

EMBRACING COMPLEXITY

A GUIDE TO EXPLORING THE MIND IN EDUCATIONAL SETTINGS
THROUGH EVOLUTIONARY AND CONTEXTUAL BEHAVIORAL SCIENCE

First Edition

Johannes Freymann

This guide has been created as a collaboration between the department of Comparative Cultural Psychology at the Max Planck Institute for evolutionary anthropology, the Biology Education research group of the Friedrich Schiller University of Jena, and the University of Leipzig, with the support of the John Templeton Foundation (Grant number 62318).



Comparative
Cultural Psychology



UNIVERSITÄT
LEIPZIG



JOHN
TEMPLETON
FOUNDATION
Inspiring Awe & Wonder

Author

Johannes Freymann – johannes.freymann@gmail.com

Illustrations

Sonja Tietz – sonja.m.tietz@gmail.com

Helpful review, feedback, and copyediting from

Dr. Susan Hanisch, Dr. Dustin Eirdosh, Christopher Droppa, Ralf Steinkopff



Publication in pdf format and **additional material** available for free at:
<https://openevo.eva.mpg.de/teachingbase/embracing-complexity-guide/>



Carbon neutral
Print product
ClimatePartner.com/12518-1907-1001



Citation: Freymann, J. (2024). Embracing Complexity - A guide to exploring the mind in educational settings through evolutionary and contextual behavioral science. 1st Edition. Leipzig/Berlin, Germany.



This work is licenced under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International](https://creativecommons.org/licenses/by-nc-sa/4.0/) licence

Dear Reader,

This guide is designed for educators, students, and anyone interested in **exploring the mind in educational contexts through the lens of evolutionary and contextual behavioral science**. In this first edition, we will embark on a journey to reflect on what it means to be human and how insights from science can help us address various current challenges across different contexts. To do so, we will explore the mind through the DNA-V model (Hayes & Ciarrochi, 2015), while also integrating other scientific perspectives, as well as knowledge from ancient traditions and the wisdom of great thinkers from the past, presented through stories and quotes. The activities in this guide will invite you to experience your own mind from different perspectives. Additionally, illustrative graphics, specifically developed for this guide, will support your understanding and help reinforce the process.

Explore More Online: Throughout this guide, you'll find this QR code that links to an online collection of additional material. Simply scan the QR code with your smartphone or device to access more in-depth material and practical tools designed to complement your learning journey.



Feel invited to get involved! Reflect on how the ideas and content in this guide relate to your daily life, as well as to your teaching and learning goals. Experiment with the concepts and connect with us to share your experiences, provide feedback, join our efforts in educational innovation, or ask any questions you may have.

Warm regards,

Johannes Freymann

A handwritten signature in black ink, appearing to read 'Johannes Freymann', located below the printed name.

CONTENTS

WHY DO I NEED ANOTHER MODEL?	4
The mystery of the mind	4
Let's have a look at the context	5
Do we even fit here? Cultural Evolution and the Evolutionary Mismatch.....	5
What can be done to encounter current challenges related to this mismatch?	7
The Author's Personal "Why"	9
HOW CAN THIS GUIDE SUPPORT YOU?	10
Who is this guide for?	10
Can't I just apply the tools, if they are effective?	11
How is this guide structured?.....	11
What could this guide help you achieve?	13
Another guide? Another model?	14
WHAT IS THE DNA-V MODEL?	16
A key outcome - Psychological Flexibility	16
The Processes	16
The DNA-V processes in a developmental and evolutionary context.....	18
The scientific base.....	19
What is truth?	20
DNA-V, Evolution, and Education	23
THE NOTICER	25
Why is there a NOTICER?	25
What scientific perspectives support my NOTICER?	27
How can I explore and develop my NOTICER?	31
THE DISCOVERER	40
Why is there a DISCOVERER?.....	40
What scientific perspectives support my DISCOVERER?.....	42

How can I explore and develop my DISCOVERER?	45
THE ADVISOR	51
Why is there an ADVISOR?.....	51
What scientific perspectives support my ADVISOR?	53
How can I explore and develop my ADVISOR?.....	56
THE VALUER	64
Why is there a VALUER?.....	64
What scientific perspectives support my VALUER?.....	66
How can I explore and develop my VALUER?	69
SELF-VIEW.....	78
Why is there a SELF?	78
What scientific perspectives support my SELF-VIEW?.....	80
How can I explore and develop my SELF-VIEW?	82
SOCIAL-VIEW	88
Why are there SOCIAL CONNECTIONS?	88
What scientific perspectives support my SOCIAL-VIEW?	90
How can I explore and develop my SOCIAL-VIEW?.....	92
INTEGRATION OF THE MODEL	99
Liberation through new perspectives.....	99
Integration of DNA-V into work and life.....	100
Real-life experience from the authors about connecting DNA-V with your passion.....	101
Everything is connected.....	102
EPILOGUE.....	104
How to deal with challenges, limitations and setbacks	104
APPENDIX.....	106
REFERENCES	107

WHY DO I NEED ANOTHER MODEL?

After reading this chapter you will know more about ...

- ... why understanding the context behind material boosts engagement and motivation.
- ... the concept of cumulative cultural evolution and its impact on modern-day challenges.
- ... the evolutionary mismatch between our human traits and the modern world.
- ... the core processes of the DNA-V model.
- ... the importance of psychological flexibility for adapting to change.

The mystery of the mind

People have sought to understand how the mind works for hundreds of years. Despite significant advances in science and various methods for studying the mind, some fundamental questions—such as those about consciousness or emotions—still lack clear answers. Meanwhile, the 21st century presents numerous challenges and crises that heavily impact education, demanding practical and effective approaches. Now more than ever, there is an urgent need for education to equip current and future generations with the essential skills and values to confront these challenges successfully and thrive amid evolving circumstances. The DNA-V model presents 6 processes (**DISCOVERER** - **NOTICER** - **ADVISOR** - **VALUER** - **SELF-VIEW** - **SOCIAL-VIEW**) that offer a conceptual framework for exploring the mind and encompass actionable interventions and activities to develop [psychological flexibility](#) as a base for value-based living, thriving, and flourishing (Hayes & Ciarrochi, 2015). Research findings consistently demonstrate the efficacy of DNA-V, its processes, and associated models in assisting both young people and adults to achieve various outcomes:

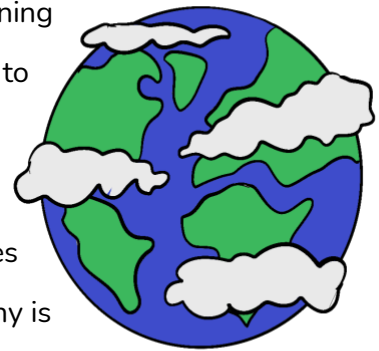


- *Decreasing levels of depression, anxiety, and stress (Fortuna et al., 2018; Hancock et al., 2018; L. Hayes et al., 2011; Livheim et al., 2014)*
- *Enhancing emotion regulation abilities (Swain et al., 2015)*

- *Promoting acceptance of chronic pain (Kemani et al., 2018)*
- *Encouraging healthier eating habits (Bryan et al., 2016)*
- *Improving sleep hygiene and increasing physical activity (Faulkner, 2019)*
- *Enhancing flexible parenting skills (Flujas & Becerra, 2018; Williams et al., 2012)*

Let's have a look at the context

One of the most important things to consider and clarify in any learning experience is context. Providing yourself and others with an answer to the question "Why is this important?" or "Why am I learning this?" can have a positive impact on motivation to engage with the material and integrate the knowledge into their personal lives (Eccles & Wigfield, 2002; McCarthy, 1981; Pintrich, 2003). Of course, the why is always very individual and subjective, and everyone is invited to [find their own answers](#). However, we all face some shared challenges that are worth noting before delving deeper into how people are dealing with their individual challenges. One prominent challenge, particularly evident in the context of education, is the growing complexity of various processes due to cumulative cultural evolution and a potential [mismatch](#) between the modern world and our evolving minds.



