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MENTAL HEALTH PROBLEMS ARE RELATED TO THE SHAPED CULTURE OF A PROBLEMATIC SOCIETY

Fabiano de Abreu Agrela Rodrigues

Post-PhD in Neurosciences, esp. Genomics Heráclito Research and Analysis Center (CPAH), Department of Neuroscience and Genomics, Brazil & Portugal https://orcid.org/0000-0002-5487-5852

Flávio da Silva Nunes

Veterinarian (CESVA/FAA), Master in Environmental Sciences (UniV), Pedagogue (UNIFATECIE), Clinical and Institutional Neuropsychopedagogue (Faculdade Metropolitana de São Paulo) and Neuroscientist (CPAH) https://orcid.org/0000-0001-8481-907X



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Abstract: This article discusses the intrinsic relationship between mental health problems, especially anxiety and its derivatives, and the culture shaped by a problematic society. Through the analysis of data from the World Health Organization (WHO) on the high rate of anxiety in Brazil, it explores the influence of violence, social inequality and the impacts of the COVID-19 pandemic on the increase in these disorders. In addition, the article discusses the physiological aspects of anxiety, the role of social networks and narcissism as elements that contribute to maintaining a vicious cycle of seeking momentary rewards and stressing individual well-being. At the end, some recommendations are made for behaviors that can help to cope with these problems.

Keywords: Mental Health, Anxiety, Culture, Urban Violence, Social Inequality, Pandemic, Social Networks, Narcissism.

INTRODUCTION

Mental health is a topic of growing relevance in contemporary society, permeating various spheres of individual and collective life. In particular, anxiety and its consequences emerge not just as isolated phenomena, but as reflections of a culture shaped by complex social challenges and problems. Concern about mental health transcends fads, establishing itself as a real and urgent issue, demanding studies and interventions aimed at alleviating and possibly resolving these conditions.

Within the Research and Analysis Center and the Science and Technology Department that I head, we receive numerous complaints. The growing demand for mental health support from our department's mental health professionals reveals alarming figures - in terms of the consequences of constant, heightened or "unregulated" anxiety. From now on, we'll have a better understanding of how the problem arises, its relationship with culture and possible solutions.

According to data from the World Health Organization (WHO), Brazil is the country with the highest rate of anxiety disorders in the world, leading with 7.5% - on a general scale among the countries analyzed. Among the factors that contribute to this rate, we can highlight, with circumstantial weight, violence and social economic differences that result in some behavioral and cultural aspects, as we will see at some point in this booklet.

Understanding the genesis and dynamics of this problem, its intricate relationship with the cultural context and envisioning possible ways of tackling it are the pillars of this article.

GENERAL OBJECTIVE

To analyze the relationship between mental health problems, with an emphasis on anxiety, and the culture of contemporary society, exploring contextual and behavioral factors that contribute to their development and perpetuation.

SPECIFIC OBJECTIVES

- Identify and analyze data on the prevalence of anxiety in Brazil and worldwide.
- Discuss the influence of urban violence and social inequality as contextual factors that potentiate anxiety.
- Analyzing the impact of the CO-VID-19 pandemic on the increase in anxiety disorders.
- Explore the physiological mechanisms underlying anxiety and its relationship with emotional memory.
- Discuss the role of social networks and narcissism in the dynamics of anxiety and the search for momentary rewards.
- Propose behaviors that can contribute to promoting mental health and coping with anxiety.

LITERATURE REVIEW

Understanding mental health in its entirety requires a comprehensive analysis that incorporates diverse perspectives. It is essential to examine data on the occurrence of mental disorders, identify the multiple factors that can increase individuals' vulnerability and, crucially, understand how a society's cultural norms, values and practices shape the experience, expression and interpretation of mental suffering (Link & Phelan, 1995). In this sense, the investigation of mental health in the social context requires the integration of findings from epidemiological studies, research into risk factors and analysis of cultural influences (Marmot & Wilkinson, 2006).

