados por el ritmo de trabajo dictado por lo que reconocen como ‘el algoritmo’. El agotamiento se caracteriza por un sentimiento permanente de insatisfacción, desánimo y agotamiento, falta de creatividad, miedo a las sanciones de la plataforma y al ‘no hacerlo’.

Palabras clave: Influenciadores digitales; Trabajo de plataforma; Algoritmos; Agotamiento algorítmico.

ARTICLE INFORMATION

This article is part of **Dossier Platform Labor & Health**.

Authors' contributions:

Study conception and design: Issaaf Karhawi e Michelle Prazeres.

Data acquisition, analysis, or interpretation: Issaaf Karhawi e Michelle Prazeres.

Manuscript drafting: Issaaf Karhawi e Michelle Prazeres.

Critical review of intellectual content: Issaaf Karhawi e Michelle Prazeres.

Conflict of interest declaration: none.

Funding sources: none.

Ethical considerations: none.

Additional thanks/Contributions: The authors are grateful to the reviewers. Their comments and suggestions improved the text significantly.

Article history: submitted: 14 Feb. 2022 | accepted: 01 Nov. 2022 | published: 23 Dec. 2022.

Previous submission: none.

CC BY-NC Licence Non-commercial Attribution. This licence allows others to download, copy, print, share, reuse and distribute the article, provided it is for non-commercial use and with a source citation, checking the due authorship credits and referring to Reciis. In such cases, no permission is required from the authors or publishers.

INTRODUCTION

The emergence of digital influencers was strongly linked to participatory culture, amateurs beginning to produce content, and the possibility of expanding content production which was no longer restricted to owners of the traditional means of dissemination and distribution (SHIRKY, 2011; JENKINS, 2009). As a result, research on digital influencers – formerly bloggers and vloggers and, more recently, creators or content creators – has focused for many years on the participatory nature of that activity on the networks.

However, while participation was previously devoid of extrinsic motivations, such as financial rewards, the advertising market has drawn ever nearer. This has stimulated a process of ‘formalization’ of content production in social networks which had previously been considered amateur (ARRIAGADA, 2021). Resultantly there has been a shift in studies on digital influencers with a special focus on the notion of digital work (ABIDIN, KARHAWI, 2021). Alongside these discussions, themes about platforms and platform work have also emerged. Subsequently, digital influencers’ practice has begun to be understood as taking place across platforms and involving management. The impact of technology companies on influencers’ productive routines is being recognised.

The contemporary working conditions of digital influencers shine a light on an unregulated practice as a profession. It is sustained by the cultural environment as well as technological devices and subjected to productivity rules and penalties characteristic of platform capitalism. This logic has severe repercussions for the health of these workers.

The relationship between digital influencers’ work and mental health issues has already been debated by the media outside of Brazil, especially due to reports from Youtubers. In the Guardian article entitled “The YouTube stars heading for burnout” the author discusses stress, exhaustion, and loneliness in the work of YouTube content creators (PARKIN, 2018). Other reports record the large-scale collapse of mental health on YouTube (ALEXANDER, 2018), and the topic is still considered relevant in 2022 (MCNEAL, 2022). In the press there are constant references to burnout as a common consequence of the exhausting work routines of content creators.

In January 2022, the World Health Organization (WHO) included burnout in the list of occupational diseases¹. It recognized that the syndrome is related to the work environment and working relationships. Although this is a relevant step towards making corporations responsible for the illness of their employees in formal work regimes, the measure does not protect some categories of workers emerging in society: entrepreneurs, outsourced employees (often informally) and platform workers, including digital influencers.

In line with international debates, the Brazilian media has also portrayed the exhaustion experienced by digital influencers. In a special series on mental health and creativity, one report by Meio & Mensagem was entirely dedicated to the work of creators: “Creators, we need to talk about burnout” (MEIO & MENSAGEM, 2018). In 2019, a group of digital influencers launched the “How to grow”² project, a survival guide for those who produce content on the internet. The project brings together short videos produced by different influencers about relating to private and professional life, metrics, digital violence, and time management.

This article falls within this area of research and concern, considering the relationship between work and mental health of digital influencers within the so-called influencer market. It starts with a reflective commitment to: (1) connect the concepts of technology, work, health, and digital influencers; and (2) demand that this connection be investigated within the field of communication. More specifically, it

1 It is worth noting that the inclusion of burnout in the list of occupational diseases does not necessarily or automatically means worker protection. The inclusion recognizes that the syndrome would be related to the environment and work relationships. That is: regardless of the type of work relationship, burnout is linked to the work environment. However, current labor law determines the incidence of legal protection to formal employment relationships. In this way, the use of burnout as a work-related disease as a parameter of incidence of employer’s accountability is restricted to workers with a formal contract (even if we believe it should not be).

2 The project was discontinued, but the videos are still available at <https://comocrescer.com>.

seeks to understand the distinctive features of the burnout experienced by digital influencers, based on a bibliographical review, argumentative analysis and presentation of examples selected for their capacity to illustrate the proposed discussions in a representative way.

TECHNOLOGY AND MEDIATIZED LIFE

Communication is a central pillar of contemporary life. By taking this statement as a premise, we want to say that functional communication configures a system of devices, instruments and codes that are fundamental to understanding and experiencing life in society today. However, it is also increasingly important to consider ambient communication as a key notion for understanding the sensitive strategies of contemporaneity.

According to Sodré, “in this historical context, functional communication has been imposing itself for decades as the code of the new social order” and “hegemony is realized in what has been called mediatization; that is, in the connection of organizations and institutions with information devices” (SODRÉ, 2021, p. 25). Therefore, it is necessary to “approach communication, uniting origins and actuality, as a general field of processes of organization and reverberation of influences within the scope of social cohesion” (SODRÉ, 2021, p. 26). Sodré calls for communication as “a practice of organizing mediations that are indispensable to the human commons” (SODRÉ, 2014, p. 15).

This interpretation of communication is pivotal for understanding technologies as a cultural environment and not just as apparatus or tools. This perspective allows one to state that we live in a cyberculture condition. We are not referring to the media culture in the act of connection or the culture inherent to the internet or network connections, but the culture of a time, the spirit of an era (TRIVINHO, 2007), the ambience of contemporaneity, the sensorium of the present time or even an environment.

Therefore, Cyberculture is a culture that intersects the individual’s life today, capable of permeating human existence and other cultures and contemporary cultural matrices in a decisive way; it is understood as the material, symbolic and imaginary contemporary arrangement and as the internal social processes (structural and conjunctural) that support it (TRIVINHO, 2007, p. 59). In other words, it is present in contemporary individuals, institutions, and *modus operandi*; and, even though it finds support in its material structures, it goes beyond them, establishing itself as a presence within the scope of the psyche, even in the absence of its tools and institutional representatives.

Therefore, technologies are apparatuses that conform contemporary repertoires and engender a cultural environment. In turn this is indexed by a totalizing communication and by values engendered in technologies.

According to Morozov (2018), everything we experience and understand about technology was created in Silicon Valley. It holds material power (the production of technological goods), financial power (the concentration of the technology market) and symbolic power (the monopoly of what is said in digital speech). Morozov uses the term Big Tech to refer to the shared agenda of technology companies: a system of narratives and practices that seek to legitimize and prescribe values embedded in the apparatuses and culture generated by and with them. The notion refers to the “[...] large companies associated with platforms that use data intensively” (2018, p. 144): Apple, Google, Microsoft, Meta, and Amazon.

This notion helps us to understand that, in contemporary times, communication occupies a central place as a code and operates a structured and structuring technological dynamic in the material and symbolic field. This ‘package’ presents, circulates, and reinforces a series of legitimate and dominant values and practices.

Speed and productivity are two of the values that make up this Big Tech agenda³. The ‘social acceleration of time’ becomes a ‘sensitive support’ for this ‘package’ to spread out and gain ground, grip and organicity in a fertile communication space aligned with the project. When analysing the temporal structures of Modernity, Rosa (2019) points out that the social acceleration of time has at least three dimensions: (1) technical acceleration, which comprises the use of technical and technological devices to shorten the time spent on activities such as transport, production, communication, etc.; (2) the acceleration of social transformations, which includes the increase in the pace of transformations in political, cultural, religious, scientific structures, etc.; and (3) the acceleration of the pace of life, which concerns the increase in frequency of actions and experiences per unit of time, generating the feeling of a lack of time (PRAZERES, 2022).