Do we even fit here? Cultural Evolution and the Evolutionary Mismatch

Our ability to use language has enabled the rapid spread and accumulation of new ideas, knowledge, technologies, beliefs, traditions, norms, and other cultural traits across generations. This phenomenon is known as [cumulative culture](#). As a result, cultural evolution has enabled humans to adapt at an unprecedented pace, drastically transforming the social and natural environments within just a few generations—or even just a few decades. The 21st century is a striking example of this accumulation, presenting us with a variety of challenges that are largely of our own making. Historian and philosopher Yuval Noah Harari highlights several key issues (Harari, 2018): Technological Disruption (AI, automation, biotechnology), Data and Privacy (surveillance, ethical use of data), Climate Change (environmental crisis, global cooperation), Biotechnology and Genetic Engineering (ethical dilemmas, human enhancement), Nuclear Threats (geopolitical tensions, global diplomacy), Misinformation and Post-Truth (fake news,

disinformation), and Inequality (wealth distribution, globalization's impact). Many of the traits that define us as humans were adaptations to the ecological and social conditions of our ancestors, helping them survive. However, under these modern conditions, those same traits may no longer serve their original functions—or may even have negative consequences. This is what evolutionary biologists refer to as an "evolutionary mismatch." The negative effects of this mismatch can include unhealthy diets, lack of physical activity, social isolation, disconnection from nature, psychological challenges (such as stress, depression, and anxiety), and difficulties coping with complex or ambiguous information, which can manifest in conspiracy theories, nationalism, xenophobia, and racism.

Example: For most of human history, food sources were scarce, so our species adapted by consuming large amounts of food whenever it was available to ensure survival. Today, however, many humans live in a world of abundance, where food is plentiful—often of poor quality. The problem has shifted from having too little to having too much, leading to health issues like diabetes. Our innate mechanisms for regulating hunger and satiety no longer align with the overwhelming availability of unhealthy food, making fasting a necessary practice for many. A similar phenomenon applies to information. In the past, gathering information about food sources, social relationships, or survival strategies was crucial. Our brains evolved to seek out and store as much information as possible to enhance survival. However, in today's information-saturated world, we are constantly bombarded with data. Our brains, still wired to collect as much information as they can, often leave us feeling overwhelmed. Just as with food, the overabundance of information creates the need for "information fasting"—deliberately limiting our intake to manage mental well-being.

Reflection: What do you think? Are we humans just stuck with a "cave-man brain" that we can't change, or are we completely flexible and can simply adapt our behaviors? **How do you feel?** What emotions do you notice when you reflect on the human mind in the context of today's world? **What about the future?** What traits would human beings need in the 21st century to live a good life?

What can be done to encounter current challenges related to this mismatch?

For more than a century, scientists and philosophers have been asking similar questions and coming up with fascinating ideas, concepts, and models that might help us find answers to the questions posed by modern society.

“The only way to make sense out of change is to plunge into it, move with it, and join the dance.”

Alan Watts (1915-1973), an English writer, speaker, and philosopher proposed the integration of Eastern philosophies, such as Buddhism, as a means to confront the challenges of the modern era.

“Learning to live with complexity is perhaps the greatest task of democratic political education.”

Ralf Dahrendorf (1929-2009), a German-British sociologist, philosopher, and political scientist, articulated the political implications of simplifying complex processes.

“The main function of consciousness is to maximize flexibility and context sensitivity.”

Thomas Metzinger (1958-today), a German philosopher, has identified a need for the development of a 'consciousness culture': a societal framework that embraces the emerging science of consciousness, engages with subjective experiences, and acknowledges our growing capacity to influence them.

“The one skill that people will definitely need is the ability to keep learning, changing, and reinventing themselves over and over again as times change. I think the two main roles of educators will be to create flexible minds and train people on how to deal with the avalanche of information.”

Yuval Noah Harari (1976-today), an Israeli author, public intellectual, and historian, emphasizes the imperative of flexibility as a key survival skill to navigate the complex landscape of the modern era successfully.

Reflection: What do you think? What do all the quotes and perspectives have in common? What can we learn from them and how could they be relevant in the context of education and teaching? **How do you feel?** What emotions do you notice when reading these quotes as attempts to encounter global challenges? **What about the future?** What is your personal take away from all these perspectives and how could you integrate it in your life?

The quotes emphasize individual agency and the cultivation of skills like flexibility, underscoring the significant influence individuals can have on their surroundings. A journey towards flexibility

and agency undoubtedly involves the exploration of the mind and can foster qualities such as curiosity, compassion, communication, and connection. These attributes not only enhance personal well-being but also encourage cooperation and collective action, potentially contributing to societal change. However, despite the urgent need to cultivate these qualities, our current educational systems lack the infrastructure to systematically teach these essential skills to young people—they simply aren't a formal part of school curricula (yet). **We believe that education provides an ideal (and perhaps the only) context where these attributes can be nurtured, equipping young people not just for the future but also for the challenges they face right now, as indicated by rising mental health concerns among the younger population (McGorry et al., 2024).**

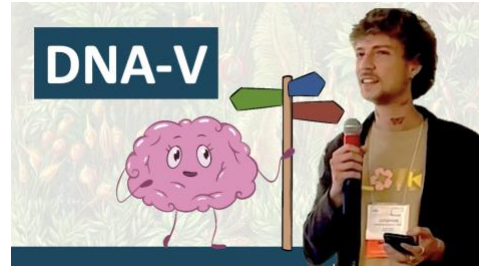
INTRODUCTION-ACTIVITY (1). FIND YOUR OWN WHY

Background: In this chapter, we've briefly delved into the broader context of the world's challenges and how different scientists and philosophers approached them over the years. Beyond these global challenges that affect us all, each of us has an own unique context where models like DNA-V can play a pivotal role in fostering our individual thriving and flourishing. **Steps:** Reflect on your current living situation. What moves you? What surrounds you? What are the current challenges in your own life? What are your reasons for learning more about the dynamics of the human mind? How could these insights possibly affect your personal life (well-being) but also impact the people around you and your environment? Write a letter to your future self, that you will only read when finishing this guide.

Reflection: Taking time to reflect on your current situation and motivations, and articulating them in words, can provide a solid foundation as you engage with this guide. **What do you think?** Why do you believe reflecting on your context is important before delving into the content? **How do you feel?** What emotions do you notice when considering your own reasons and motivations? **What about the future?** How can reflecting on your own reasons and motivations support you in addressing the challenges you currently face and those you may encounter in the future?

The Author’s Personal “Why”

Discovering your personal “why” – the reason you feel compelled to engage with this material—is essential, whether you’re applying it to help others or to benefit yourself. Also, the creators of the DNA-V model also had their own motivations and personal stories. guided by



the principle that *research is me-search*, the author of this guide is no different, with a personal connection to the content. If you’d like to learn more about this motivation, feel free to check out [this video](#).

Find the online collection
of additional material here:



HOW CAN THIS GUIDE SUPPORT YOU?

After reading this chapter you will know more about ...

... how this guide helps you explore the dynamics of the mind in practical settings.

... who this guide is designed for and how it could benefit you in personal and professional roles.