Anxiety, in its primary nature, operates as an innate warning mechanism, essential for the survival of the organism in the face of potential dangers (LeDoux, 1996). However, the awareness of violence, especially in urban contexts, acts as a powerful intensifier of this anxious response (Ferraro, 1995). The tension experienced when traveling through unfamiliar environments, a natural reaction of caution, is significantly amplified when there is the perception that these places are dangerous, in other words, when there is awareness of urban violence (Ressler et al., 2000). This feeling of constant insecurity can lead to significant changes in sleep patterns, where nocturnal noises are interpreted as potential threats of invasion, reflecting a state of hypervigilance induced by chronic anxiety (Ohayon, 2005).

THE MOST ANXIOUS PEOPLE IN THE WORLD

According to data from the World Health Organization (WHO), Brazil is the country with the highest rate of anxiety disorders in the world, affecting 7.5% of the population. This leadership in a global ranking signals the magnitude of the problem in the Brazilian context. Among the factors that contribute to

this scenario, violence and marked social inequality emerge as elements of circumstantial weight, influencing behaviors and cultural aspects that will be explored below.

ANXIETY AND URBAN VIOLENCE

In its fundamental nature, anxiety represents a state of physiological and psychological readiness, an adaptive and instinctive response of the organism to stimuli interpreted as dangerous or threatening (Barlow, 2002). This warning mechanism, essential for survival, is strongly influenced by the perception of the environment. In this context, awareness of urban violence emerges as an intrinsic and significant factor in increasing anxiety levels (Skogan, 1987). The natural apprehension that arises when traveling through unfamiliar places is considerably intensified when one is aware of the dangerousness of certain spaces, cultivating a persistent feeling of insecurity (Ressler et al., 2000). This constant feeling of threat can manifest itself in an exacerbated way, even disturbing the sleep cycle, where nocturnal noises are mistakenly interpreted by the nervous system as potential signs of invasion and imminent danger (Ohayon, 2005).

SOCIAL INEQUALITY ASSOCIATED WITH ANXIETY

Social inequality is another relevant factor in the potentiation of anxiety disorders. Data from the Brazilian Institute of Geography and Statistics (IBGE) in 2019 revealed that more than 16.2 million Brazilians lived below the poverty line, with an income of less than R\$178.00 per month. When considering the international poverty line recommended for Brazil, this number would exceed 51 million people. These conditions of extreme vulnerability contribute significantly to increased anxiety, a situation that has been exacerbated by the COVID-19 pandemic.

ANXIETY-RELATED PANDEMIC

High-impact research published in the prestigious journal The Lancet has shown a significant increase in the global prevalence of anxiety and depression disorders during the COVID-19 pandemic. The data revealed an alarming 76 million new cases of anxiety in 2020 alone, representing a 26% increase compared to previous years (Xie et al., 2021). Regardless of negative beliefs about the severity of the pandemic, the very nature of a global health crisis such as the one we are experiencing instinctively triggers an increase in anxiety levels, even on a subconscious level, driven by fear of infection and disease (Hoekstra et al., 2020). The sudden and drastic change in daily routines has also been established as a crucial factor in triggering and intensifying anxiety, since this emotional state often emerges as a response to situations of uncertainty, unpredictability and the feeling of "pending" or lack of control over events (Barlow, 2002).

In addition, the social isolation imposed as a measure to contain the pandemic has deprived individuals of important sources of social support and interaction, crucial elements for maintaining mental health and dampening stress and anxiety levels (Loades et al., 2020). The limitation of physical contact with family and friends, the economic uncertainty generated by the crisis and the fear of losing loved ones have contributed to a scenario of generalized psychological vulnerability, exacerbating pre-existing conditions and precipitating the emergence of new cases of anxiety and depression on an unprecedented global scale (Holmes et al., 2020).