It is worth emphasizing that these values are constantly associated with an idea of progress and development, which we are susceptible to because it is, inevitably, conceived as a positive thing. In the world of work, they are also commonly associated with notions of achievement and purpose, or entrepreneurship and meritocracy. It is a ‘symbolic package’ that works through self-reinforcing strategies: cycles of material and symbolic corroboration, which find shelter in the multiple facets of technologies – tools, repertoires, and culture –; and in communication, a sensitive area.

COMMUNICATION, TECHNOLOGY AND PLATFORMIZED WORK

With the advent of Industry 4.0 we enter what Antunes (2020, p. 15) calls “a new phase of digital-informational hegemony, under the command of financial capital”. The author states that “cell phones, tablets, smartphones and the like will increasingly become important instruments of control, supervision and command” (2020, p. 15). Amadeu da Silveira characterizes this phase as “digital-datafied capitalism”:

The structure of protocols that make up the Internet is cybernetic, that is, simultaneously for communication and control. This allowed [...] the collection of a large part of the digital traces that people left on different servers [...] while surfing the internet. [...] All data would be essential for fine tuning the profile formation of each user-consumer. Digital capitalism has turned into digital-datafied capitalism, that is, driven by data. (SILVEIRA, 2021, p. 5)

Although the author refers to the “user-consumer”, against this backdrop the areas of communication, technology and work are becoming increasingly intertwined. Consequently, researchers are faced with the challenge of considering the density of the world of work, constituted by physical and symbolic territories: “[...] what should we imagine when the means of production aim to produce a communicational product and to boost relationships of communication in society? Thus, there is a specific framework to be studied” (FIGARO, 2018, p. 182). Furthermore, the definition of work platformization appears to help us understand work relationships on platforms, in particular understanding that there is a dispersion of work, but centralization of control:

Platformization (POELL; NIEBORG; VAN DIJCK, 2020) is the growing dependence on platform mechanisms in very different sectors of life [...]. This means understanding the process of dependence on digital platforms to perform work tasks, and the implications of this in different dimensions, such as value extraction processes (SADOWSKI, 2019, 2020), changes in the control and organization of work with datafication and algorithmic management (MOORE; WOODCOCK, 2021; CRAWFORD, 2021), the role of platform materialities and infrastructure (data centres, undersea cables) (PLANTIN; PUNATHAMBEKAR, 2019), and worker surveillance platforms (MANOKHA, 2020). It also involves understanding the working conditions subordinated through very different platforms [...]. (ABÍLIO; AMORIM; GROHMANN, 2021, p. 32)

3 For instance, we can mention other values such as innovation, (digital) inclusion, efficiency, interactivity, connectivity, mobility, visibility, flexibility, transformation, and playfulness (especially related to the universe of games).

In addition, platforms characterize themselves as only being technology companies, intermediaries, a bridge between “consumers and producers”, providing a camouflage through this discourse (FILGUEIRAS; ANTUNES, 2020, p. 31). The absence of formal documents or contracts allows the preservation of this discourse of “intermediaries”, since workers can choose to carry out their activities there or not, according to their own interest (FILGUEIRAS; ANTUNES, 2020, p. 31). Thus:

The idea of freedom and flexibility (working whenever and wherever you want to), is propagated by companies. In reality this is the deliberate transfer of risks to increase control over workers, as this freedom means the absence of a guaranteed salary and increased fixed costs that become their responsibility (FILGUEIRAS; ANTUNES, 2020, p. 33)

Based on this discussion, is it possible to state that influencers are platformized digital workers? This could be a way to understand this ‘category’, based on some similarities with other internal categories of digital work (teleworkers, delivery app people, information technology workers), although it is necessary to point out some differences that characterize influencer work.

Vallas and Schor (2020) argue that influencers are platform workers as they depend on the logic and mechanisms of digital platforms to carry out their work. Lima and Costa (2020, p. 12) also recognize digital influencers as platform workers and identify “the quantification of data in metrics, the attribution of value to new currencies in digital media (attention, data, users and money) and user and algorithm guided selection [...]” as components of digital work.

Thus, digital influencers are information workers. They work through platforms, are subject to algorithmic regulation, but have ‘clients’ whose operational logic is similar to communication agencies and content producers. Influencers don’t sell a material product; they provide an information-related service. Their contracts are also with customers, but the ‘contracts’ with the platforms often include non-explicit rules which change regularly without workers being aware.

SPECIFIC FEATURES OF DIGITAL INFLUENCERS’ WORK

At first glance, the subjects appear to be seduced by the glamor and the idea of an ‘easy life’ that permeates the digital influencer profession, by a narrative that denotes them as self-made entrepreneurs who supposedly perform more freely and flexibly. This is because “where platformization takes place in sectors that have long been in the informal economy, its effects may appear, at first, to be ‘progressive’, in the sense that they can bring [...] higher wages, some kind of autonomy [...]” (HUWS, 2021, p. 231).⁴

However, focused analysis reveals that influencers are far from being fascinated and enchanted. Without legal protection for the exercise of their profession they site the precarity of their work more often. Even so, in the country where “[...] different forms of precarious work prevail, often under the mantle of ‘flexibilization’” (ANTUNES, 2015, p. 129), digital influencers are seen as symbols of success. Even if there are financially successful influencers who no longer depend on platforms for their activities (they have opened their own businesses, launched product lines, became part of traditional media), this is not commonplace.

In the United States, 46 million influencers consider themselves amateurs and do not earn enough to rise above the country’s poverty line (GEYSER, 2022). In an aspirational work environment – in which “[...] workers’ vision of a desirable future leads them to embrace highly insecure positions in the labor market.” (VALLAS, SCHOR, 2020, p. 276) –, time and effort are invested working on an activity without any financial return. For Duffy (2017), aspirational work happens because, prior to reaching a more comfortable position

4 “nos lugares em que a plataformação ocorre em setores que estavam há muito tempo na economia informal, seus efeitos podem parecer, em um primeiro momento, ser ‘progressistas’, no sentido de que podem trazer [...] salários mais altos, algum tipo de autonomia [...]” (HUWS, 2021, p. 231).

in the industry, creators are subject to productive routines without any remuneration and to daily delivery (without pause) of content and publications on the platforms. In Brazil, data from a survey published by the agencies Squid and YouPix (2020) indicates that 68.5% of digital influencers do not consider this work their main source of income – even after having worked in the market for one or three years.

In addition, aspiring digital influencers decide to work with the production of internet content because they perceive some benefits in the activity: apparent independence, the opportunity to follow their dreams and have more flexible working hours (PULIZZI; HANDLEY; CLARK, 2021). However, in attempting to work more independently – without the need to report to the boss or clock in at 8am and leave at 6pm – influencers have encountered obstacles imposed by platformization. Digital influencers are not their own bosses – they work not only ‘on’, but ‘for’ the platforms. Despite increasing publicity resulting from the activity, the interference of the platforms curtails their work, conforms content, limits discussions, and generates health problems typically found where there are distorted and exploitative relations to the workforce.

Furthermore, as is common among professions that have arisen from digital platforms, influencer work lacks regulation. The National Council for Advertising Self-Regulation (Conar) monitors influencers’ advertising and propaganda placement specifically to recommend what should or should not be done to comply with the provisions of the Consumer Protection Code (CDC):

[...] in the scope of its practice as a ‘promoter of products and services’, freedom of expression is now weighed against consumer protection [...]. Therefore, influencers must follow the same rules applicable to Brazilian advertising, with special attention to the CDC. (RAMOS, 2021, p. 156)

There are also no digital influencer unions in Brazil. In May 2022, a bill that addressed influencers’ professional practice, and was being processed in the Federal Senate, was shelved⁵. Digital influencers are therefore at the mercy of platforms.