... the value of a theoretical foundation for applying mental health interventions and educational practices.

... the flexibility and adaptability of the DNA-V model across different contexts.

This guide aims to assist you in exploring the dynamics of your own mind and of those around you. **This understanding will not only aid you in implementing the suggested activities but also in customizing them to suit your individual needs or the needs of those you work with.**

While some of the activities presented here are predominantly science-based and empirically tested, you are encouraged to adapt them or even create your own interventions based on your acquired knowledge and find out if they work for you.

Who is this guide for?

This guide is for anyone eager to explore the mind from a [contextual](#) and evolutionary perspective and who is curious about applying these insights in their interactions with others—whether in professional settings or personal life. However, the authors are particularly passionate about offering these perspectives to young people. We believe that teachers can use this guide as inspiration to shape their work around what they find meaningful and worth passing on. However, we have also written this guide in a way that students can understand, so they are encouraged to engage with it directly, allowing them to get a glimpse behind their teacher's curtain and actively participate in the learning process. Throughout the guide, you'll find **REFLECTIVE QUESTIONS** and **ACTIVITIES**, and in the [final chapter](#), we will share ideas and approaches for integrating this model into your work.

Can't I just apply the tools, if they are effective?

You could try and it might work, but think of it this way: Just as medical professionals study for years to grasp the complexities of the human body, understanding the intricacies of the mind is crucial for effective mental health and educational interventions. Merely learning about tools or interventions without a foundational understanding of how the mind operates would limit your ability to adapt and apply them effectively. Much like doctors treating patients without understanding the underlying mechanisms of the human body, simply applying tools in mental health interventions risks overlooking the holistic needs of individuals. Therefore, personalizing and modifying interventions to personal needs is both useful and valuable. This practice fosters a collaborative alliance between individuals working together, enhancing the effectiveness and relevance of the interventions provided (van Dooren et al., 2020). Similarly, effective teaching and pedagogy involve more than just implementing prescribed methods. It's about the ability to flexibly adapt methods to the specific context of a class or individual students, taking into account the opportunities and challenges that arise in the moment. **In the case of this guide, understanding the mind within the framework of the DNA-V model provides a foundation for more effective application, adaptation, and modification of interventions according to the specific context, requirements, and preferences of those you are working with.** What's crucial is consistently asking yourself the question: **Does this intervention work for both you and the individuals you're working with?** This inquiry serves as an invitation to explore and discover throughout the process. Ultimately, it is about making pragmatic and flexible decisions that are aligned with the needs, wishes, and values of all involved.

How is this guide structured?

This guide aims to provide a basic understanding of the DNA-V model and to provide strategies and tools for implementing it in various educational contexts. Before delving into its intricacies, we examined the current global landscape and the [challenges facing humanity in the 21st century](#), drawing on insights from evolutionary science. We will then outline how this guide can serve as a resource to help you and the people you work with meet these challenges and live a [values-based life](#). The core of this guide is the presentation of the [DNA-V processes](#). Each process is explained and supplemented with ACTIVITIES designed for immediate use by both educators and students. The whole guide as well as each of the processes within the DNA-V

model is elucidated using the following structured approach, commonly employed in experiential learning (McCarthy & McCarthy, 2006):

WHY IS THERE ...? In this section, we will explore the evolutionary significance behind each process and the metacognitive skills they support. We'll also look at how the challenges of modern life make it crucial to develop these processes in order to thrive in today's world. Each section will include a tale that provides context and makes the importance of the process more tangible and relatable.

WHAT SCIENTIFIC PERSPECTIVES SUPPORT ...? In this section, we will explore the theoretical foundations of each process, emphasizing its distinct characteristics and relevance. We will draw from a curated selection of scientific perspectives to provide insight into the research and evidence supporting each process. Additionally, we will provide some suggestions on how the theories may connect with various school subjects. These examples are intended to offer a starting point for you to reflect on how you could potentially integrate DNA-V into your teaching. Of course, this is just one possible approach to integrating the model, and we want to emphasize that there are countless other ways to explore and incorporate it into your teaching.

HOW CAN I EXPLORE AND DEVELOP MY ...? Through practical, engaging activities, we will encourage you to apply your understanding of each process, helping you to cultivate familiarity and integrate it into your personal growth journey. Sharing your experiences with others can further enrich this process, fostering a sense of common humanity and reminding you that many of us go through similar experiences.

SECOND EDITION: WHAT IF LIFE HAPPENS? In future editions of this guide, we plan to include a section based on real-world experiences with the DNA-V processes. This section will explore how individuals have navigated the inevitable challenges that arise when applying the insights and skills from each DNA-V process in both personal and professional life. We warmly invite you to provide us with feedback from your experience working with this guide, so we can fill the second edition with real-life examples and practical insights that will support others on their journey.

What could this guide help you achieve?

Explore the Mind: Cultivate the ability to explore and understand the dynamics of the mind.

Grasp the Evolutionary Context: Understand the evolutionary background to grasp what it means to be human in the 21st century.

Cultivate Metacognitive Competencies: Participate in activities that enhance metacognitive skills, deepening your awareness of your own mental processes.

Apply Knowledge to Modify Activities: Use the knowledge you've gained to modify and adapt activities according to the needs of the situation, ensuring their practical relevance.

Maintain a Critical Attitude for Workability: Develop a critical mindset, consistently assessing the workability and adaptability of the DNA-V model in different contexts.

Achieve Increased Flexibility and Flourishing: Strive for greater flexibility and flourishing for both yourself and those around you by applying the insights from the DNA-V model.

It's crucial to recognize that supporting young people in enhancing their psychological flexibility to thrive and flourish requires those around them to first connect with their own psychological flexibility and actively work on improving it. Research consistently underscores the significance of the mindset of adults in the lives of children (Yeager et al., 2022). Working on your own psychological flexibility will allow you to act as a role model (Williams et al., 2012) and to communicate the content in a more comprehensible, adaptive, and authentic way. When appropriate, demonstrating your humanity to those you work with builds trust and lays the foundation for a shared learning experience. Indeed, every student possesses the inherent capacity to develop flexibility.

INTRODUCTION-ACTIVITY (2). REALITY CHECK.

Background: Some scientists suggest that, much like our genetic DNA, the DNA-V processes are naturally inherent in every human being, but are often inhibited by societal influences, learning experiences, language, and other external and internal factors. This viewpoint implies that with the right support and environment, individuals can access their innate resilience and adaptability, allowing them to flourish and thrive. **Steps:** Take some time to contemplate the following questions individually. Then, get together with a group to discuss these questions and share your insights. *What does flourishing and thriving mean to you? Are you currently flourishing and thriving? How would you notice you were flourishing and thriving more? What changes would need to occur in your life to make it easier for you to thrive and flourish?*

Reflection: Engaging with these questions allows you to take stock of your current situation, conduct a reality check, and consider your future aspirations. Discussing them with others might help you develop a greater sense of self-awareness and self-compassion, potentially guiding you toward actions aligned with your values. **What do you think?** What could be the benefit of connecting Activity 1 with this one? **How do you feel?** What emotions do you notice when you reflect on these questions? **What about the future?** How could answering these questions positively impact your personal life?

Another guide? Another model?