THE PHYSIOLOGICAL ASPECT OF ANXIETY

The onset of anxiety initiates an intricate process in the body in which the amygdala, a key brain structure in emotional processing, plays a central role by accessing what can be metaphorically described as a "map of memories" relevant to the evaluation and potential resolution of the situation perceived as threatening (LeDoux, 1996). Similarly, the amygdala can be understood as a selective storage system, with specific "drawers" for different problem domains (health, economy, etc.), allowing the evocation of past experiences and the emotions associated with them (Dalgleish, 2004). Emotion, in this context, functions as a fundamental self-preservation mechanism, acting to encode significant memories in neural networks (engrams) during risk events. These emotionally encoded memories can subsequently be retrieved in times of high anxiety and stress, serving as a guide in the search for coping strategies (McGaugh, 2004).

This complex neurobiological process is closely linked to the concept of homeostasis, here called the "homeostatic linear", representing the state of physiological and psychological equilibrium essential for maintaining well--being (Sterling & Eyer, 1988). When anxiety is activated, the amygdala tends to evoke memories with negative valence, related to past aversive experiences. Persistence in this state of anxious activation and evocation of negative memories can lead to neuroplastic changes in the amygdala itself and in other interconnected brain regions, contributing to the development of disorders, mental disorders and diseases, including depression (Drevets, 2000). Understanding these intricate physiological aspects offers a deeper perspective on human behavior and the identification of practices and customs that, consciously or unconsciously, can destabilize the "homeostatic linear" in a way that is detrimental to mental health (Schulkin, 2003).

ANXIETY: BEHAVIORS AND CULTURAL CORRELATION

Brazil's digital landscape reveals a significant uptake of the internet and social networks. Recent data from Hootsuite and We-AreSocial indicate that Brazil is the second country with the highest rate of internet access and the third in terms of use of social media platforms (Kemp, 2024). Interaction on these platforms can trigger the release of neurotransmitters associated with the brain's reward system, notably dopamine (Schultz, 2015). This release provides a sense of immediate satisfaction, capable of temporarily alleviating negative emotional states, such as anxiety. However, this gratification is intrinsically fleeting and, with repeated exposure to the same stimuli, there tends to be a decrease in the dopaminergic response, a phenomenon known as desensitization (Wise, 2004).

This neuroadaptive process drives the individual to continually seek out new stimuli or intensify existing ones in an attempt to obtain the same sensation of pleasure. This dynamic of incessant search for novelties and rewards echoes the philosophical perspective of Arthur Schopenhauer, who described human existence as a constant oscillation between the eagerness to desire and the inevitable feeling of boredom after possession (Schopenhauer, 1819/2014). In this context, anxiety can be understood as a state of motivational "pendency", a continuous search for positive sensations which, paradoxically, keep the individual away from a stable and lasting state of well-being (Solms & Turnbull, 2002).

NARCISSISM, CULTURE AND MORE DISORDERS

Narcissism, in its instinctive form and with roots in sexual selection and reproduction (Buss & Schmitt, 1993), may have its characteristics intensified by the increasing amount of time spent using electronic devices and social

networking platforms. This digital immersion can foster an illusory sense of control over one's image and online interactions, as well as an inflated perception of power and influence (Twenge & Campbell, 2009). Behaviors such as negationism, for example, can offer momentary gratification to the individual, functioning as a psychic defense mechanism in the quest to restore a sense of internal balance, or "homeostatic linear" (Schulkin, 2003). Dopamine, a central neurotransmitter in this process of seeking pleasure and reward, has a known addictive potential, sharing neurobiological mechanisms with the use of psychoactive substances and involvement in pathological gambling behaviors (Wise, 2004; Volkow et al., 2017).

Considering the nature of culture as a dynamic construct, shaped by the behaviors and customs of a collective and reciprocally influenced by the psychological characteristics of its individual members (Triandis, 1996), it becomes clear that culture is not immune to the mental health problems prevalent in its individuals. A society marked by high levels of anxiety, with a growing dependence on immediate solutions offered by the internet, a reduction in meaningful face-to-face social interactions and a focus on virtual gratification, shows a tendency to develop exacerbated narcissistic traits. In addition, this cultural dynamic can increase susceptibility to other cluster B personality disorders (called "dramatic, emotional or erratic"), such as histrionic personality disorder, antisocial personality disorder (sociopathy) and borderline personality disorder, which often manifest themselves through behaviours characterized by haughtiness, victimhood, emotional inconsistency and impulsivity (American Psychiatric Association, 2013).