Despite the corporate discourse presenting it as a ‘horizontal’ relationship, Burgess argues that “[...] creators have played a major role in building the cultures and audiences of platforms, but [...] platforms have the power to make or break the careers of creators” (2021, p. 23). We are not referring to activity that is merely ‘situated’ on digital social networking platforms, but that is marked by the penetration of “[...] infrastructures, economic processes, and governmental frameworks of platforms [...]” (POELL; NIEBORG; VAN DIJCK, 2020, p. 5). The centrality of platforms has guided the economic transactions that take place in these spaces and conformation of user interaction.

For Poell, Nieborg and van Dijck (2020), there are aspects of platformization that include datafication: the way in which platforms transform into data what previously seemed to be unquantifiable. Datafication is part of the platforms’ business model and generates a shared ideology of dataism, in which hegemonic knowledge becomes the knowledge offered by the data (D’ANDRÉA, 2020). Since this data is restricted to platforms, the only possibility of ‘recognizing its existence’ is through algorithms. More than mathematical codes, algorithms are responsible for processing large volumes of data and metadata, either via selection, ranking or recommendation (the most evident forms). However, above all they operate via control of information flows. Thus, “[...] datafication and algorithmic mediations are interdependent phenomena” (D’ANDRÉA, 2020, p. 31)⁶.

Digital influencers deal with the ‘consequences’ of algorithms actions on a daily basis, observing what gains or does not gain visibility. The risk of not subjecting oneself to algorithmic norms lies in what Bucher

5 It was bill no. 1,138 in 2022. The initiative of Senator Eduardo Gomes (PL-TO). The procedure was terminated after withdrawal by the author himself, on May 9, 2022.

6 “[...] dataficação e mediações algorítmicas são fenômenos interdependentes” (D’ANDRÉA, 2020, p. 31)

(2012) identified as the “threat of invisibility”, a new type of reign over the subjects’ actions: the concern is not about being observed and exposing oneself daily, but about ‘disappearing’ and not being considered relevant. As relevance is measured by algorithms, becoming visible depends on obeying certain platform logic (BUCHER, 2012).

Meanwhile, the idea of independence and flexible hours becomes almost a contemporary utopia: “[...] the transition from the worker to subordinate self-manager, [...] [while] calling oneself an ‘entrepreneur’.” (ABÍLIO, 2020, p. 114). In consonance with neoliberal rationality⁷, influencers introduce norms of subordination and self-management. Meanwhile, they are subject to the algorithmic rules of the networks: posts in *stories* must be daily or they undermine the delivery of content, the new *reels* function must be used weekly, the *feed* must be fed with photos and videos and must also generate reactions that spread among followers. The flesh-and-blood boss disappears but is replaced by a machinic boss with whom decisions related to the pace of action cannot be negotiated.

At the same time, the rhetoric from the platforms themselves asserts that the algorithm is just an intermediary between content creators and their audiences, “[...] as if it merely conducted users’ choices without interference” (ARAÚJO, 2021, p. 36). Algorithms are said to only reveal audience choices or follow users. In this way, creators find themselves hostage to two logics: the audiences’ interests and the platforms’ interests. Discourses about human bias, camouflage the commercial objectives of these companies (O’NEIL, 2020).

There is evidently a power game taking place in this context: despite being unable to open the black box of algorithms, influencers must respond to their rules. Not only visibility but also ‘content’ itself is impacted by the algorithms. Even though there is a materialization of the ‘governance’ of platforms (D’ANDRÉA, 2020) – in their ‘terms of service’ and ‘community guidelines’, which indicate which content is allowed and/or tolerated, and which is discouraged –, there are still disagreements. There is opacity in the texts, constant changes are made to them, and accidental penalties are frequent due to their automated nature. Many sensitive (and discouraged) topics are addressed by digital influencers to alert or inform their audiences, including political issues.

Brazilian creators have been penalised for not complying with the rules. There are reports of shadow banning, algorithmic racism, and censorship (KARHAWI; SÉ, 2021). It is clear, therefore, that platforms “[...] allow cultural workers to find new avenues to audiences and visibility [...], [but] it is also clear that they constrain the ‘creative’ process in various ways [...]” (POELL; NIEBORG; DUFFY, 2022, p. 7).

⁷ Campos and Ferreira (2021) systematized the idea of neoliberalism as rationality. The authors explain that neoliberalism is “a normative system, a series of practices, discourses and parameters of behaviour that guide individuals in their relationships with themselves and with others” (2021). As such it could not be considered an exclusively economic phenomenon. For them, “although neoliberalism is not reduced to policies alone, these policies are powerful tools for promoting the subjectivation of individuals in a neoliberal way” (2021). The authors point to the serious aspect of a mono-rationality: “[...] the form of neoliberal political rationality appears as the only possible rational form”. Therefore, “thinking in a calculating, microeconomic and competitive way becomes the only possible way of thinking rationally, and everything else is reduced to baseless ideology. This occurs in everyday life, but also in politics and at state government level, reduced to complying with neoliberal norms of conduct, as if it were inevitable to do so in order to remain within what is considered reasonable by the general public. There is an erasure of any other ways of understanding the world and the duties of the State other than efficiency, considered an objective criterion and indisputably beneficial at individual and social levels. It is this characteristic of neoliberalism that makes it so dominant in discursive and political terms, allowing its unrestricted application without it appearing to be a choice, but taking place naturally, with a sincere pretence of neutrality on the part of its enforcers” (2021).

Algorithmic governance⁸ impacts the productive work routine of influencers, and not knowing the (opaque) platform rules causes damage to the work itself, in a clear “transfer to the worker of managing his work, costs and risks [...]” (ABÍLIO, 2020, p. 114). Thus, being penalized for content that is considered inappropriate or not having significant content delivery metrics, for example, is considered a ‘personal failure’ rather than as an issue to be resolved to improve that influencer’s performance. The likely conclusion drawn is that the influencer did not make good enough content or that they were not able to hack the algorithm. It is the materialization of algorithmic management and of:

[...] permanent tracking [which] are the concretization of a worker quantified by performance metrics managed by algorithms, with management techniques going beyond the subject, impelled to ‘transcend themselves by the company’ or ‘motivate themselves more and more to satisfy the customer’. It is about transcending and motivating oneself, based on one’s own metrics, as mechanisms of self-coercion and self-blame [...]. (GROHMANN, 2020, p. 105)

Throughout this ongoing self-motivation process, digital influencers invest in guesstimation, observing patterns of how to please the platform to promote their visibility and increase their popularity (ABIDIN, 2020). In order to do so, they evoke an ‘algorithmic imaginary’: “perceptions about what the algorithm is and how it works” (BUCHER, 2017, p. 40). In addition, they engage in ‘algorithmic gossip’ (BISHOP, 2019), in order to shape their presence on networks based on what the platform is thought to recognize as relevant and appropriate. To escape penalties and even hack the algorithm in search of more visibility, digital influencers discuss the functioning of platforms daily, and seek in many ways to ‘beat the algorithm’ (ARRIAGADA; IBÁÑEZ, 2020).

Insights gained through this investigation shape production and content choices of influencers and content producers. However, every day they continue to face the black-box structure of social media networks in their work routines. The insecurity of the job is strongly related to the opacity of this logic. It is no coincidence that Duffy (2020) understands the work of these content producers in a context of algorithmic precariousness.

ALGORITHMIC EXHAUSTION: HEALTH, WORK AND DIGITAL CONTENT PRODUCTION

Acknowledging health issues, especially those arising from work, still seems to be a challenge for workers. As part of an illustrative effort, in this volume we use examples obtained through spontaneous observation of digital influencers from different segments⁹ in 2020 and 2021. These examples mention the impact of platforms on professional performance. It is worth noting – within the scope of the methodology of this

8 Gillespie (2018, p. 97) defines algorithms as “codified procedures that, based on specific calculations, transform data into desired results”. For author Goffey: “Algorithms do things, and their syntax incorporates a command structure to allow this to happen (GOFFEY, 2008, p. 17).” (GOFFEY apud GILLESPIE, 2018, p. 97). According to this understanding, “computers are fundamentally algorithmic machines – designed to store and read data, apply mathematical procedures in a controlled manner and offer new information as a result” (GILLESPIE, 2018, p. 97). Gillespie warns that “as we adopt computational tools as our main means of expression and begin to make not only mathematics, but ‘all’ information ‘digital’, we begin to subject human discourse and knowledge to these procedural logics that sustain all computing” (2018, p. 97). One of the consequences pointed out by the author of adopting algorithmic procedures to manage our lives is that these machines are also producing and certifying knowledge. “What we need is a questioning of algorithms as a central element of our information ecosystem (ANDERSON, 2011) and of the cultural forms that emerge in their shadows (STRIPHAS, 2010), paying special attention to how and where the introduction of these algorithms in the practices of human knowledge can have political ramifications” (2018, p. 97).