We understand that during any education or training in the field of social sciences, you're often presented with a vast array of materials and countless models, all designed to make your life and work easier, while helping you grasp complex and sometimes difficult concepts. With this in mind, we aimed to create a guide that stands out, equipping it with unique features and offering a different approach:

- 1. Accessibility and Free Online Resources:** The DNA-V model has been widely disseminated by scientists and practitioners, offering a plethora of free online resources for individuals to familiarize themselves with and apply. We will direct you to existing resources and highlight those we find particularly useful, ensuring easy access to supplementary materials.
- 2. Integration from Other Fields:** This guide transcends mere scientific description by incorporating insights from diverse disciplines such as psychology, neuroscience, art,

philosophy, and history. Through quotes, songs, and stories, we provide additional layers for reflection and understanding, enriching the learning experience. This guide can also serve as a base to find connections and integrate DNA-V to already existing curriculum content of diverse subject areas.

3. **Connection to Evolution, Behavior, and Sustainability:** We emphasize the importance of contextual understanding by integrating insights from evolutionary science into the DNA-V model. This approach enables a deeper exploration of human behavior and the mind while addressing the unique challenges of the 21st century. The integration of evolutionary science also creates valuable links for teaching about human evolution.
4. **Second Edition - Real-Life Experiences:** In the second edition of this guide, we plan to include feedback from teachers and students who have applied the DNA-V model in real-life settings. Their firsthand experiences, reflections, and advice will provide valuable insights into how the model can be practically implemented, helping you navigate both opportunities and challenges. By incorporating these real-world perspectives, we aim to make the guide even more applicable and supportive in everyday situations.

WHAT IS THE DNA-V MODEL?

After reading this chapter you will know more about ...

... the concept of psychological flexibility and its role in well-being and mental health.

... the processes of the DNA-V model (DISCOVERER, NOTICER, ADVISOR, VALUER) and how they apply to daily life.

... how these processes are rooted in evolutionary development and evolve across a lifetime.

... the theoretical background of DNA-V, including its foundations.

... the idea that truth is context-dependent and how interventions can be adapted for different situations and individuals.

A key outcome - Psychological Flexibility

As you explored the chapter on the [challenges of the 21st century](#), you likely recognized the importance of psychological flexibility as a key skill for living a fulfilling and thriving life. Because there are many definitions and perspectives on psychological flexibility, understanding its nuances can be complex (Kashdan & Rottenberg, 2010). **Nonetheless, psychological flexibility is often seen as a skill that enables both you and those you work with to engage mindfully with the present moment. It encourages you to acknowledge your thoughts and emotions, staying open to internal and external experiences without unnecessary resistance. This, in turn, helps you consciously align your actions with your values, allowing for adaptability in any situation (Hayes et al., 2012).** However, numerous evidence-based studies underscore its vital role in promoting mental health (Levin et al., 2012).

The Processes

DNA-V is a model that encompasses various processes representing the capacities, functions, potentials, and pitfalls of the human mind. These processes aim to foster psychological flexibility, flourishing, thriving, and living a meaningful, values-based life. As you'll notice, the DNA-V processes are metaphorically personified. **This personification not only enhances**

understanding and memory but also fosters a healthy distance from these processes, allowing for flexibility rather than being controlled by them.

- **DISCOVERER:** This process encourages you to engage in trial-and-error exploration, expanding your knowledge, skills, resources, and social networks while stepping outside your comfort zone.
- **NOTICER:** This process helps you become more aware of your present experiences, both internal and external. It also strengthens your emotional intelligence, allowing you to use your emotions as valuable information and respond thoughtfully rather than impulsively.
- **ADVISOR:** This process supports you in navigating the world efficiently and safely by offering guidance through your thoughts and verbal behaviors, reducing the need for trial-and-error learning.
- **VALUER:** This process helps you identify what is truly important to you, guiding your decisions and actions in alignment with your values.

The four DNA-V processes emerge and develop throughout the lifespan, and as you'll see, we have a significant influence on how this development occurs. **Additionally, these processes are constantly interacting with the context in which they unfold—both within ourselves and through the social connections we cultivate. Being contextual components in which the DNA-V processes unfold, the self and social connections are also deeply interconnected, constantly influencing each other.**

- **SELF-VIEW:** This view empowers you to move beyond self-limiting beliefs. It reminds you that your past actions, emotions, or thoughts do not define you, and you can grow, progress, and create a life that reflects your values.
- **SOCIAL-VIEW:** This view empowers you to build meaningful connections and manage difficult relationships. It enhances your understanding of others' behaviors, emotions, and thoughts while deepening your sense of interconnectedness with all living beings.

The DNA-V processes in a developmental and evolutionary context

The structure of the processes in this guide follows the developmental trajectory across both the human lifespan and the evolutionary development of our species. We begin with the NOTICER, progress to the DISCOVERER, and conclude with the ADVISOR and VALUER. This sequence mirrors the natural progression of these processes as we grow and evolve. At birth (or even before), our capacity to notice is already present. As we grow, we begin to explore and discover, and around the age of 2, we develop language skills, activating our ADVISOR and eventually enabling us to verbalize values. A similar pattern can be observed across evolutionary history. For example, early organisms like amphioxys could only notice changes in light with a few cells. As species evolved, amphibians made the first significant discoveries by transitioning from water to land. Eventually, as *Homo sapiens* developed language and abstract thinking, we gained an inner ADVISOR and the ability to verbalize values. This parallel between individual development (ontogeny) and species evolution (phylogeny) was proposed by Ernst Haeckel in 1866 as the Biogenetic Law. While this theory is no longer considered a biological law, it retains heuristic value. In the context of the DNA-V model, this parallel serves as a useful guide to understanding the development of processes both in individuals and across evolutionary history.

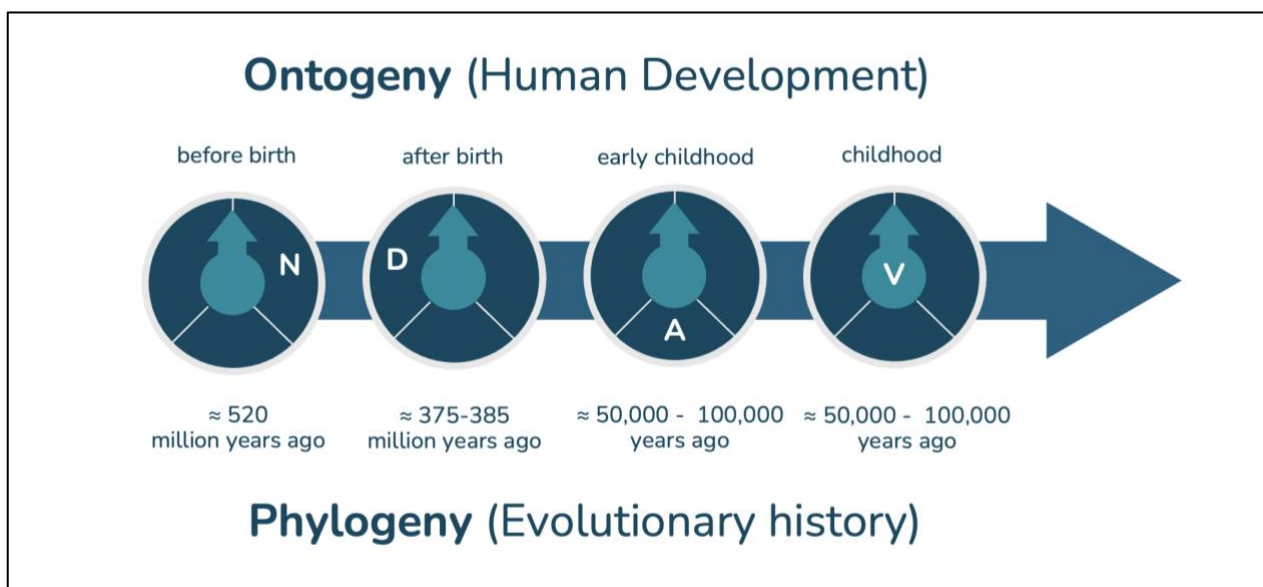


Figure 1. Development of DNA-V processes across human development (ontogeny) and evolutionary history (phylogeny). Evolutionary anthropologists continually uncover new findings that adjust our understanding of these timelines. The dates provided here are intended as a rough outline of approximate timelines.