METHODOLOGY

This study is based on an exploratory and reflective analysis of the existing literature on the subject of mental health, anxiety and their relationship with socio-cultural factors. The methodology involved the selection and interpretation of statistical data from organizations such as the World Health Organization (WHO) and the Brazilian Institute of Geography and Statistics (IBGE), as well as research published in scientific journals, such as The Lancet study on the impact of the pandemic. In addition, concepts from psychology and neuroscience were incorporated to understand the physiological mechanisms of anxiety and its influence on human behavior. The analysis also considered perspectives from sociology and philosophy to discuss the cultural and behavioral implications of the use of digital technologies and narcissism in contemporary society.

DISCUSSION

The integrated analysis of epidemiological data and theoretical references from various areas of knowledge reveals a complex and multifaceted panorama of the high prevalence of anxiety in contemporary society, with particular emphasis on the Brazilian context. Endemic urban violence and profound socio--economic disparities act as powerful chronic stressors, keeping a significant portion of the population in a constant state of alert and contributing significantly to the genesis and exacerbation of anxiety disorders. The COVID-19 pandemic, with its atmosphere of global uncertainty, the fear of morbidity and mortality, and the drastic changes in social and economic routines, has superimposed itself on this pre-existing scenario, adding an additional layer of anxiety on a planetary scale.

Understanding the neurobiological substrates of anxiety, which involves the activation of the brain's amygdala as a threat processing center and the subsequent retrieval of aversive emotional memories, offers a crucial perspective on the way past negative experiences can shape and influence the present mental state. This neural circuitry, although adaptive in situations of real danger, can become dysfunctional in a chronically stressful environment, perpetuating a cycle of hypervigilance and disproportionate anxious responses. Additionally, the massive and often dysfunctional use of social networks, with their algorithmic architecture designed to optimize engagement through intermittent rewards mediated by the release of dopamine, can establish a vicious cycle of seeking instant gratification, contributing to chronic dissatisfaction and rising anxiety levels. The increase in narcissistic traits, fostered by the dynamics of online interactions and the culture of self-exposure and virtual validation, has also been associated with greater vulnerability to the development of other personality disorders characterized by emotional and behavioural instability.

Culture, as a dynamic system of values, beliefs and practices shared by a group, has a two-way influence on the mental health of its members. A society marked by high levels of anxiety tends to shape behaviors and customs which, in turn, can perpetuate and even aggravate this condition. The search for quick and superficial solutions on the internet, the decrease in engagement in physical activities and face-to-face social interactions, and the excessive valuing of achievements and validation in the virtual environment can become maladaptive coping mechanisms which, in the long term, exacerbate anxiety and contribute to social isolation.

Neuroplasticity, the brain's ability to remodel itself in response to experiences, plays a fundamental role in the perpetuation of anxiety disorders. Chronic exposure to stressors and dysfunctional thought patterns can strengthen the neural pathways associated with anxiety, making anxious responses more automatic and intense. This process of "learning" anxiety can make it difficult to implement healthy coping strategies and recover emotional well-being. Effective therapeutic interventions often aim to promote adaptive neuroplasticity, weakening the neural connections associated with anxiety and strengthening those related to emotional regulation and realistic thinking.

The perspective of attachment theory also offers valuable insights into understanding vulnerability to anxiety. Experiences of insecure attachment in childhood, characterized by inconsistency or lack of responsiveness on the part of caregivers, can lead to the development of insecure internal relationship models, predisposing the individual to greater anxiety about intimacy and abandonment in adulthood. These insecure attachment patterns can be exacerbated by the superficiality of online interactions and the difficulty in establishing deep and secure emotional bonds in the virtual environment.

