

EDITORIAL

Features shared between fear of missing out on rewarding experiences (FOMO) and internet gaming disorder

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There is currently much discussion about the similarities and differences between behavioral addictions and substance addictions. Recent studies indicate that the core elements of substance addictions, including tolerance, inability to reduce the use/behavior, continued use/behavior despite negative consequences and withdrawal are also present in behavioral addictions. In recent years there has been an exponential growth in the prevalence of behavioral addictions, which is driven by internet-related behavioral addictions. The prevalence of these addictions can be as high as 38% in young people, but it is probably lower in older adults.¹ Internet gaming disorder (IGD) is the most studied internet-related behavioral addiction and probably the most severe. Among internet-related behavioral addictions, IGD was the only one included in DSM5, being described as a condition that requires additional research to be included in the main part of the manual. However, abundant evidence in the literature indicates that excessive use of social networking sites and messaging services also produces a negative impact on affected subjects.²

The fear of missing out (FOMO) on rewarding experiences, both real and virtual, is described as a desire to be permanently connected with what other people are doing. It is a central concept in the study of problematic Internet use. In a review study, Elhai et al.² found evidence that FOMO is relevant and should be studied comprehensively. FOMO is associated with female gender, young age, neuroticism and narcissistic personality traits. Because of FOMO, people feel the need to stay connected all the time and excessively use social networking systems and messaging services. Greater FOMO leads to higher Internet use, which can have many repercussions on the subject's wellbeing. There is a positive association between FOMO and negative affectivity, which includes boredom, anxiety and depression symptoms. Studies also indicate an inverse relationship between FOMO and satisfaction/quality of life.² Brown et al.³ subjected 78 study participants to 7 days of social media abstinence. Despite the fact that they agreed with the length of abstinence before entering the study, 13 subjects

(17%) could not fully abstain and were excluded from the final analysis. By the end of the abstinence period, there was a significant decrease in FOMO, while social connectedness and mental wellbeing increased. Mean smartphone use reduced from 3.5 hours/day to 2.5 hours/day after the trial.³

As with FOMO, IGD is also associated with young age, neuroticism and narcissistic personality traits.⁴ While FOMO is more associated with female gender, IGD is more prevalent in males. IGD has also been associated with negative affectivity, anxiety and depression symptoms. Generalized anxiety disorder, panic disorder, depression, social phobia, school phobia and ADHD were associated with IGD. Among players of Massive Multiplayer Online Role-Playing Games, 8% spend 40+ hours per week in the game, 61% spend a minimum of ten continuous hours in the game, 18% experience academic, health, financial, or relationship problems, and 50% consider themselves addicted.⁴ Apparently, computer games consume more hours per day than social networking or messaging. Both IGD and high FOMO are associated with disruption of day-to-day activities, including social and academic activities. The impact of IGD on these activities is probably more severe due to the greater amount of time consumed by games. What keeps FOMO subjects connected is the need to compensate for a lack of offline relationships and to maintain a sense of belonging. On the other hand, in IGD, what keeps the subjects connected is competition in a ranking system. If players do not engage in the game they and their team could experience losses.

Kuss et al.⁵ found significant neurobiological differences between healthy controls and individuals with IGD. Individuals with IGD had abnormalities in the prefrontal cortex, striatum, frontostriatal circuits, salience network, temporal gyrus, cerebellum and frontal gyrus, as well as other brain areas. Studies on the neurobiology of FOMO are still lacking.

In conclusion, FOMO and IGD share many features: both excessive social network/messaging use and excessive computer gaming can have negative psychological

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Submitted Aug 05 2020, accepted Aug 10 2020, Epub Oct 07 2020.

How to cite this article: Freire RC, Santos VA. Features shared between fear of missing out on rewarding experiences (FOMO) and internet gaming disorder. Braz J Psychiatry. 2021;43:129-130. <http://dx.doi.org/10.1590/1516-4446-2020-0019>

and social repercussions for the affected subjects. Internet-related behavioral addictions are relevant and should be studied comprehensively, including their neurobiological aspects.

Disclosure

The authors report no conflicts of interest.

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