9 The digital influencers in question are part of a long-term research study (KARHAWI, 2017; KARHAWI, 2020) in an initial intentional sample, defined by typical cases. Our understanding of spontaneous observation is a continuous follow-up process with a view to gathering examples and cases that point to emerging or recurrent issues in digital influencers’ culture – understanding that research questions emerge from common sense (LOPES, 2010). We recognize that an observation on Instagram also faces the impositions of the platform, especially algorithmic biases. Even so, in line with the objective of theoretically articulating the notion of exhaustion and digital influencers activity on platforms, we assume that the cases operate as examples and illustrate the proposed debate, with no intention of generalizing from the research samples.

study – that the examples cited here are not intended to form a ‘sample’, given that they were collected in a spontaneous observation process and not necessarily obeying systematized categories of investigation. Although they do not constitute a sample, we consider the cases to be important illustrative elements of the argument presented in the study and, therefore, they are used to provide empirical robustness to the work. In methodological terms, description and analysis will be presented concomitantly, as suggested by Lopes (2010).

The decision to follow some digital influencers on Instagram was made because it is the network on which creators most often close commercial deals (YOUPIX; BRUNCH, 2019). Therefore, it is the place where work relationships are most evident. It was observed that many of the influencers would ‘get things off their chest’ in the *stories* space, precisely because of the more interactive, less posed, or ‘instagrammable’ format of the functionality – there, content creators feel comfortable sharing more intimate aspects or details of their own routine (LEAVER; HIGHFIELD; ABIDIN, 2020). However, there is also a migration – in a transmedia dynamic – in which the conversation started in *stories* expands to YouTube.

Influencers are workers exposed to health problems. From material and symbolic points of view they are submitted to the connection between communication, technologies, and culture, producing the ‘package’ of Big Tech social prescriptions. From the structural point of view, they are submitted to the dynamics of the social acceleration of time; and, from the point of view of the world of work, algorithmic regulation, and unregulated mechanisms for exercising their profession.

In Matos’ (2020) doctoral research YouTubers’ performance is linked to ‘self-exhaustion’. According to the author, the platforms’ sociotechnical agencies affect content creators. There is, for example, a duality imposed on the production of quality content versus the large amount of content demanded by platforms. This type of relationship highlights the tension in dealing with time and with the YouTuber’s own reputation. Creators see themselves favouring exhaustive production to the detriment of their own mental health, since they understand that not following the rules of the game will reduce their relevance.

Resultantly, some creators consider giving up their channels when evaluating the high investment made within the platforms and the frugal benefits resulting from this dedication (MATOS, 2020). There are still reports from YouTubers about work overload and tiredness; in addition to feelings of frustration, impotence, and injustice; as well as the fear of failure. In the reports, there are criticisms of YouTube, especially regarding opacity, the lack of dialogue with producers, and consistently negative mentions of the algorithm.

Following Matos’ observations, on January 27, 2021, influencer Lu Ferreira, currently on Instagram as @lutsferreira, published a series of *stories*¹⁰ commenting on the feeling that work on social networks had taken away her creativity. The feeling was linked to the fear of taking vacations and not being able to post videos on YouTube anymore. Her main concerns were “fear of the algorithm penalizing me” and a constant concern with “numbers and algorithms” to the detriment of content made for love (Figure 1). The quality versus quantity duality, demanded by platforms, even affects a digital influencer like Lu Ferreira, who has been working with content production since 2007. She is one of the precursors of the Brazilian fashion blogosphere (KARHAWI, 2020).

10 According to the ethical research recommendations of the Association of Internet Researchers (MARKHAM; BUCHANAN, 2012), when the initial intention is for content to be public and reach large audiences – as is the case with publications by digital influencers – the material can be used in research, without the need for authorization.



Figure 1 – Lu Ferreira in a *stories* sequence on January 27, 2021¹¹
Source: Captured by the authors on the Instagram profile @lutsferreira.

The influencer Nátaly Neri, who started her career as a content producer in 2015 on YouTube, also directly mentioned the algorithm. On July 6, 2021, Nátaly dedicated a *stories* sequence to commenting on Instagram changes, especially the most recent one related to the fact that the platform is no longer considered a network for photos, according to an official announcement made by the CEO, Adam Mosseri.¹² During a frank conversation with her audience on *stories*, Nátaly tries to show how exhausting content production is given the radical rule changes and difficulty following them. The creator mentions that: “I do not have infinite mental health and I am not a slave to an algorithm or a social network [...]” (Figure 2).



Figure 2 – Nátaly Neri in a *stories* sequence on July 6, 2021¹³
Source: Captured by the authors on the Instagram profile @natalyneri

11 Transcription of the stories captions: “[...] It hit home because I was really nervous about my YouTube vacation. [...] I was afraid the algorithm would penalize me. [...] In recent years I have thought more about numbers and algorithms. [...] And it was really making me unhappy. [...]”

12 The announcement was made in video format, on Adam Mosseri’s social media (2021). In a message on Twitter, Mosseri also noted changes in other areas, in addition to videos he mentions creators, purchases and messages.

13 Transcript of the stories captions: “Hi guys! About Instagram! These last changes were the straw that broke the camel’s back. Part of a series of grievances that I have had with this network (for those who are content creators too, I imagine.) [...] It has been soooooo hard to produce for this social network! It’s what gets to me the most! Given that before it was one of the most fun due to the more impersonal nature it had with the backstage atmosphere. [...] I don’t have infinite mental health and I’m not a slave to an algorithm or a social network and if the network or format and the demands start to bother me more than they give me pleasure to share, [...] we get even more motivated and you can follow the conversation, the narrative. It is very sad to produce for a network where most of the messages you start to receive are: “Instagram no longer delivers your content to me”, wanting us to pay for you to receive it.”

Nátaly's account also shows how the pleasure of producing content is lost when the activity becomes shaped and dictated by the algorithm. To some extent, the pleasure is supplanted by a feeling of anxiety ("It's what provokes me the most!"). In investigations conducted with Finnish digital influencers, Lehto (2020) argues that the influencer's performance is underpinned by anxiety. The "neurotic influencer", as the author calls them, arises because of the precarious work on social networks, but also because of the 'affective' practice that unfolds in the relationship between influencers and followers – affection that is evident in Nátaly's complaint about the absence of pleasure and fun. Anxiety also stems from work that is constantly judged by large audiences (LEHTO, 2020).

Two months later, the conversation started on Instagram by the influencer continued in a video on her YouTube channel, entitled "THE ALGORITHM will kill THE CONTENT CREATOR". In the approximately 26-minute video, the influencer covers the constant changes on platforms, focusing on Instagram, and expresses an understanding that following them is part of the job for those who produce internet content, but "[...] it is inhumane work, because it happens all the time! Because social networks do this all the time, and we pay rent, and are constantly expelled and evicted!" (NERY, 2021). Nátaly continues the conversation by dealing with the logic of monetizing influencers' work and how this setup impacts mental health:

Even though we don't earn for every post, it's important to keep a posting rhythm so that you keep the profile attractive and make all this free production sustainable, understand? [...] But we are exhausted and burned out because we are going crazy. [...] Content production gurus on Instagram spend half their time saying it's up to you to make your content reach your audience. Because if you don't post twice a day, your content won't reach them. Because if you don't make 50 thousand stories, your content won't reach them. Because if you don't do an IGTV, a *stories*, a *reels*, a *guide*, I don't know what, I don't know what... Your content won't reach them. You blame the creator when they can't handle it. [...] And then we talk about health on the internet, and where do we put it, right? [...] Because there won't be any. [...] But, in short, what happens? Either it's the creator blaming themselves, thinking they can't handle it? And they don't grow because their content is bad. When, in fact, their content is just not reaching people. Or the creator gives their soul, doesn't have time for creativity, doesn't have time for elaboration. [...] And then you have a lot of content creators who are sick [...]. (NERY, 2021)

Nátaly's account returns to the discussion on creativity previously raised by Lu Ferreira and highlights that creators' working pace borders on a "level of exhaustion and burnout", a feeling that they are going 'crazy'. This feeling is mixed with "guilt" due to the performance of some publications. In the transcribed excerpt, Nátaly does not mention the algorithm, but it is in the title of the video and permeates the entire discussion. The algorithm appears as a kind of materialization, something that gives a name to the opacity of the networks, 'someone' toward whom indignation is addressed. It is not exhaustion without an obvious cause, a generalized anxiety for which there is no name, but an exhaustion that derives from the conformation of platforms, from interference in the quantity and quality of content production, in the limits imposed on pleasure and creativity due to a datafied logic. The exhaustion articulated points to an 'algorithmic exhaustion'.

