

Open Access **Book review**

The Dopamine Brain, by Anastasia Hronis, Australia, Penguin Books, 2024, 224 Pages, eBook, 9781761346385

Melkhanus Hendrik Pentury^{1,2}, Vernando Yanry Lameky^{1,3*}

Citation: Pentury, M. H. & Lameky, V. Y. (2024). *The Dopamine Brain*, by Anastasia Hronis, Australia, Penguin Books, 2024, 224 Pages, eBook, 9781761346385. *Journal of Gambling Issues*.

Editor-in-Chief: Nigel E. Turner, PhD

ISSN: 1910-7595

Received: 07/24/2024

Accepted: 10/02/2024

Published: 11/03/2024



Copyright: ©2024 Pentury, M. H. & Lameky, V. Y. Licensee CDS Press, Toronto, Canada. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>)

¹Faculty of Health, Department of Public Health, Universitas Kristen Indonesia Maluku

²**ORCID:** 0009-0009-5238-2120

³**ORCID:** 0000-0001-8415-8099

*Corresponding author: Vernando Yanry Lameky, vernandoyanrylameky@gmail.com

Abstract: Chapter One: What is dopamine and how does it work/ Chapter Two: Debunking dopamine myths/ Chapter Three: What can disrupt our dopamine/ Chapter Four: Chasing pleasure, escaping pain/ Chapter Five: What other neurotransmitters are important/ Chapter Six: The conflict of pleasure and purpose/ Chapter Seven: Identifying your target behaviour/ Chapter Eight: What are values and why are they important/ Chapter Nine: Identifying your values/ Chapter Ten: Where do my values come from/ Chapter Eleven: Assessing our alignment/ Chapter Twelve: Navigating the fork in the road/ Chapter Thirteen: Setting goals in line with values/ Chapter Fourteen: The power of plastic/ Chapter Fifteen: Take a break/ Chapter Sixteen: Sitting with discomfort/ Chapter Seventeen: Riding the wave/ Chapter Eighteen: When you can't ride the wave/ Chapter Nineteen: Building the new/ Chapter Twenty: Breaking free and finding balance.

Keywords: Book review, Dopamine, Brain, Problem Gambling, Gambling.

Introduction

Dopamine is a neurotransmitter which plays a role in various brain functions, including regulating mood, muscle movement, motivation and reward (Channer et al., 2023). Dopamine is also involved in various conditions, such as addiction, schizophrenia, and other brain circuit disorders (Juárez Olguín et al., 2016).

The Dopamine Brain, written by Dr Anastasia Hronis, emphasizes the importance of establishing behavioural control over unhealthy habits by altering neural pathways and resetting dopamine levels at a neurochemical level. This book provides practical tools and techniques so readers can take control of their habits and make more intentional life choices. Through these steps, readers are guided to understand and utilize the role of dopamine in their lives to achieve better behavioural control and overall well-being.

The novelty of this book lies in its comprehensive exploration of the role of dopamine in various aspects of human behavior and decision-making. This book dives into the science behind dopamine and recognizes its impact on addiction, motivation, pleasure, and other areas. Additionally, *The Dopamine Brain* offers practical strategies for managing dopamine-induced urges, with an emphasis on the importance of aligning actions with values and explaining the balance between pleasure and goals. In addition to the aspects already mentioned, the book also covers topics such as neuroplasticity, attention and the role of other neurotransmitters. This provides an essential holistic approach to understanding and managing the influence of dopamine in daily life.

The Dopamine Brain is arranged into 3 parts with 20 chapters, each of which contains material and chronology related to the dopamine brain and its treatment in a comprehensive manner so that the subject matter and length of the book are balanced. The discussion of each chapter is clear, concise, and accompanied by examples of case studies or research results that strengthen ideas or perspectives. Part 1 (chapters 1-7) discusses in depth the scientific understanding of dopamine, including its function, activation pathways in the brain, and the impact of various substances and behaviours on these dopamine pathways. Various aspects, like what dopamine is, its existence, and how it works, are explored in detail. Additionally, a discussion of dopamine pathway activation and how subconscious processes influence subconscious decisions is also included.