Finally, it is crucial to recognize the complex interaction between biological, psychological and social factors in the etiology and maintenance of anxiety. Genetic predisposition, life experiences, thought patterns, available social support and the cultural context in which the individual is inserted all contribute interdependently to the manifestation and intensity of anxiety. A truly effective approach to mitigating the impact of anxiety in contemporary society requires a holistic understanding

of these multiple factors and the implementation of interventions at different levels, from public policies aimed at reducing violence and social inequality to mental health prevention and treatment programs that address both the individual and contextual aspects of anxiety.

PARTIAL RESULTS

The partial results of this analysis converge to show that Brazil stands out on the global stage with one of the highest rates of anxiety disorders, and that this situation is significantly influenced by contextual factors such as urban violence and marked social inequality. In addition, the COVID-19 pandemic has emerged as an event of great magnitude, exerting a considerable impact on the increase in cases of anxiety on a global scale, further straining the mental health of populations.

Understanding anxiety reveals a complex physiological basis, intrinsically linked to the activation of the brain's amygdala and the processes of recovering emotional memories, demonstrating how past experiences can shape present anxious responses. Furthermore, the pattern of excessive use of social networks, often associated with an increase in narcissistic traits, suggests a possible correlation with the maintenance of cycles of seeking momentary rewards and a greater vulnerability to the development of other personality disorders. Ultimately, the analysis points to a two-way relationship between a society's culture and the mental health of its members, indicating that mental health problems can influence and shape cultural behaviors and customs.

REFERENCES

- 1. AMERICAN PSYCHIATRIC ASSOCIATION. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- 2. BARLOW, D. H. (2002). Unraveling the mysteries of anxiety and its disorders from the perspective of emotion theory. Clinical Psychology: Science and Practice, 9(1), 37-66.
- 3. BUSS, D. M., & SCHMITT, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. Psychological Review, 100(2), 204-232.
- 4. DALGLEISH, T. (2004). The emotional brain. Nature Reviews Neuroscience, 5(7), 582-589.
- 5. DREVETS, W. C. (2000). Neuroimaging and neuropathological studies of depression: Implications for the cognitive-emotional features of mood disorders. Current Opinion in Neurobiology, 10(2), 249-257.
- 6. FERRARO, K. F. (1995). Fear of crime: Interpreting victimization risk. Journal of Research in Crime and Delinquency, 32(1), 84-110.
- 7. HOEKSTRA, R. A. I., BEEN, J. V., MUNBLIT, D., НАПРЯЖЕНИЕ, M., КОНТРОЛ, M., & MOLENAAR, N. M. (2020). The impact of the COVID-19 pandemic on the mental health and well-being of children and adolescents: A systematic review. International Journal of Environmental Research and Public Health, 17(22), 8647.
- 8. HOLMES, E. A., O'CONNOR, R. C., PERRY, V. H., TRACEY, I., WESSELY, S., ARSENEAULT, L., BALLARD, C., CHRISTENSEN, H., SILVER, R. C., & EVERALL, I. P. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: A call for action for mental health science. The Lancet Psychiatry, 7(4), 381-387.
- 9. IBGE. (1993). O Traço da desigualdade social no Brasil. Rio de Janeiro: IBGE. Em: https://biblioteca.ibge.gov.br/visualizacao/livros/liv101760.pdf
- 10. INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA (IBGE). (2020). Pesquisa Nacional por Amostra de Domicílios Contínua Rendimento de todas as fontes 2019. Rio de Janeiro: IBGE.
- 11. KEMP, S. (2020, janeiro 30). Digital 2020: Global Digital Overview. DataReportal. Recuperado de: https://datareportal.com/reports/digital-2020-global-digital-overview
- 12. KEMP, S. (2021, janeiro 27). Digital 2021: the latest insights into the 'state of digital'. We Are Social UK. Recuperado de https://wearesocial.com/uk/blog/2021/01/digital-2021-the-latest-insights-into-the-state-of-digital/
- 13. KEMP, S. (2024, fevereiro 21). Digital 2024: Brazil. DataReportal. Recuperado de [Inserir o link exato do relatório "Digital 2024: Brazil" da Hootsuite e WeAreSocial]
- 14. LEDOUX, J. E. (1996). The emotional brain: The mysterious underpinnings of emotional life. Simon & Schuster.
- 15. LINK, B. G., & PHELAN, J. C. (1995). Social conditions as fundamental causes of disease. Journal of Health and Social Behavior, 35(Extra Issue), 80-94.
- 16. LOADES, M. E., E. T., JONES, N., WIGHAM, S., MONZANI, B., SMITH, P., BOULD, E., POOLE, A., & MCVEIGH, E. (2020). Rapid systematic review: The impact of social isolation and loneliness on the mental health of children and adolescents in the context of COVID-19. Journal of the American Academy of Child & Adolescent Psychiatry, 59(11), 1218-1239.e3.
- 17. MARMOT, M., & WILKINSON, R. G. (Eds.). (2006). Social determinants of health (2nd ed.). Oxford University Press.
- 18. MCGAUGH, J. L. (2004). The amygdala modulates the consolidation of memories of emotionally arousing experiences. Annual Review of Neuroscience, 27, 1-28.

