Pathological Processes of Content Creators on Social Media: A Scoping Review

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ABSTRACT

Background: Content creators (CC), like any other worker, are exposed to various occupational hazards that can affect their physical, mental, and social well-being, with psychosocial and ergonomic risks being particularly relevant. The combination of prolonged work hours, sedentary lifestyles, excessive public scrutiny, and often, job insecurity and unpredictability (manifesting as continuous connectivity and anticipation of sporadic tasks) presents a significant risk for the development of health issues.

Objective: To review the scientific literature to identify the potential pathological processes of CC on social media.

Method: The scope review method was used. The data were obtained from the following bibliographic databases: MEDLINE (via PubMed), Embase, Cochrane Library, PsycINFO, Scopus, Web of Science, and Virtual Health Library. The terms used as descriptors and in the title and abstract fields were “Content Creator” and “Pathologic Processes.” The search was conducted in May 2024. Agreement between authors for article selection was measured using Cohen's kappa coefficient. The documentary quality of the articles was assessed using the STROBE questionnaire, and the level of evidence and recommendation grade were determined according to SIGN recommendations. Bias presence was evaluated using the ROBINS-E tool

Keywords: Pathological Processes; Social Media; Content Creator; Psychological Phenomena; Postural Balance.

INTRODUCTION

The rise of social media is primarily supported by the creation of content that appeals to the public. These social media platforms have become not only a means of social entertainment but also a commercial medium where brands offer their products and services through individuals with a significant ability to influence a broad audience.

In this framework, the role of content creation (CC) stands out as a new form of employment. The emergence of this labor role, popularly known as the "influencer," led the European Union to enact the Digital Services Act, which introduced regulations for digital platforms and CCs to combat illegal content and misinformation [1]. This regulation prompted the Spanish government to introduce specific legislation that established the rights and obligations for those engaging in this profession [2].

Thus, the exercise of this activity, as indicated by a study from the University of Valencia [3], is based on the economic performance derived from the advertising impact it has on social media. In other words, it connects commercial brands with their target audience through their ability to influence a community. Collaboration with CCs is now part of the global strategy of brands [4]. To achieve this, CCs must devote much of their day not only to content creation but also to promoting their work and engaging with sponsoring companies.

In the context of their professional activity, like any other worker, CCs are exposed to various occupational risks that can affect their physical, mental, and social well-being [5]. Particularly relevant are psychosocial and ergonomic risks. Psychosocial risks are related to factors arising from the interaction between work, individuals, and the social context: stress, pressure to maintain a constant presence on digital platforms, or public exposure can lead to anxiety or emotional disorders. Regarding ergonomic risks, these relate to the organization and conditions of the work environment: the use of data display screens, forced postures, or repetitive movements. Identifying, evaluating, and preventing these risks must be the foundation of this labor sector to avoid future health problems in CCs.

Although the negative health implications of social media engagement are recognized, there is limited understanding regarding the precise role social media plays in the development of associated pathological conditions [6]. Thus, this cocktail of marathon workdays, sedentary behavior, public overexposure, and, in many cases, job insecurity and uncertainty (being constantly connected and awaiting tasks without predictability) results in health problems, ranging from mild to severe [7].

Similarly, CCs have been associated with components of addiction (prominence, tolerance, mood modification, relapses, withdrawal, and conflict). However, Peng and Liao have critiqued the ability to differentiate between problematic and highly active CCs [8]. Recently, a novel media phenomenon termed "pathostreaming" has gained prominence. This activity involves the online dissemination of recordings or images that feature false, obscene, and vulgar content, alongside the propagation of hate speech across various digital platforms. The distinct characteristics of “pathostreaming” have led to the emergence of new media entities: “pathostreamers”, “pathoinfluencers” and “pathousers”. A critical area of ongoing research focuses on the mental health of these individuals and their influence on their followers [9].

There is no doubt that work through digital platforms is growing in importance; however, it also presents significant challenges for the health and safety of its workers. Specifically, all the risks involved in the activities will be present (transport, cleaning, workplace adaptation, home-based work, etc.), but these are exacerbated by the unique characteristics of work on platforms [10,11].

CCs are often expected to produce quality work while managing their own stress. The pressure of the creative process, combined with the challenge of meeting deadlines, can lead to burnout. One of the main forms of digital content creation is the live-streaming of video games. The study noted that video game players and those engaged in electronic sports (eSports) were at a higher risk of suffering from numerous chronic diseases and an increase in mortality, highlighting a concerning reality in this research [12].

At the same time, participation on this Web 2.0 platform, with prolonged exposure as an idealized image, was correlated with depressive symptoms, self-esteem problems, anxiety, and body dissatisfaction [13]. Furthermore, this overexposure may occasionally result in the reception of hate speech. The experience of being targeted by hate speech is distressing for content creators; this sense of attack can diminish their self-perception and self-esteem, thereby compromising their well-being [14]. In this line, Fung et al. [15], conducted a systematic review that highlighted the importance of social media in public health issues. They emphasized how the generated content influenced both the well-being of creators and viewers.

Content creation has become an emerging labor activity, which is not free from associated health problems. Therefore, the central aim of this study involved critically analyzing the available scientific bibliography, seeking to understand the potential pathological processes derived from CC within the realm of social networks and the interventions undertaken, with the ultimate aim of establishing the nature of their causal link.

METHODS

- Design

This is a descriptive cross-sectional study, and a critical analysis of the studies retrieved through a systematic technique. The structure of this review followed the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) [16] and the methodological framework proposed by Arksey & O'Malley for scoping reviews [17].