Despite the developmental order of the processes across the lifespan (and evolution), we can develop and fine-tune them at all stages of life. This allows us to live a values-based, vital, and flexible way of life. Certainly, while DNA-V is not a one-size-fits-all model for addressing every challenge, empirical research has shown its numerous benefits across a [wide range of life situations and fields](#). Notably, both the overall application of the model and its individual processes have shown significant advantages. Moreover, these processes have been found to work independently from one another, allowing for flexible application according to the specific needs of individuals and situations (Hayes et al., 2022).

Another significant strength of the DNA-V model is its inherent flexibility and openness to scientific development. The processes described within the model allow for ongoing refinement and supplementation in light of new scientific findings. In essence, they are not rigid but adaptable, enabling scientists and practitioners to integrate insights from other fields and apply them flexibly and creatively. This guide will also feature such supplements and references to other fields and models, enriching the understanding and application of the DNA-V framework.

The scientific base

DNA-V stems from different fields within psychology, a science dedicated to understanding the human mind and behavior. DNA-V can be conceptualized as a combination of Acceptance and Commitment Therapy (ACT) and positive psychology, grounded in the principles of evolutionary biology and contextual behavioral science (CBS).

- **Contextual Behavioral Science (CBS)** is a scientific field that focuses on understanding and influencing human behavior within its context. It is rooted in philosophical premises that posit the relevance of the broader environment, evolutionary influences on behavior, and pragmatism. CBS aims to create a behavioral science that better addresses the situated complexities of human behavior and the challenges we face (Hayes et al., 2012).
- **Acceptance and Commitment Therapy (ACT)** is a therapeutic approach developed within the field of CBS that aims to enhance psychological flexibility by helping individuals face challenging thoughts, emotions, and situations with acceptance and openness, ultimately leading to value-based actions and a more fulfilling, meaningful life (Hayes et al., 2012).

- **Evolutionary biology** is a subfield of biology that seeks to understand the astonishing diversity of life on our planet by integrating insights from genomics, developmental biology, studies of natural populations, and experimental analyses. By comprehending the principles of evolution, we can gain a deeper understanding of our place in the world and tackle significant challenges related to how our minds operate and how we function within social systems.
- **Positive Psychology** focuses on studying the conditions and processes contributing to human flourishing and optimal functioning. It seeks to explore and understand the positive aspects of human experience, such as joy, resilience, love, and fulfillment, and thereby provides a more balanced understanding of human behavior and well-being, acknowledging that most individuals lead fulfilling lives despite facing challenges and adversity (Seligman, 2011).

What is truth?



You may wonder how we reconcile knowledge from various therapeutic approaches and integrate it with evolutionary science. Aren't there substantial differences? And, after all, who holds the ultimate truth? Does adapting the original protocol to fit the context and goals of the individuals I am working with mean I am no longer conveying the essential truth? No! **Within the framework of Contextual Behavioral Science (CBS), something is considered "true" when it serves a specific purpose in the given context (Biglan & Hayes, 2016). Therefore,**

adapting therapeutic protocols to suit the context and goals of the individuals you're working with still aligns with the "truth". The focus shifts from a single consistent way of thinking to evaluating interventions based on their practical effectiveness and their alignment with the values and goals of those involved. Ultimately, the measure of truth lies in workability - whether interventions lead to desired outcomes in real-life situations and provide individuals with orientation in the world.

- In psychotherapy research, this idea is embodied in the **Dodo Bird Verdict**, which suggests that different therapeutic approaches can produce equivalent outcomes and therefore hold truth within their respective contexts (Rosenzweig, 1936). The term comes

from the story in Alice in Wonderland, where the Dodo, after a race around a lake, declares, “Everybody has won, and all must have prizes.” The goal of the race was simply to get dry after getting wet, and since that goal was achieved, everyone was considered a winner. This highlights how context matters, and truth is defined by what works.

- This perspective applies not only when evaluating our own interventions but also when assessing the behavior of others. In this scenario, truth is defined by what works for the other person, considering their unique context. Unfortunately, we often overlook this and attribute others’ behavior to their personality rather than considering situational and environmental factors, a tendency known as the **Fundamental Attribution Error** (Ross, 1977).
- Dutch biologist Nikolaas Tinbergen (1963) emphasized this point in [Tinbergen's Questions](#), noting that to truly understand why an animal exhibits certain behaviors, we must ask about the functions those behaviors serve for survival and well-being. These functions are inseparable from their context.

When evaluating truth, it is essential to consider multiple factors, such as the function of a behavior, the underlying values and goals, and the context. Examples illustrating this perspective can be found across various fields:

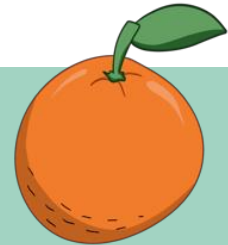
- **Evolution:** Natural selection doesn’t prioritize having objective facts; it focuses on how well traits function in specific contexts. Take human vision, for example. We can only see certain parts of the light spectrum—those that have been crucial for our survival and reproduction. This means our vision is “good enough” for our needs, even though it doesn’t encompass the entire spectrum of light around us. Similarly, some species, like certain worms from the family Annelida, cannot perceive any light at all. These worms live in environments where no light reaches them, so being able to see wouldn’t offer any evolutionary advantage.

“[These worms] live without any ability to see or even know about light. The notion of light is unimaginable. But we humans know that light exists.” Sofi Elizondo in the movie “I Origins” (2014)

- **Modern World:** Consider different representations of a place like Times Square in New York City. A map, with its symbols, helps with navigation, while a photograph captures the atmosphere and emotional essence of the location. Neither representation alone provides a complete depiction. Each respects different qualities and serves a distinct purpose, offering its own version of “truth” based on the level of analysis. Truth depends on context and purpose - whether it’s for practical navigation or conveying the feel of a moment.
- **Psycho-social interventions:** Similarly, in psycho-social protocols and activities like those outlined in this guide, effectiveness depends on individual values and preferences. For someone like David, who values security and precision, following the activity exactly as described may work well. But for Sandy, who values creativity and expression, adapting the activity—perhaps using different materials or allowing more flexibility in timing—may be necessary. The success of the activity hinges on its alignment with the individual’s values, preferences, experiences, and context.

INTRODUCTION-ACTIVITY (3). THE ORANGE RIDDLE

Riddle: A mother finds herself caught between her two daughters, both insisting on having the last orange in the house. The daughters argue back and forth, each claiming she needs the whole orange, and neither is willing to compromise. Unsure of how to resolve the disagreement fairly, the mother wonders if there’s a way to split the orange that will leave both daughters satisfied. **Question:** Based on what you’ve learned about truth, what might the mother do so that both daughters are happy with what they receive? **Solution:** See [appendix](#).