The volume of activities that are involved in the production of content are mentioned during the influencer's outburst, including the features of IGTV, *stories* and *reels*. The accumulation of functions had already been reported by Primo, Matos and Monteiro (2021) as a possible cause of exhaustion among creators. Data from a survey published by the Brunch agency and YouPix, in 2019, reveals that few Brazilian digital influencers (34%) manage to form teams. The absence of other professionals in the field reveals a practice that is not only lonely, but also overloaded. The job includes editing photos and videos, scripting, contractual issues, dealing with agencies and brands, capturing images and audio, etc. Continuing under the logic of aspirational work, even at different moments in their careers, these dynamics remain: beginners accumulate different functions as they cannot have a team yet. Sometimes, already professionalized

influencers continue to accumulate functions even with teams due to the formats and functionalities required by the platforms, with large and frequent updates.

Rosa (2019, p. 48) calls this state “frantic stagnation” or “suspension frenzy” – in which there is constant movement and an apparent absence of a break. This leads to an “addition of compulsion and transformation to the tendency to stiffen up” (2019, p. 21). Han (2014) supports this reflection when he states that this “hyperactive society is – in fact – hyperpassive”, because we stop reflecting, and thinking is the most “active activity” (HAN, 2014, p. 48).

Working in the literature content production segment - known as *bookstam*, on Instagram, and *booktube*, on YouTube –, influencers Ju Cirqueira (@ju cirqueira) and Mell Ferraz (@blogliteraturese) have also shared accounts of their relationships with the platforms they are active on in *stories* on February 27, 2021 and October 24, 2020 (Figure 3).

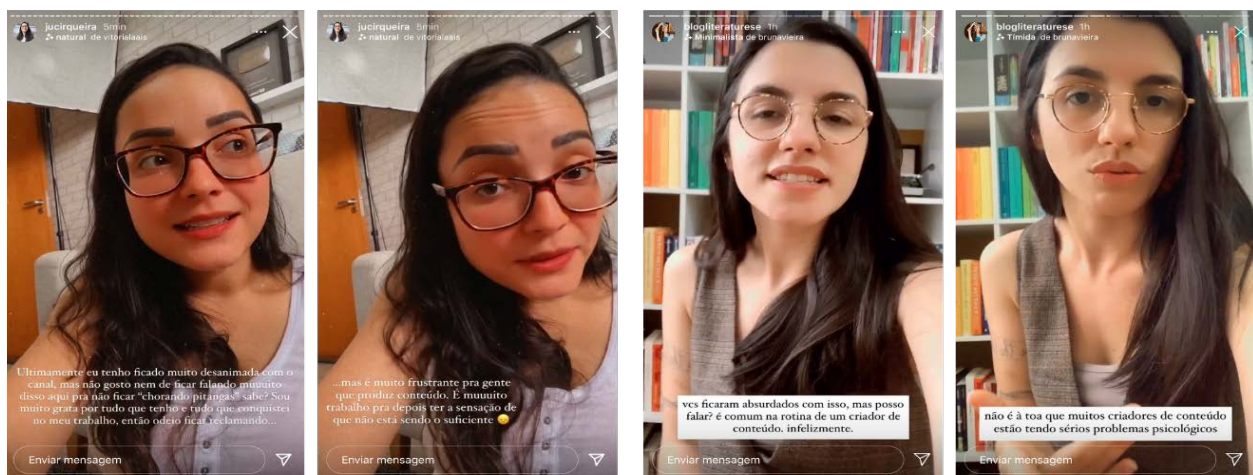


Figure 3 – Ju Cirqueira and Mell Ferraz in *stories* sequences¹⁴

Source: Captured by the authors on the Instagram profiles @ju cirqueira and @blogliteraturese.

The accounts are brief and do not detail relationships of dependency or subjection. However, they provide hints at their dissatisfaction – “Lately I have been very unenthusiastic [...]” – and regarding exhaustion – “it is no wonder that many content creators are having serious psychological problems.” The permanent subjection to the dynamics of exposure, transparency, and tiredness lead to the absence of a break. This is clear in Ju Cirqueira’s speech (“It’s a lot of work to later have the feeling that it’s not enough”). In the case of platform workers, such as influencers, this equation gains an extra layer of perversity: the total appropriation of time.

Time is simultaneously private and intimate and completely socially determined. The rhythms, sequences, duration, and speed of social time, as well as temporal horizons and perspectives, escape individual control and, at the same time, clearly develop into a normative effect, coordinating and regulating actions. (ROSA, 2010, p. 90)

The blurring of boundaries between public and private is a founding principle of digital and is highlighted by the ‘blurring’ of time, which is intimate but socially determined (CORRÊA, 2014). As a result, professional

14 Transcript of the stories captions: “Lately I’ve been very unenthusiastic about the channel, but I don’t even like to keep talking a looooot about it here to not ‘cry a river’, you know? I’m very grateful for everything I have and everything I’ve achieved in my work, so I hate complaining... [...] ...but it’s very frustrating for people who produce content. It’s a looooooot of work to then have the feeling that it’s not enough” and “[...] you guys were gobsmacked by it, but can I talk? It’s common in a content creator’s routine. unfortunately. [...] it is no wonder that many content creators are having serious psychological problems [...]”.

activity in this space is equally diluted and any “[...] distinction between work and leisure is being blurred” (PRIMO; MATOS; MONTEIRO, 2021, p. 117).

Technical acceleration does not force an increased pace of life, but it modifies the measures of time that underlie our actions and plans (ROSA, 2010). In the case of influencers, time allocation seems to fall within a very narrow margin of individual choice – since they are subject to the imperative of data-generating time. If we understand that free time is about “temporal resources not linked to mandatory activities, which can be disposed of with greater or lesser individual volition, that is, as time left over after subtracting time from work, family and domestic and personal care” (ROSA, 2010, p. 265), it is possible to infer that connection time is not free time, because it is time that generates data (MOROZOV, 2018). Furthermore, for the creators, it is the time that continues to generate financial gains due to the consumption of the audience that, in this logic, invests their free and leisure time on the platforms.

The relationship with time is evident in the speech of YouTuber Ellora, in a video report by Meio & Mensagem (2018) about content creators and burnout. In a statement, Ellora, who produces content centred around lifestyle and mental health, addresses issues already covered throughout this work: the dilution of leisure and work time; the blurring of borders; and the exhaustive demand for production.

Like any other job, it has disadvantages, you know? Thinking that all the time we have free we should be working... And that's absurd, man. You should be working because you will deliver the other videos better [...], you know? And several other rules, like that, that we invent ourselves or that are put in our heads as well. [...] If we get into this, we will never win this game. So, it is more worthwhile to create your rhythm, saying: “Look, this is my limit, it is the limit that I consider healthy” [...]. Because if not, we'd get stuck in the vibe that all videos must have a certain reach, you know? This is very harmful, man. We talk a lot more about it, about the algorithm than about: “Are you okay?”. (MEIO & MESSAGEM, 2018)

At several points in her speech, Ellora blames a third party for “putting something in the head” of the creators and for having to “deliver the videos”. In the end, she summarizes: “We talk a lot more about it, about the algorithm than about: ‘Are you okay?’”. There, suddenly, that responsible ‘entity’ has a name - ‘the algorithm’. Ellora’s speech dialogues with the others selected to exemplify the theoretical discussion undertaken here. What seems to unfold is an exhaustion, a feeling of dissatisfaction in which ‘the algorithm’ is primarily responsible.