- Study Population

In the context of this review, a content creator was understood to be an individual responsible for generating and distributing diverse forms of material (including text, video, audio, and images) across digital platforms. Their primary aims include entertaining, informing, educating, or fostering connection with an audience. This creative work can be performed on any web-based social media platform.

- Data Collection Source

Data were obtained from direct consultation and access, via the internet, to the following bibliographic databases in the field of health sciences: MEDLINE (via PubMed), Embase, Cochrane Library, PsycINFO, Scopus, Web of Science, and Virtual Health Library (VHL).

- Information Processing

To define the search terms, the Thesaurus of Descriptores de Ciencias de la Salud (DeCS) developed by the Latin American and Caribbean Center on Health Sciences Information (BIREME) was consulted, along with its equivalence to the Medical Subject Headings (MeSH) established by the U.S. National Library of Medicine.

From the hierarchical study of both Thesauri and their indexing sheets (Entry Terms), the following search equations were deemed appropriate:

> Equation 1: Content creators on social media (Web 2.0)
>
> “Content Creator*”[Title/Abstract] OR “Influencer*”[Title/Abstract] OR “Streamer*”[Title/Abstract] OR “Gamer*”[Title/Abstract] OR “Youtuber*”[Title/Abstract] OR “TikToker*”[Title/Abstract] OR “Instagramer*”[Title/Abstract] OR “Twitcher*”[Title/Abstract] OR “Blogger*”[Title/Abstract] OR “Vloggers*”[Title/Abstract] OR “Podcaster*”[Title/Abstract] OR “Content Strategist”[Title/Abstract]
>
> Equation 2: Pathological processes - Abnormal forms and mechanisms involved in dysfunctions of tissues and organs.
>
> “Pathologic Processes”[Mesh] OR “Pathologic Processes”[Title/Abstract] OR “Pathological Process”[Title/Abstract] OR “Disease*”[Title/Abstract] OR “Syndrome*”[Title/Abstract] OR “Symptom*”[Title/Abstract] OR “Illness”[Title/Abstract]

The final search equation was developed for use in MEDLINE (via PubMed) by combining the two proposed equations using Boolean logic (Equation 1 AND Equation 2).

This strategy was then adapted to the characteristics of each of the other consulted databases, and the search was conducted from the earliest available date in each of the selected databases up to May 2024. Additionally, a complementary search strategy was implemented to minimize the possibility of publication bias, by manually searching the bibliographies of the

articles selected for the review. Furthermore, experts in the study topic were contacted to determine the potential existence of grey literature (materials and research produced by organizations outside of traditional commercial or academic publications and disseminated through alternative channels). These experts were not involved in the delineation of the research scope, the refinement of the research question, the selection of studies, or the interpretation of the findings.

- Final selection of articles

The selection of articles for review and critical analysis was guided by the subsequent criteria:

• Inclusion: Original articles published in a peer-reviewed journal, written in English, Spanish, or Portuguese, with access to the full text of the selected article.

• Exclusion: Studies not focused on the review's objective (CC and pathological processes) or studies conducted on individuals under 13 years of age (the minimum age established by law for engaging in the activity) [2]).

The selection of relevant articles was performed by two authors of this review (S.M.-A. and J.S.-V.). To validate the inclusion of articles, the agreement rating between the authors had to be above 0.60 [18]. Any disagreements were resolved through consensus among all authors of the review.

- Document quality, evidence level and recommendation grade

The structural validity of the articles was evaluated using the Strengthening the Reporting of OBservational Studies in Epidemiology (STROBE) guidelines [19], which contains a list of 22 essential aspects that must be described in each article. For each selected article, one point was assigned for each item present. If an item contained several subcategories, these were independently evaluated, with the same value given to each subcategory, and then an average was calculated (this average was the result for that item), ensuring that the total score for each item did not exceed one point.

To determine the level of evidence and its recommendation grade, the recommendations of the Scottish Intercollegiate Guidelines Network Grading Review Group (SIGN) [20] were used.

- Bias study

The risk of bias in exposure effect studies was assessed using the ROBINS-E tool [21]. This tool classifies biases into 7 dimensions, rating each one on 4 possible interpretations: Low risk (little or no concern about bias); some concerns (there is some concern about bias in this domain, though it is unclear whether a risk exists); high (the study has some significant issues in this domain, leading to a high risk of bias); very high (the study is highly problematic in this domain. The study's characteristics lead to a very high risk of bias).

- Data extraction

Data accuracy control was performed using double-entry tables that allowed for the detection of deviations and their correction through re-consulting the original data.

Duplicate records were excluded using the cross-platform ZOTERO program, a reference management tool developed by the Center for History and New Media at George Mason University.

- Variables under study

The articles were grouped based on the variables under study to systematize and facilitate the understanding of the results. The following data were extracted: first author, year of publication, CC activity, age, platform used, intervention conducted, and type of disease or symptoms.

- Data Analysis

The data related to information retrieval were presented in terms of frequency and percentage. The agreement for article selection by the two authors was measured using Cohen's kappa coefficient, with an agreement considered adequate when the value was above 60% (good or very good agreement strength).

To determine the currency/obsolescence of the selected articles, the Burton-Kebler (BK) semi-period was calculated: the median age based on the temporal range analyzed, and the Price Index (IP): the percentage of articles less than 5 years old.

STROBE questionnaire scores were analyzed using the median, maximum, and minimum. The evolution of these scores, in relation to the years of publication, was obtained through regression analysis (R^2).

- Ethical aspects

All data were obtained from articles accepted for review. Therefore, in accordance with the Law 14/2007 on biomedical research, ethical committee approval was not required due to the use of secondary data [22].

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