Reflection: What do you think? Did you arrive at this solution in your mind? If not, what do you believe led you to consider a different solution? **How do you feel?** What emotions do you notice as you reflect on the idea that both daughters had their specific purposes and contexts, and therefore their own “truths”? How do you feel when comparing this scenario to your own solution? **What about the future?** Have you encountered situations in your life where understanding the context and purpose of a behavior was truly significant? How might the insights gained from this riddle help you approach

DNA-V, Evolution, and Education

As you may have noticed throughout the initial pages of this guide, the DNA-V model and its processes are deeply connected to evolutionary principles. **Much like our biological DNA, the processes are embedded within every human being.** By emphasizing this connection - such as showing how each process relates to adaptive behaviors observed [throughout evolution](#), we not only address why and how the human mind functions as it does but also enhance recognition, acceptance, and embracement of its complexities. By illustrating how the learning content is interwoven with multiple disciplines, this guide enables you to engage with perspectives that resonate with your personal values, interests, and strengths, allowing you to focus on what is most meaningful to you. The holistic integration of evolution into the DNA-V model makes the guide more credible, understandable, and practical, encouraging positive attitudes toward the content and potentially improving learning outcomes.

“Reframing the patient’s perspective by providing an evolutionary mismatch narrative to focus on the ultimate cause—rather than just a mechanistic explanation—of a chronic disease may motivate beneficial lifestyle behavior change because patients will understand the theory behind their lifestyle prescriptions.” Basile et al. (2021)

“Certainly, an explanatory framework grounded in evolutionary logic might make guidelines about healthy eating seem less arbitrary and more rational than nutritional information alone. In addition, an understanding of evolutionary logic might translate readily into a form of self-empowerment, one that supersedes the authoritarian prescripts that often accompany lectures on health and nutrition for youth...” Sherry (2019)

INTRODUCTION-ACTIVITY (4). O CAPTAIN! MY CAPTAIN!

Background: Changing perspective is fundamental for nurturing psychological flexibility and transitioning between the DNA-V processes. Perhaps you're acquainted with [the iconic scene from the film Dead Poets Society](#), where teacher John Keating urges his students to stand on their desks, altering their viewpoint of the room. He does so to highlight the limitations inherent in viewing the world solely from our accustomed vantage point each time. **Steps:** Now, take a moment to try it yourself. Whatever your current physical situation as you read this guide, you're encouraged to change it up. Stand up and view your room or environment from a perspective you've never seen before. Perhaps stand in a corner you've never explored, or even sit on your desk and, if safe, climb onto your chair. Take the time to notice your surroundings with full attention, observing any shifts within yourself as well.

Reflection: Having taken the time to change your position in the room, you might have noticed some differences. Now, take a moment to reflect on the following questions. You can do this individually or as part of a group discussion. **What do you think?** What does this change reveal about your default perspective on your environment? **How do you feel?** Did you notice any changes in your internal experience of the environment when altering your physical perspective? Did you feel different, or did you notice different things? **What about the future?** How might the insights gained from this activity support you when facing challenges in your life? How is this connected to psychological flexibility?

Find the online collection
of additional material here:



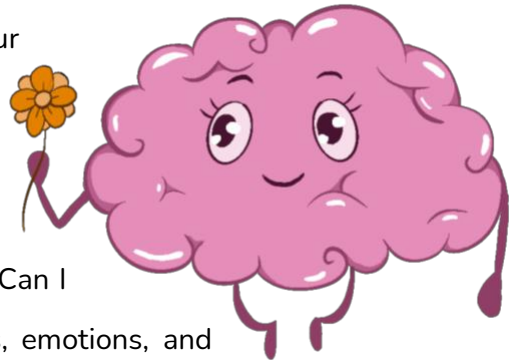
Let's move on! Now that you've experienced the impact of changing perspective, you're ready to shift your view of the human mind and dive deeper into the DNA-V processes. These processes are designed to help you on this journey of seeing life from new angles and tapping into the skills that already exist within you.

THE NOTICER

OBSERVANT, ATTENTIVE, MINDFUL, INSIGHTFUL, EMPATHETIC, PERCEPTIVE. THAT'S YOUR NOTICER, WHO IS KEENLY AWARE OF SUBTLE DETAILS AND CHANGES IN YOUR ENVIRONMENT OR INNER EXPERIENCE.

Why is there a NOTICER?

To survive, our brains have evolved to adapt to our environments, including external threats, leading to a [negativity bias](#). At the same time, they are also finely tuned to our internal needs and potential dangers within. Am I hungry? Do I feel fear? Am I coming down with a fever? Can I trust this person? Awareness of bodily states, thoughts, emotions, and feelings is essential for effective responses that ensure survival and reproduction. As SOCIAL beings, our ability to notice the bodily signals of others is equally important for [cooperation](#), which plays a crucial role in the survival and success of the group, ultimately benefiting our own safety. Being attuned to the states of those around us enables us to meet their needs, provide support when necessary, and protect ourselves if we sense potential danger. Noticing and fully connecting with the present moment serves not only an evolutionary function—enhancing survival—but also improves our well-being (Kabat-Zinn, 2005). However, the ADVISOR often pulls us away from the present moment by focusing on [what is not happening right now](#) causing our minds to wander into the past or future. While this ability is a cognitive strength, it often comes at an emotional cost, as a wandering mind is very often an unhappy mind (Killingsworth & Gilbert, 2010). Your NOTICER helps you recognize this tendency and supports you in refocusing on the present moment, both within yourself and in your surroundings.



“What we need to learn to do is to look at thought, rather than from thought.” Steven Hayes

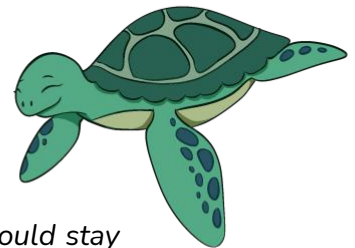
Getting in touch with your NOTICER will help you foster the following metacognitive competencies: Self-regulation Competency, Evaluation Competency, Cooperation Competency

One important thing to remember, often overlooked in our Western society shaped by a "Don't Worry, Be Happy" mindset, is that **worrying, overthinking, and mind-wandering are entirely normal and sometimes functional and have evolved as very effective responses to the threats our ancestors faced.** In fact, scientists have found that at least one in four young people struggle with their emotions (Hayes & Ciarrochi, 2015). So, if you look around a classroom of twenty-four kids, that means six of them might be grappling with emotional challenges. If you happen to be one of them, know this: You are not odd. You are not alone. When we face emotional struggles, we often avoid fully experiencing them. Our reactions tend to involve avoidance or attempts to fight them, which can make things worse. While these strategies might work for external threats, they are often ineffective for internal experiences, as you might discover in the [ADVISOR-ACTIVITY. THE PINK ELEPHANT](#). Fighting these emotions is usually a drain on time and energy, often intensifying the very difficulties we're trying to avoid.

TALES OF DISCOVERY AND INSIGHT

THE SEA TURTLE (INSPIRED FROM THE WHY CAFE)

*I was about 100 feet away from the beach, and diving down among some large rock structures, when I turned to my right and saw a large green sea turtle swimming next to me. He was right underneath me when I looked down, and he was swimming away from the shore. I decided I would stay on the surface and just watch him for a while. To my surprise, although he appeared to be moving pretty slowly, sometimes paddling his flippers and other times just floating in the water, I couldn't keep up with him. After about ten minutes, I lost him. **Disappointed, and a little embarrassed that I couldn't keep up with a turtle, I turned back toward the beach and snorkeled to shore.** The next day I returned to the same spot and watched him for a while as he paddled around the coral, and then I tried to follow him as he swam away from the shore. Once again, I was surprised to find I couldn't keep up. When I realized he was pulling ahead of me, I stopped paddling and just floated and watched him. It was at that moment that he taught me an important life lesson. **As I was mindfully floating on the surface, I realized that the turtle linked its movements to the movements of the water.** When a wave was going toward the shore, and in the face of the turtle, he would float, and paddle just enough to hold his position. When the pull of the wave was back out to the ocean, he would paddle faster, so that he was using the movement of the*



water to his advantage. The turtle never fought the waves, but instead, he used them. The reason I had not been able to keep up with him was because I was paddling all the time, no matter which way the water was flowing.