Even so, the beginning of Ellora’s account contains an important passage: “Like any other job, it has disadvantages, you know?”. This is because we cannot ignore that digital influencers are part of a billion-dollar industry: it was estimated that the influencer market was worth 16.4 billion dollars in 2022 (SEGALLA, 2022). The ills arising from professional activity are not sufficient to displace the current discourse about the successful influencer: 41% of young Brazilians would like to be a digital influencer, citing the opportunity to earn money as their main motivation (SILVA, 2021). The possibility of working as a content creator on the internet is a “perverse means of overcoming poverty” (MORAES, 2021). While unemployment rates in Brazil reach 11% in the first quarter of 2022 (BRASIL, 2022) and hunger affects 33 million people (CORREIA, 2022), the internet seems like a meritocratic oasis. No wonder there are so many content creators trying to reach the star system, inhabited by the big digital influencers, while subjecting themselves to platform impositions and dealing with health consequences. One of these is algorithmic exhaustion.

FINAL CONSIDERATIONS

Digital influencers are information workers who work on platforms and are therefore subject to algorithmic regulation. Initially they were treated as content producers who acted in a spontaneous and amateur way, occupying the ‘gaps’ and the potential spaces of the emerging participation culture. This was based on a supposed democratization of communicative possibilities boosted by the opening of media hubs and social networks. Today they occupy a recognizably central place – no longer amateur and spontaneous, but professional and planned – in the contemporary communicational ecosystem.

However, this professionalization of the craft was not supported by legal protection for its professional practice, leaving these workers at the mercy of norms and rules established by their clients, but above all, determined by digital platforms.

On the one hand, corporations argue that there is ‘freedom and flexibility’; on the other hand, these workers are subjected to arbitrary rules defined by these companies, which promote or penalize influencers and their content based on non-transparent attributes and are supported by the functioning regimes of the institutions themselves. Furthermore, from the point of view of the mediation of this relationship, we witness an absence of regulation and a cultural environment hegemonically constituted by notions of productivity and values related to the Big Tech agenda and platform capitalism. The overlapping of these factors has a severe impact on the health of these workers.

This article sought to build connections between (1) the centrality of communication and technologically mediated life; (2) the professional performance of digital influencers as agents of this ecosystem; (3) the classification of these professionals as platform workers; (4) the action of these corporations as regulators of the work of these professionals, despite evoking flexibility and autonomy in their relations; and (5) the repercussions reported by influencers on their work dynamics and their health conditions.

We explored the notion of ‘algorithmic exhaustion’ as an expression-synthesis of this connection, as it is a specific type of exhaustion, the result of the intersection of these factors (listed above) and the production of a toxic ‘work environment’ for these workers. In addition to being intersected by these dynamics, they are subjected to 24/7 shifts, required to produce a high volume, overloaded through an accumulation of functions and other aspects like the absence of a break. All these factors result in exhaustion.

The accounts provided by the influencers we observed point to aspects of this ‘algorithmic exhaustion’: a work relationship marked by violence and not classified as employment, therefore making it impossible for these workers to organize themselves collectively and communicate with their ‘bosses’ to consider improvements in working conditions and other areas. This one-way action is one of the drivers of the sensations suffered by the influencers and predominantly experienced in isolation, without the possibility of dialogue or intervention.

Some symptoms of this relationship were recorded in the testimonies collected when observing the influencers. They include: the dilution of time, the mixing of leisure time with work time, the totalization of work, the ‘blurring’ of the edges with other social practices, the exhaustive demand for production, the “*end of creativity*” and content “*made for love*”, the constant and fast changes (and the impossibility of keeping up with the pace of transformations) arbitrarily promoted by the platforms, the incessant and uninterrupted production, the logics of monetization and the character of dependence and subjection.

These ‘contracts’ regulating the operation of content production by platform workers have health repercussions (especially for mental health) that indicate the characterization suggested here, of ‘algorithmic exhaustion’: the feeling that work takes away creativity, the perception that one is going through ‘psychological problems’, the “fear of the algorithm [...] penalizing”, the feeling of being “a slave

to the algorithm”, the guilt for “not being able to handle it”, the permanent feeling of dissatisfaction, discouragement and exhaustion.

We believe that the argumentative commitment and articulation presented here point to several gateways to a critical dive into this macro scenario. The regulation of the influencer profession, as platform workers, the look at the working conditions of these professionals, the profile of influencers in Brazil and the social markers that intersect the mental health issues of these workers are some of the aspects that we consider to be possible ramifications and future investigations on this topic. It is hoped that this initial articulation – which we defend as a research interest for the communication field – can support new and necessary reflections.

REFERENCES

- ABIDIN, Crystal. Mapping internet celebrity on TikTok: exploring attention economies and visibility labours. **Cultural Science Journal**, [s. l.], v. 12, n. 1, p. 77-103, 2020. DOI: <https://doi.org/10.5334/csci.140>. Disponível em: <https://sciendo.com/article/10.5334/csci.140>. Acesso em: 12 jun. 2022.
- ABIDIN, Crystal; KARHAWI, Issaaf. Influenciadores digitais, celebridades da internet e ‘blogueirinhas’: uma entrevista com Crystal Abidin. **Intercom: Revista Brasileira de Ciências da Comunicação**, São Paulo, v. 44, n. 1, p. 289-301, jan.-abr. 2021. DOI: <https://doi.org/10.1590/1809-58442021114>. Disponível em: <https://www.scielo.br/j/intercom/a/WftrmyFhn6K5r366RN9hSZD/?lang=pt>. Acesso em: 12 jun. 2022.
- ABÍLIO, Ludmila Costhek. Uberização: gerenciamento e controle do trabalhador *just-in-time*. In: ANTUNES, Ricardo. (org.). **Uberização, trabalho digital e indústria 4.0**. São Paulo: Boitempo, 2020. p. 111-124.
- ABÍLIO, Ludmila Costhek; AMORIM, Henrique; GROHMANN, Rafael. Uberização e plataformação do trabalho no Brasil: conceitos, processos e formas. **Sociologias**, Porto Alegre, v. 23, n. 57, p. 26-56, maio-ago. 2021. DOI: <http://doi.org/10.1590/15174522-116484>. Disponível em: <https://www.scielo.br/j/soc/a/XDh9FZw9Bcy5GkYGzngPxB/?lang=pt>. Acesso em: 12 jun. 2022.
- ALEXANDER, Julia. YouTube’s top creators are burning out and breaking down *en masse*. **Polygon**, [s. l.], jun. 2018. Youtube. Disponível em: <https://www.polygon.com/2018/6/1/17413542/burnout-mental-health-awareness-youtube-elle-mills-el-rubius-bobby-burns-pewdiepie>. Acesso em: 21 jun. 2022.
- ANTUNES, Ricardo. **Adeus ao trabalho?**: ensaio sobre as metamorfoses e a centralidade do trabalho. 16. Ed. São Paulo: Cortez, 2015.
- ANTUNES, Ricardo. (org.). **Uberização, trabalho digital e indústria 4.0**. São Paulo: Boitempo, 2020.
- ARAÚJO, Willian Fernandes. Norma algorítmica como técnica de governo em Plataformas Digitais: um estudo da Escola de Criadores de Conteúdo do YouTube. **Fronteiras: Estudos Midiáticos**, Porto Alegre, v. 23, n. 1, p. 29-39, jan-abr. 2021. DOI: <https://doi.org/10.4013/fem.2021.231.03>. Disponível em: <https://revistas.unisinos.br/index.php/fronteiras/article/view/20534>. Acesso em: 21 jun. 2022.
- ARRIAGADA, Arturo. Content creators and the field of advertising. In: CUNNINGHAM, Stuart; CRAIG, David. **Creator culture**: an introduction to global social media entertainment. New York: New York University Press, 2021. P. 232-249.
- ARRIAGADA, Arturo; IBÁÑEZ, Francisco. “You need at least one picture daily, if not, you’re dead”: content creators and platform evolution in the social media ecology. **Social Media + Society**, [s. l.], v. 6, n. 3, 2020. DOI: <https://doi.org/10.1177/2056305120944624>. Disponível em: <https://journals.sagepub.com/doi/10.1177/2056305120944624>. Acesso em: 21 jun. 2022.
- BISHOP, Sophie. Managing visibility on YouTube through algorithmic gossip. **New Media & Society**, [s. l.], v. 21, n. 11-12, p. 2589-2606, 2019. DOI: <http://doi.org/10.1177/1461444819854731>. Disponível em: <https://journals.sagepub.com/doi/10.1177/1461444819854731>. Acesso em: 21 jun. 2022.
- BRASIL, Cristina Indio do. Taxa de desemprego fica estável no primeiro trimestre, aponta IBGE. **Agência Brasil**, Brasília, DF, 13 maio 2022. Economia. Disponível em: <https://agenciabrasil.ebc.com.br/economia/noticia/2022-05/taxa-de-desemprego-fica-estavel-no-primeiro-trimestre-aponta-ibge#:~:text=A%20taxa%20de%20desemprego%20no.quando%20atingiu%2014%2C9%25>. Acesso em: 20 jun. 2022.