Next, the section explains and debunks popular myths surrounding dopamine, such as 'dopamine detox' and 'anti-dopamine parenting'. This is done to convey accurate information and eliminate misconceptions regarding dopamine. In addition, an explanation of the impact of certain substances and behaviours that over-activate the dopamine pathway is also provided. Case examples such as addiction to shopping, gambling, use of drugs, alcohol, the internet, social media, and binge-watching TV programs are included to deepen understanding of how the brain reacts to such stimuli.

Discussions about neuroscience concepts are also explored, especially in relation to how dopamine and other brain chemicals work. The

consequences of this chemical imbalance and the potential for addiction are also discussed. Part II (chapters 8-13) emphasizes the balance between purpose and pleasure. In this section, the discussion includes the concept of goals, recognizing values, and how to organize daily life in accordance with these values while controlling behaviour that is influenced by dopamine. Essential points covered include the importance of striking a balance between pleasure and purpose to create a meaningful and fulfilling life. In this context, identifying personal values is very important because this will help set goals and direct actions in accordance with the values believed. It is important to remember that there is no absolute right or wrong method for balancing pleasure and purpose. Each individual needs to find this balance personally.

In addition, the second part also provides concrete steps to control behavior to manage activities triggered by dopamine. Thus, a person can live a life that leads to the union of pleasure and purpose. The conclusion highlights the importance of the process of introspection, acting on held values, and finding a personal balance between hedonic and eudaimonic happiness.

Part III (chapters 14-20) focuses on implementing practical changes to manage dopamine-stimulated activities. In this section, steps are presented for taking a break from these activities and strategies for dealing with urges or desires that arise. It is important to note that this section emphasizes the importance of replacing dopamine-stimulated activities with actions that are in line with one's values and reflecting on the progress that has been made. There are options to keep the activity or reintroduce it in a controlled way. This section also reviews the crucial importance of making small but consistent changes and introduces the concept of 'choice points' from acceptance and commitment therapy. This concept helps individuals choose behavior that is in line with their values. Thus, the third part of *The Dopamine Brain* offers valuable guidance in managing dopamine-stimulated activities effectively and in line with one's values.

The Dopamine Brain has several significant implications: 1) it provides deep insight into how brain chemicals, specifically dopamine, influence behaviour and decision-making processes, helping readers understand the complex factors that influence the human condition. 2) it aims to provide entertainment, inspiration, and understanding through the stories told within it, making it a thought-provoking source of knowledge. 3) encourages readers to reflect on their personal choices and values, inviting them to engage in self-reflection that can contribute to better mental health and self-understanding. 4) offers practical strategies to positively influence individual well-being in everyday decisions, providing valuable guidance for readers to take better actions in everyday life. 5) emphasizing the brain's capacity for change, this book encourages readers to use the knowledge gained from the reading to improve the quality of their lives, making this book an informative and transformative source of information.

The strength of this book lies in its comprehensive exploration of the role of dopamine in our behaviour and choices. This book delves into the science behind dopamine and its impact on addiction, motivation, pleasure, and decision-making. This book offers practical strategies for managing dopamine-induced urges, emphasizes the importance of aligning actions with values, and provides insight into maintaining balance and satisfaction in life. The book also covers a variety of related topics, such as neuroplasticity, attention, emotional regulation, and the influence of other neurotransmitters, making it a valuable resource for understanding and managing the influence of dopamine in our lives. The target readers of this book are professionals, psychologists, educators, academics, parents, and anyone interested in learning how brain chemicals influence our behaviour.

Statement of Competing Interests

The authors do not declare any interest.

Relative Contribution

The authors have taken responsibility for this research, starting from reading the book, writing key points, as well as compiling, reviewing, and approving the final manuscript.

Ethics Approval

N/A.

Acknowledgment and Funding

No funding was received for this study.

References

- Channer, B., Matt, S. M., Nickoloff-Bybel, E. A., Pappa, V., Agarwal, Y., Wickman, J., & Gaskill, P. J. (2023). Dopamine, Immunity, and Disease. *Pharmacological Reviews*, 75(1), 62–158. <https://doi.org/10.1124/PHARMREV.122.000618>
- Juárez Olguín, H., Calderón Guzmán, D., Hernández García, E., & Barragán Mejía, G. (2016). The Role of Dopamine and Its Dysfunction as a Consequence of Oxidative Stress. *Oxidative Medicine and Cellular Longevity*, 2016(1), 9730467. <https://doi.org/10.1155/2016/9730467>