Reflection: **What do you think?** How does this tale relate to the NOTICER'S behavior? What is the issue addressed in this tale? **How do you feel?** What emotions do you notice when you empathize with the swimmer who could not keep up with the turtle? **What about the future?** Can you think of any "heavy waves" in your life? How might changing your attitude towards them, like the swimmer in the tale, lead to transformation?

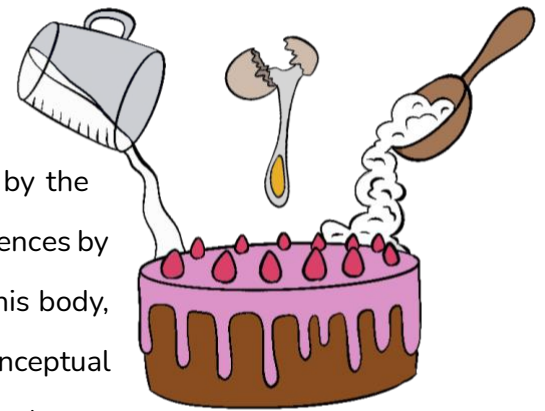
What scientific perspectives support my NOTICER?

Your NOTICER encompasses a range of mindfulness skills, such as observing internal and external experiences, acting with awareness, recognizing thoughts, labeling emotions, and maintaining nonreactivity to inner experiences. Below, we will outline scientific perspectives that underscore the significant role played by the NOTICER in our mind. We'll begin by introducing a theory on emotions, which are fundamental to the NOTICER abilities. From there, we'll explore the human condition in greater detail and examine how the concept of mindfulness can significantly impact our understanding and experience.

HOW EMOTIONS ARE MADE

Before we delve deeper into understanding how to deal with our emotions, it's important to take a closer look at what emotions actually are. Scientists have been debating this topic for decades without reaching a consensus or common ground. The theory of constructed emotions by Lisa Feldman Barrett (2017) suggests that emotions like anger, sadness, and fear aren't basic building blocks in the mind, but rather are *constructed* from more fundamental brain networks. **Just like how basic ingredients (flour, yeast, and water) can be combined to make various foods (pizza, cinnamon rolls, and bread), our emotions are created from basic neural ingredients in response to different situations or contexts.** At the same time, the same dish (spaghetti) can be made out of different ingredients (wheat, rye, rice), meaning that the same emotional experience can be created from different neural ingredients.

Emotions are therefore highly variable instances tailored to the context. These instances emerge from signals in the brain that categorize incoming sensory inputs. Think about the diver in the [tale](#) you read before. When he realizes he cannot keep up with the turtle, he describes feelings of disappointment and embarrassment. According to the theory of constructed emotions, he does not experience these emotions because specific circuits in the brain for embarrassment or disappointment get activated, triggered by the situation. Instead, his brain generates these emotional experiences by combining various neural ingredients, such as signals from his body, sensory inputs from his environment, and his conceptual understanding of the situation, which also can be linked to our ADVISOR's input. Possibly in another context, but with the same signals from the body, he might have constructed and described a different emotion. **The theory highlights the importance of our mindful NOTICER abilities in relation to both our internal experiences and the surrounding context.** Strengthening our NOTICER allows us to become more attuned to the wide range of emotional experiences we encounter. By acknowledging the variability and context-dependency of emotions, we develop the ability to respond to situations with greater psychological flexibility and resilience.



This scientific perspective can resonate with and be connected to the following subjects:

Philosophy/Ethics, Psychology, Biology, Chemistry, Literature, Art

BEING HUMAN

Considering the highly variable nature of emotions, which are often influenced by the context, and taking into account the [challenging circumstances of the 21st century](#), as well as our tendency to focus on the negative aspects of our experiences, **it is entirely normal for unpleasant emotions to be part of being human. Focusing on them can even be considered functional, as they may signal the need for action, whereas pleasant emotions suggest that everything can remain as it is. While it may seem instinctive to aim for their elimination, it becomes clear over time that this goal is simply unattainable. However, this realization brings with it a sense of liberation.** Instead of engaging in a futile struggle against unpleasant emotions, we have the option to observe and accept them. **Similar to the diver in the [tale](#) who ceased fighting against the waves, thereby conserving energy, we too can choose to cease our inner struggle with unwanted experiences and flow with them, perhaps even allowing them to guide us toward [values](#) that are important to us.** Despite the immense challenges of the modern era, characterized by complexity and ambiguity, the experience of human suffering, and the ongoing endeavor to confront it, has been documented in ancient traditions, philosophy, poetry, and art over the course of more than 2000 years. **In today's Western culture, unpleasant inner experiences are often seen as obstacles to be eliminated ("Don't worry, be happy!"), something that can hinder our well-being and living a meaningful life.** People from different cultural backgrounds may have entirely different ways of relating to their inner experiences, offering us valuable insights and perspectives.

„Pain is certain, suffering is optional.“ Buddha

„The wound is the place where the light enters you.“ Rumi

„We are so made that we can derive intense enjoyment only from a contrast and very little from a state of things. Thus our possibilities of happiness are already restricted by our constitution. Unhappiness is much less difficult to experience.“ Sigmund Freud

**This scientific perspective can resonate with and be connected to the following subjects:
Philosophy/Ethics, Social Sciences, History, Psychology, Literature, Art**

MINDFULNESS

These days, the concept of mindfulness is widely discussed and often used excessively, leading many people to develop a reluctance towards it. And a note upfront: It is not a solution for everything. Some people do not benefit from it in any substantive way or may even experience adverse effects (Binda et al., 2022). Additionally, many people have a limited understanding of what mindfulness truly entails. To clarify what it is not, psychologists (Harris, 2008) have created a list of common myths about mindfulness: It's meditation. It's connected to religion or spirituality. It's about relaxation. It's about positive thinking. It's about feeling good.

Reflection: What do you think? What is your personal understanding of mindfulness? In what contexts have you encountered it, and what do you associate with it? Which of the three images below best represents your understanding of mindfulness, and why? **How do you feel?** Do you notice any emotional responses when you think about mindfulness and if yes, which ones?



Figure 2. Different mental processes can represent mindfulness in various ways for different individuals.

Despite common misunderstandings, scientific research demonstrates that for many of us mindfulness remains one of the most effective methods for engaging with our [emotions](#) and coping with the [human condition](#). Originating from ancient Eastern philosophical traditions like Buddhism, mindfulness found its way to the West primarily through the efforts of Jon Kabat-Zinn (2005), a scientist and meditation teacher. Mindfulness has become a cornerstone of many innovative psychological therapies, such as [ACT](#), which forms the foundation of the DNA-V model. **Scientists define mindfulness as the awareness that emerges from purposefully paying attention to the present moment, without judgment** (Kabat-Zinn, 2005). This form of present-focused awareness extends not only to external surroundings but also to internal bodily

signals, such as hunger or increased heart rate. Scientists term this process interoception and assert its critical role in survival, emotions, decision-making, and overall well-being (Craig, 2003). Mindfulness encompasses the process of interoception and extends beyond it. The ability to be fully aware of the present moment, both in terms of internal and external sensory input, and to do so non-judgmentally, has the potential to increase our openness to our current experiences and even to the conclusions we draw from them. Think about the [tale](#) you just read. As the diver mindfully floats on the water, he immerses himself in the present moment, refraining from judging either the turtle or himself for not being able to keep up. Instead of fighting the unpleasant emotions of disappointment and embarrassment or letting them lead him into dysfunctional behaviors, he remains open to simply observing what is happening around him. This mindful presence allows him to carefully watch the turtle's behavior, enabling him to gain new insights and adjust his own actions according to both his values and the demands of the situation. The [tale](#) illustrates that, like battling heavy waves, fighting our emotions is often a waste of energy that can lead to unwanted outcomes.