BUCHER, Taina. The algorithmic imaginary: exploring the ordinary affects of Facebook algorithms. **Information, Communication & Society**, [s. l.], v. 20, n. 1, p. 30-44, 2017. DOI: <http://doi.org/10.1080/1369118X.2016.1154086>. Disponível em: <https://www.tandfonline.com/doi/full/10.1080/1369118X.2016.1154086?scroll=top&needAccess=true>. Acesso em: 20 jun. 2022.

BUCHER, Taina. Want to be on the top? Algorithmic power and the threat of invisibility on Facebook. **New Media & Society**, [s. l.], v. 14, n. 7, 1164-1180, 2012. DOI: <https://doi.org/10.1177/1461444812440159>. Disponível em: <https://journals.sagepub.com/doi/10.1177/1461444812440159>. Acesso em: 20 jun. 2022.

BURGESS, Jean. Platform studies. In: CUNNINGHAM, Stuart; CRAIG, David. **Creator culture**: an introduction to global social media entertainment. New York: New York University Press, 2021. p. 21-38.

CAMPOS, Jonas; FERREIRA, Adriana Nunes. Neoliberalismo como racionalidade: uma análise das justificativas de duas medidas econômicas. In: ENCONTRO NACIONAL DE ECONOMIA POLÍTICA, 26., 8-11 jun. 2021, Goiânia. **Anais** [...]. Niterói: SEP, 2021. p. 1-21. Disponível em: https://www.sep.org.br/mostrar.php?url=enep_teste/uploads/1731_1615851542_Neoliberalismo_como_racionalidade_-_COM_ID_pdf_ide.pdf. Acesso em: 20 jun. 2022.

CORRÊA, Elizabeth Saad. Nem público nem privado: o determinismo das práticas de redes sociais na configuração de um ciberespaço híbrido. In: SOUSA, Mauro Wilton; CORRÊA, Elizabeth Corrêa (org.). **Mutações no espaço público contemporâneo**. São Paulo: Paulus, 2014. p. 217-235.

CORREIA, Victor. 33 milhões de pessoas passam fome no Brasil, aponta pesquisa. **Correio Braziliense**, Brasília, DF, 08 jun. 2022. Insegurança alimentar. Disponível em: <https://www.correio braziliense.com.br/brasil/2022/06/5013817-33-milhoes-de-pessoas-passam-fome-no-brasil-aponta-pesquisa.html>. Acesso em: 20 jun. 2022.

D'ANDRÉA, Carlos. **Pesquisando plataformas on-line**: conceitos e métodos. Salvador: EDUFBA, 2020.

DUFFY, Brooke E. **(Not) getting paid to do what you love**: gender, social media and aspirational work. New Haven & London: Yale University Press, 2017.

DUFFY, Brooke E. Algorithmic precarity in cultural work. **Communication and the Public**, [s. l.] v. 5, n. 3-4, p. 103-107, 2020. DOI: <https://doi.org/10.1177/2057047320959855>. Disponível em: <https://journals.sagepub.com/doi/10.1177/2057047320959855>. Acesso em: 20 jun. 2022.

FIGARO, Roseli. Comunicação e trabalho: implicações teórico-metodológicas. **Galáxia**, São Paulo, n. 39, p. 177-189, set.-dez. 2018. DOI: <https://doi.org/10.1590/1982-255435905>. Disponível em: <https://www.scielo.br/j/gal/a/3fjwYtPkq4M9y9VZJvytFcyk/?lang=pt>. Acesso em: 20 jun. 2022.

FILGUEIRAS, Vitor; ANTUNES, Ricardo. Plataformas digitais, uberização do trabalho e regulação no capitalismo contemporâneo. **Contracampo: Brazilian Journal of Communicatin**, Niterói, v. 39, n. 1, p. 27-43, 2020. DOI: <https://doi.org/10.22409/contracampo.v39i1.38901>. Disponível em: <https://periodicos.uff.br/contracampo/article/view/38901>. Acesso em: 20 jun. 2022.

GEYSER, Werner. The state of the creator economy: definition, growth & market size. **Influencer Marketing Hub**, maio 2022. Disponível em: <https://influencermarketinghub.com/state-of-the-creator-economy/>. Acesso em: 29 jun. 2022.

GILLESPIE, Tarleton. A relevância dos algoritmos. **Parágrafo**, São Paulo, v. 6, n. 1, p. 95-121, jan.-abr. 2018. Disponível em: <https://revistaseletronicas.fiamfaam.br/index.php/recicofi/article/view/722>. Acesso em: 29 jun. 2022.

GROHMANN, Rafael. Plataformização do trabalho: características e alternativas. In: ANTUNES, Ricardo. (org.). **Uberização, trabalho digital e indústria 4.0**. São Paulo: Boitempo, 2020. p. 93-110.

HAN, Byung-Chul. **Sociedade do cansaço**. Petrópolis: Vozes, 2014.

HUWS, Ursula. Desmercantilizar as plataformas digitais. In: GROHMANN, Rafael. (org.). **Os laboratórios do trabalho digital**: entrevistas. São Paulo: Boitempo, 2021. p. 229-234.

JENKINS, Henry. **Cultura da convergência**. 2. ed. São Paulo: Aleph, 2009.

KARHAWI, Issaaf. **De blogueira a influenciadora**: etapas de profissionalização da blogosfera de moda brasileira. Porto Alegre: Sulina, 2020.

KARHAWI, Issaaf. Influenciadores digitais: conceitos e práticas em discussão. **Communicare**, São Paulo, v.17, edição comemorativa, p. 46-61, 2017. Disponível em: <https://casperlibero.edu.br/wp-content/uploads/2017/09/Artigo-1-Communicare-17-Edi%C3%A7%C3%A3o-Especial.pdf>. Acesso em: 21 nov. 2022.

KARHAWI, Issaaf; SÉ, Leticia. Censura ou problema técnico? A opacidade algorítmica do Instagram e o caso de Sheikh Jarrah. In: CONGRESSO BRASILEIRO DE CIÊNCIAS DA COMUNICAÇÃO, 44., 4-9 out. 2021, Recife. **Anais [...]**. São Paulo: Intercom, 2021. Disponível em: <https://www.portalintercom.org.br/anais/nacional2021/resumos/dt5-cd/issaaf-karhawi.pdf>. Acesso em: 21 nov. 2022.

LEAVER, Tama; HIGHFIELD, Tim; ABIDIN, Crystal. **Instagram: visual social media cultures**. Cambridge: Polity Press, 2020.

LEHTO, Mari. Neurotic influencers: feeling rules and the affective practice of anxiety in social media influencer work. In: ANNUAL CONFERENCE OF THE ASSOCIATION OF INTERNET RESEARCHERS, 21., 27-31 out. 2020, online. **Selected Papers of #AoIR2020**. [S. l.]: AoIR, 2020. Disponível em: <https://journals.uic.edu/ojs/index.php/spir/article/view/11259/9824>. Acesso em: 1 mar. 2022.

