MENTAL HEALTH AND INSTAGRAM USE: A BRAZILIAN EXPLORATORY STUDY ON DEPRESSION, ANXIETY AND FOMO

[1] SCHRAMME, C. Nadyne, Psychology, Centro Universitário Campos de Andrade, Brazil. E-mail: nadyneschramme@gmail.com
[2] CARVALHO, G. Evelise, Psychology, Centro Universitário Campos de Andrade, Brazil. E-mail: evelise@gmail.com
[3] DE CARVALHO, Elisa, Social Sciences and Economics Department, Università Degli Studi Di Roma La Sapienza, Italy. E-mail: elisacristina.decarvalho@uniroma1.it

INTRODUCTION

Until January 2021, the number of Brazilians with internet access increased by 14.2% compared to 2020, totaling 160 million users, of which 150 million are active on social networks (Kemp, 2021). The average number of hours Brazilians spend on social media is 10 hours and 8 minutes, above the global average of 3 hours and 42 minutes, losing only to the Philippines and Colombia.

All this time, surfing on social media has a positive or negative impact on people's mental health. Research has shown the benefits of allowing people to express their thoughts and feelings and receive social support (Chuang, 2021; O'Reilly, 2018; Lenhart et al., 2015; Lilley, Ball & Vernon, 2014). On the other hand, other studies have gathered evidence linking social media use to psychological issues (Marino et al., 2018; Kelly et al., 2018; McCrae et al., 2017; Best et al., 2014; Guntuku et al., 2017; Hoare et al., 2016).

In recent years, the term "problematic use of social media" has emerged in the literature regarding mental health and the internet. The concept essentially describes an excessive concern with social networks, resulting in such an intense use of them, that it can affect the individual's well-being, interfering with social, personal, and professional activities (Shensa, 2017).

A meta-analysis of 23 studies showed a correlation between problematic Facebook use and psychological distress in adolescents and young adults (Marino et al., 2018). Other systematic reviews have also found a significant relationship between social media use and depression (Best et al., 2014; Hoare et al., 2016). A systematic review of 11 studies showed a small but statistically significant relationship between social media use and depressive symptoms in children and adolescents (McCrae et al., 2017).

In diagnostic manuals such as the International Classification of Diseases (ICD) and Diagnostic and the Statistical Manual of Mental Disorders (DSM), there is still no section dedicated to social media addiction and its possible harms, but this subject is being increasingly discussed (Abi-Jaoude et al., 2020). In the 5th edition of the Diagnostic Manual of Mental Disorders, internet addiction was included as a subcategory of Impulse Disorders and addiction to games and smartphones (APA, 2014).

Even though Brazil is a country that exceeds the world average internet usage by 7 hours, there are few studies evaluating the profile of social media users in an abusive way; there are no studies related to the topic (Scatena, 2017). To fill this gap, this exploratory

research aims to verify the incidence of depressive and anxiety symptoms in Instagram users in Brazil.

MATERIALS AND METHODS

This is a qualitative and quantitative field research. For the literature review, we consulted the Scielo database, using the descriptors: social media, depression, and anxiety, looking for works produced in the last five years. We also consulted other sources such as the CAPES thesis and dissertation database and books.

The quantitative study considered Instagram the fourth most used platform in the world, behind Facebook, YouTube, and WhatsApp. In Brazil, Instagram has about 129 million users (Statista, 2021). Furthermore, recent research have linked browsing Instagram to depression and anxiety (McCosker et al., 2020; Jiang et al., 2020; Keyte et al., 2021), so this was the chosen platform.

The Instagram users in this study were selected by snowball sampling. Participants were recruited through posts on internet communities such as Facebook, Instagram, and WhatsApp and invited to share them with acquaintances who could meet the eligibility criteria and potentially contribute to the study.

From April to June 2020, a total of 379 participants participated and answered the questionnaire on social media use, which contained 13 questions. In addition to demographic data, the Patient Health Questionnaire – PHQ (Spitzer & Cols, 1999), General Anxiety Disorder - GAD-7 (Spitzer & Cols, 2006), and the Fear of Missing Out Scale (Przybylski et al., 2013) measured social media use. These questionnaires were chosen because they are not restricted to the use of psychologists, and can be made available on the internet.

All participants were informed about the research objectives, participation was voluntary, and confidentiality and anonymity were assured by the Ethics Committee (CAAE: 29610620.0.0000.5218).

RESULTS AND DISCUSSION

Of the 379 participants who responded to the survey, 21 were excluded for being underage (9) or because they had not fully answered the questionnaire (12). The remaining 331 participants were divided into three groups according to time spent on Instagram. Group 1 (G1): Instagram users with a daily average of >5 hours; Group 2 (G2): Instagram users with <2 daily hours; and Group 3 (G3): non Instagram users.

Each subject answered three questionnaires: Patient Health (PHQ-9), General Anxiety Disorder (GAD-7), and Fear of Missing Out (FOMO) scale. Of the sample, 87.5% identified themselves as female, 12% as male, and 0.5% as non-binary. The age group was between 18-25 (69%), 26-35 (22%), 36-45 (5%), 46-55 (3%), 56-65 (>1%) and 66-75 (>1%), with an average age of 25 years.