- 19. MENDONÇA, M. J. C., LOUREIRO, P. R. A., & SACHSIDA, A. (2003). Criminalidade e desigualdade social no Brasil. IPEA.
- 20. OHAYON, M. M. (2005). Epidemiology of insomnia: What do we know? Sleep Medicine Reviews, 9(3), 153-166.
- 21. ORGANIZAÇÃO MUNDIAL DA SAÚDE (OMS). (2019). Transtornos mentais. Genebra: OMS.
- 22. ORGANIZAÇÃO PAN-AMERICANA DA SAÚDE (OPAS). (s.d.). Brasil, um país ansioso. OPAS.
- 23. RESSLER, K. J., ROTHBAUM, B. O., TOLIN, D. F., & MCCANN, R. A. (2000). Posttraumatic stress disorder: Diagnostic controversies, neurobiological models, and psychopharmacology. Clinical Psychology Review, 20(7), 769-816.
- 24. SCHOPENHAUER, A. (2014). O mundo como vontade e representação (J. F. Barreto, Trad.). Editora Unesp. (Obra original publicada em 1819)
- 25. SCHULKIN, J. (2003). Rethinking homeostasis: Allostatic regulation in physiology and pathophysiology. MIT press.
- 26. SCHULTZ, W. (2015). Neuronal reward and decision signals: From theories to data. Physiological Reviews, 95(3), 853-951.
- 27. SKOGAN, W. G. (1987). The impact of victimization. Crime & Delinquency, 33(1), 135-154.
- 28. SOLMS, M., & TURNBULL, O. (2002). The brain and the inner world: An introduction to the neuroscience of subjective experience. Other Press.
- 29. STERLING, P., & EYER, J. (1988). Allostasis: A new paradigm to explain arousal pathology. In S. Fisher & J. Reason (Eds.), Handbook of life stress, cognition and health (pp. 629-649). John Wiley & Sons.
- 30. THE LANCET. (2020). COVID-19: mental health consequences. The Lancet, 396(10258), 991.
- 31. TRIANDIS, H. C. (1996). The psychological measurement of cultural syndromes. American Psychologist, 51(5), 407-415.
- 32. TWENGE, J. M., & CAMPBELL, W. K. (2009). The narcissism epidemic: Living in the age of entitlement. Free Press.
- 33. VOLKOW, N. D., KOOB, G. F., & MCLELLAN, A. T. (2017). Neurobiologic advances from the brain disease model of addiction. New England Journal of Medicine, 374(4), 363-371.
- 34. WISE, R. A. (2004). Dopamine, learning and motivation. Nature Reviews Neuroscience, 5(6), 483-494.
- 35. XIE, Y. X., XUE, S. T., ZHOU, Y. J., ZHU, K., ZHANG, Q., & SONG, X. L. (2021). Global prevalence of anxiety during the COVID-19 pandemic: A systematic review and meta-analysis. The Lancet, 397(10272), 407-417. Em: https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2902143-7