LIMA, Marília Abreu de; COSTA, Rafael Rodrigues da. Influenciadores digitais como trabalhadores de plataformas: o caso @diegojovinooficial e @fortalezaordinaria. In: CONGRESSO BRASILEIRO DE CIÊNCIAS DA COMUNICAÇÃO, 43., online, 1 a 10 out. 2020. **Anais [...]**. São Paulo: Intercom, 2020. Disponível em: <https://www.portalintercom.org.br/anais/nacional2020/resumos/R15-1659-1.pdf>. Acesso em: 16 nov. 2022.

LOPES, Maria Immacolata Vassallo de. **Pesquisa em comunicação**. São Paulo: Edições Loyola, 2010.

MARKHAM, Anette; BUCHANAN, Elisabeth. **Ethical decision-making and internet research: recommendations from the AoIR Ethics Working Committee (Version 2.0)**. [S. l.]: AoIR, 2012. Disponível em: <https://aoir.org/reports/ethics2.pdf>. Acesso em: 29 jun. 2022.

MATOS, Ludimila. **“O YouTube não liga pra gente”**: agenciamentos sociotécnicos na percepção de criadores de conteúdo brasileiros para o YouTube. 2020. 282 f. Tese (Doutorado em Comunicação e Informação) – Faculdade de Biblioteconomia e Comunicação, Universidade Federal do Rio Grande do Sul, Porto Alegre, 2020.

MCNEAL, Stephanie. YouTube is facing an identity crisis as its creators burnout. **BuzzFeedNews**, Los Angeles, 30 mar. 2022. Internet Culture. Disponível em: <https://www.buzzfeednews.com/article/stephaniemcneal/youtube-mcbrooms-quitting-david-dobrik>. Acesso em: 20 jun. 2022.

MEIO & MENSAGEM. **Creators, precisamos falar sobre burnout**. Série Saúde Mental & Criatividade. [São Paulo: s. n.], 2018. 1 vídeo (5 min). Publicado pelo canal Meio&Mensagem. Disponível em: <https://www.youtube.com/watch?v=9tNnvgiogH0&t>. Acesso em: 10 jan. 2022.

MORAES, Fabiana. Carlinhos Maia e o Instagram como meio perverso de superar a pobreza. **The Intercept Brasil**, [s. l.], 12 jan. 2021. Disponível em: <https://theintercept.com/2021/01/12/carlinhos-maia-e-o-instagram-como-meio-perverso-de-superar-a-pobreza/>. Acesso em: 18 jun. 2022.

MOROZOV, Evgeny. **Big Tech: a ascensão dos dados e a morte da política**. São Paulo: Ubu Editora, 2018.

MOSSERI, Adam. **Changes are coming to video on Instagram**. Nova York, 30 jun. 2021. Twitter: @mosseri. Disponível em: <https://twitter.com/mosseri/status/1410297743285829632>. Acesso em: 29 jun. 2022.

NERI, Nátaly. **O algoritmo vai matar o criador de conteúdo**: maquia & fala com produtos veganos importados da Milk. [S. l.: s. n.], 2021. 1 vídeo (26:50 min). Publicado pelo canal Nátaly Neri. Disponível em: https://www.youtube.com/watch?v=n14ye_LvIoM. Acesso em: 22 jun. 2022.

O'NEIL, Cathy. **Algoritmos de destruição em massa**: como o *Big Data* aumenta a desigualdade e ameaça a democracia. Santo André: Rua do Sabão, 2020.

PARKIN, Simon. The YouTube stars heading for burnout: “The most fun job imaginable became deeply bleak”. **The Guardian**. Londres, 08 set. 2018. Lifestyle. Disponível em: <https://www.theguardian.com/technology/2018/sep/08/youtube-stars-burnout-fun-bleak-stressed>. Acesso em: 18 jun. 2022.

POELL, Thomas; NIEBORG, David; DUFFY, Brooke Erin. **Platforms and cultural production**. Cambridge: Polity Press, 2022.

POELL, Thomas; NIEBORG, David; VAN DIJCK, José. Plataformização. **Fronteiras: Estudos Midiáticos**, São Leopoldo, v. 22, n. 1, p. 2-10, jan.-abr. 2020. DOI: <https://doi.org/10.4013/fem.2020.221.01>. Disponível em: <https://revistas.unisinos.br/index.php/fronteiras/article/view/fem.2020.221.01>. Acesso em: 18 jun. 2022.

PRAZERES, Michelle. Tecnologias, aceleração e educação: aproximações entre as noções de aceleração social do tempo, moderna socialização escolar e cultura *slow*. **Revista Comunicação & Educação**, São Paulo, v. 27, n. 1, p. 45-60, 2022. DOI: <https://doi.org/10.11606/issn.2316-9125.v27i1p45-60>. Disponível em: <https://www.revistas.usp.br/comueduc/article/view/183848>. Acesso em: 11 nov. 2022.

PRIMO, Alê; MATOS, Ludimila; MONTEIRO, Maria Clara. **Dimensões para o estudo dos influenciadores digitais**. Salvador: EDUFBA, 2021.

PULIZZI, Joe; HANDLEY, Ann; CLARK, Brian. **The Unconventionals**. [S. l.]: The Tilt, 2021. (Content Entrepreneur Benchmark Research). Disponível em: https://www.thetilt.com/wp-content/uploads/2021/07/TheTilt_Content_Entrepreneur_Research_final.pdf. Acesso em: 24 jun. 2022.

RAMOS, Pedro Henrique. **Direito e mídia digital**. Belo Horizonte: Dialética, 2021.

ROSA, Hartmut. **Aceleração: a transformação das estruturas temporais na modernidade**. São Paulo: Editora Unesp, 2019.

ROSA, Hartmut. **Alienation and acceleration: towards a critical theory of late-modern temporality**. Aarhus: Aarhus University Press, 2010.

SEGALLA, Amauri. Brasil é o país dos influenciadores, mostra estudo da Nielsen. **Estado de Minas**, Belo Horizonte, 10 jun. 2022. Mercado S/A. Disponível em: https://www.em.com.br/app/columnistas/amauri-segalla/2022/06/10/interna_amauri_segalla.1372382/brasil-e-o-pais-dos-influenciadores-mostra-estudo-da-nielsen.shtml. Acesso em: 20 jun. 2022.

SHIRKY, Clay. **A cultura da participação: criatividade e generosidade no mundo conectado**. Rio de Janeiro: Zahar, 2011.

SILVA, Jefferson. Quem te influencia? MindMiners e Youpix apresentam um estudo sobre a relação dos brasileiros com os influenciadores digitais. **Mindminers**, [s. l.], 9 dez. 2021. Estudo original. Disponível em: <https://mindminers.com/blog/quem-te-influencia>. Acesso em: 20 jun. 2022.

SILVEIRA, Sérgio Amadeu da. Capitalismo digital. **Revista Ciências do Trabalho**, São Paulo, n. 20, p. 1-10, out. 2021. Disponível em: <https://rct.dieese.org.br/index.php/rct/article/view/286/pdf>. Acesso em: 21 jun. 2022.

SODRÉ, Muniz. **A ciência do comum: notas para o método comunicacional**. Petrópolis: Vozes, 2014.

SODRÉ, Muniz. **A sociedade incivil: mídia, liberalismo e finanças**. Petrópolis: Vozes, 2021.

SQUID; YUPIX. **Machismo, sexismo & equidade no mercado de influência**. São Paulo: YouPix, 2020. Disponível em: <https://medium.youpix.com.br/pesquisa-machismo-sexismo-equidade-no-marketing-de-influ%C3%A2ncia-8bc21ecfe323>. Acesso em: 16 nov. 2022.

TRIVINHO, Eugênio. **A dromocracia cibercultural: lógica da vida humana na civilização mediática avançada**. São Paulo: Paulus, 2007.

VALLAS, Steven; SCHOR, Juliet B. What do platforms do? Understanding the gig economy. **Annual Review of Sociology**, [s. l.], v. 46, p. 273-294, abr. 2020. DOI: <https://doi.org/10.1146/annurev-soc-121919-054857>. Disponível em: <https://www.annualreviews.org/doi/10.1146/annurev-soc-121919-054857>. Acesso em: 24 jun. 2022.

YUPIX; BRUNCH. **Creators e marcas**. São Paulo: YouPix, 2019. Disponível em: <https://tag.youpix.com.br/pesquisacriadoresdinheiro2019>. Acesso em: 17 nov. 2022.