Within the scope of this study, 23% of G1 participants showed more significant symptoms of depression, against 19% in G2, and 14% in G3. Regarding anxiety symptoms, 23% of G1 participants indicated severe anxiety, while among G2 participants this index was 16%, and 14% in G3. Regarding the feelings of FOMO—meaning the discomfort felt when a person does not participate in something with friends or when they are doing something without his/her presence (Dhir, 2018)—severe symptoms were identified in 23% of G1, 19% of G2, and 14% of G3.

Chart 1. Survey Results.
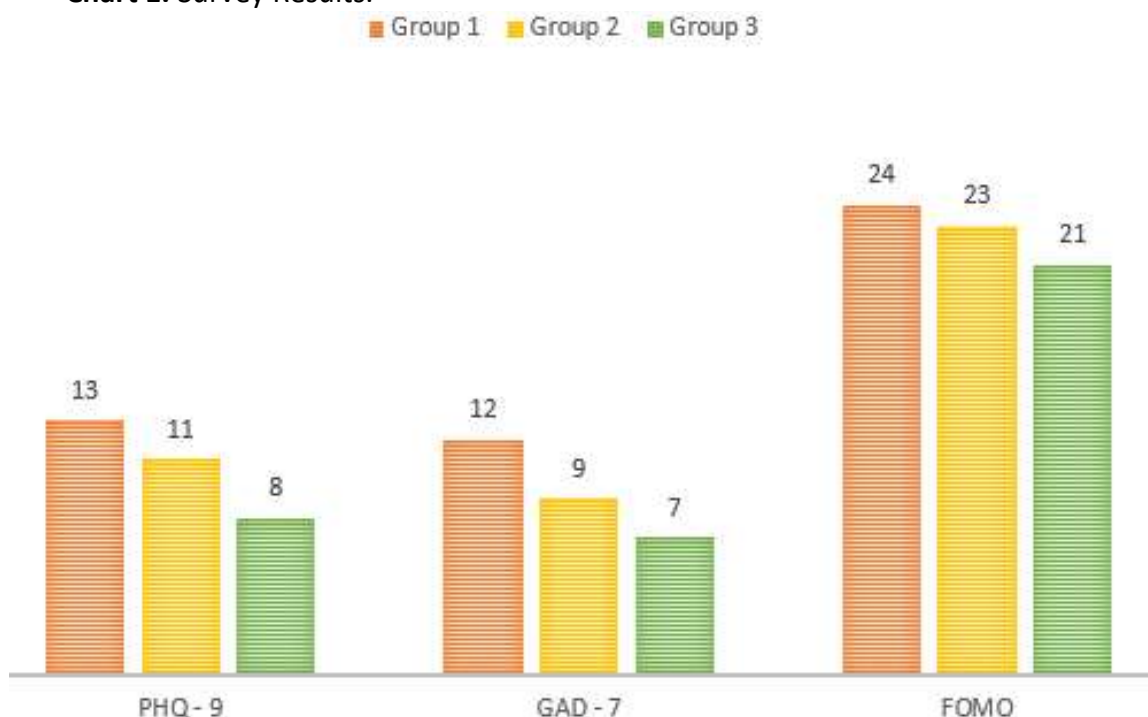
Excessive use of social media can cause the subject to experience unpleasant online situations and develop isolating behavior, which can impair concentration and interfere with the ability to pay attention to other activities. The unrealistic expectations presented during social media use can lead to feelings of low self-esteem, making the individual want a perfect life. This constant demand can result in anxiety attacks and is associated with the fact that the use of more than one social media is linked to social phobia (Bueno, 2018). In addition, comparison attitudes make the individual observe other people's posts at parties, trips, among other events, and feel that they are not enjoying life as they should. This feeling can lead the person to want a life like those portrayed on social media, triggering an unrealistic comparison (Bueno, 2018).

The results showed that those who spend more time on Instagram may have a higher incidence of depression, anxiety, and FOMO symptoms than the other groups. Obviously, it should be taken into consideration that other internal and external factors can also trigger these symptoms. According to Shensa (2017), increased depressive and anxiety symptoms may be linked to the relationship and purpose of using social media for each individual. This means that individuals with a more effective connection to the network are more sensitive to negative feedback and susceptible to developing symptoms of depression (Shensa, 2017).

The first study to establish a clear causal link between less social media use and decreased symptoms of loneliness and depression was conducted by Hunt et al. (2018). This means that it would be possible to confront this issue by limiting the use of social media, which would directly and positively impact subjective well-being over time, especially with regard to reducing loneliness and depression.

CONCLUSION

This research was developed during the COVID-19 pandemic, which means the data had to be self-reported and may not accurately reflect a "non-pandemic" average behavior due to social isolation. Additionally, the pandemic resulted in an organic increase in screen

time that may have influenced the results. In addition to this limitation, the number of participants is not statistically relevant compared to the number of Instagram users. For future research, a more significant number of participants and other tools to measure these symptoms are indicated.

Nevertheless, these exploratory data provide interesting information about how excessive use of social networks can lead to symptoms of depression and anxiety. The data collected supported the hypothesis that the longer one is connected, the more susceptible the user is to unpleasant experiences and the incidence of symptoms of depression and anxiety. Although, as highlighted throughout this work, the relationship is not causal.

Further studies should be conducted to confirm this hypothesis, including different methodologies and sample exceptions. This study aimed to build knowledge in the field of technology and mental health, as well as raise awareness of the importance of implementing initiatives and public policies to promote a healthier use of social media.

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