This scientific perspective can resonate with and be connected to the following subjects:

Philosophy/Ethics, Physical Education, Psychology, Biology, Literature, Art, Physics, Computer

How can I explore and develop my NOTICER?

Similar to other processes, your NOTICER isn't inherently good or bad - exploring and understanding its workability in a certain context is key. By developing a positive relationship with it, you can leverage its strengths while managing any drawbacks it may present. This process is supported by the following activities.

NOTICER-ACTIVITY. CLOUDS IN THE SKY

Background: Our minds are incessantly generating thoughts beyond our control, making it impossible to alter them or their content. However, the NOTICER empowers us to observe these thoughts without attempting to change them. Throughout the centuries, scientists and artists alike have devised countless metaphors to depict the constant stream or flow of thoughts. One particularly prominent metaphor, easy to recall, likens thoughts to clouds in the sky—drifting through, perpetually changing in size and shape, never lingering in one place. **Steps:** Visualize yourself lying down in the soft grass, feeling its gentle support beneath your back. As you gaze upward, you watch the clouds drifting by with pure curiosity. In this moment, you wouldn't even consider attempting to alter the clouds—they simply are. Similarly, with your thoughts, there's no need to intervene. If you now shift your focus inward, perhaps by taking a deep breath, you'll notice thoughts emerging, much like the passing clouds. Endeavor to observe them with the same curiosity you afforded the clouds, embracing the notion that you needn't exert control over them (no matter how ugly or threatening they may seem). Remember: You are not accountable for your thoughts, just as you are not responsible for the clouds.

Reflection: Viewing thoughts as clouds and approaching them with a curious attitude devoid of judgment, refraining from attempts to alter them, can be regarded as the fundamental mechanism of utilizing your NOTICER. **What do you think?** Why do you believe the metaphor of viewing thoughts like clouds is so fitting and frequently utilized? Can you identify other facets of the mind that are illuminated by this metaphor? **How do you feel?** What emotions do you notice when you envision that observing your thoughts resembles watching clouds in the sky? How do you feel when recognizing that you are not accountable for your thoughts? **What about the future?** In what situations could this activity prove useful for navigating specific types of thoughts? Sharing these situations and even the thoughts with trusted individuals from your group can further fortify the perspective of the NOTICER.

NOTICER-ACTIVITY. BODY SCAN AND NSDR

Background: As we've learned, our NOTICER allows us to observe our inner landscape, including bodily states and sensations. Body scans, commonly practiced as part of various meditation techniques, as well as a more scientifically structured approach known as nonsleep deep rest (NSDR), are powerful tools that aid in relaxation without falling asleep by intentionally focusing on different parts of the body. This relaxation is further enhanced by paced breathing, which involves deep inhalation and extended exhalation, effectively slowing down the heartbeat. **Steps:** Set aside a few minutes to engage in NSDR and connect with the sensations in different parts of your body. Find a quiet space free from distractions and lie down comfortably. Begin by taking deep breaths, ensuring to prolong your exhales. Then, systematically direct your attention to various body parts, starting from your toes.

Reflection: NSDR and other relaxation techniques highlight the profound connection between the body and mind. By simply directing our attention to different parts of the body and extending our outbreath, we can experience a multitude of physiological and psychological benefits (Boukhris et al., 2024). These include enhanced sleep quality, improved cognitive function, better mental health, and an overall sense of well-being. **What do you think?** Why do you believe that repeating protocols in which you guide your attention to different body parts can yield such positive effects? **How do you feel?** What emotions do you notice after participating in such protocols? **What about the future?** What insights can you derive from this activity? In what life situations do you believe you would benefit from engaging in NSDR? What obstacles might arise?

NOTICER-ACTIVITY. MOOD METER

Background: As we've learned, our NOTICER allows us to observe our inner landscape, including our emotions. Many individuals struggle to connect with their emotions, not because they're absent, but due to a lack of precise vocabulary to label them. Emotional granularity, the ability to differentiate and label emotions with precision, is linked to enhanced better coping with stressful experiences (Tan et al., 2022). The MoodMeter, developed by Marc Brackett and colleagues, serves as a tool to enhance emotional granularity. It operates on the theory that emotions are situated within a matrix defined by two spectrums: Arousal (How much energy do I have?) and valence (How pleasant do I feel?). From this framework, four quadrants emerge, aiding in tracking emotions through a top-down approach. Within these four quadrants, a wide range of vocabulary for describing emotional experiences can be found. **Steps:** Take a few moments to acquaint yourself with the MoodMeter. Then, ask yourself, "How do I feel right now?" and identify the word with the matrix that best encapsulates your current emotional state. You're encouraged to include additional emotions if you feel one descriptor isn't sufficient, drawing from various fields if needed. In a second step, try to answer the question, "What makes me feel this way?" by identifying the internal and external factors that contribute to your emotional state.

Reflection: You may have noticed that accurately pinpointing a word to describe an emotion often leads to another relation with it. **What do you think?** Why does simply acknowledging our emotions influence how we experience them? What does this reveal about the interplay between language, cognition, and emotion? **How do you feel?** What emotions do you notice when you pay attention to your emotional state (yes, it's possible!)? **What about the future?** What insights can you glean from this activity? How might you integrate this tool into your daily life for greater self-awareness and emotional regulation?

Tip: You can find the [Mood Meter here](#). If you're seeking a more dynamic approach that allows you to track your emotions, share them with friends, and receive explanations and information, consider checking out the [app How We Feel](#) by Marc Brackett and his team at the Yale University Center for Emotional Intelligence.

Find the online collection
of additional material here:



NOTICER-ACTIVITY. OBSERVE YOUR BREATH

Background: The breath, a constant companion wherever we go, has long held a central role in ancient meditative practices, notably in Buddhism. By directing focused attention to the breath and fully engaging with its rhythm, you can find solace and calmness, especially during moments of wandering thoughts. **Steps:** You're about to engage in one of the simplest yet most potent practices. Your only task is to observe your breath. There's no need to alter anything; simply witness how it moves in and out of your body. If it aids your focus, you can select a specific area of your body where the breath feels most prominent, such as your nostrils, chest, or belly. Incorporate this exercise into your daily life whenever you wish.

Reflection: Watching the breath without altering or evaluating it is deceptively simple yet challenging. With each practice session, your ability to observe strengthens, allowing for greater flexibility in integrating this skill into your daily routine. **What do you think?** Why do you believe it's challenging to adhere to such a straightforward instruction to observe your breath? How might this difficulty be linked to another DNA-V process? **How do you feel?** What emotions do you notice during and after observing your breath? Have they shifted compared to when you began? **What about the future?** How might observing your breath assist you in your daily life? In what situations do you anticipate benefiting from this practice? What obstacles might arise, and how could you overcome them?

NOTICER-ACTIVITY. ALLOW YOURSELF TO SIGH

Background: In our daily lives, we often face situations that trigger unpleasant emotions, resulting in shallow breathing and added stress on both the body and mind. Deliberate breathing techniques are known to offer numerous benefits, including enhanced emotional regulation and greater psychological flexibility. What can often bring instant relief is the physiological sigh which is a type of deep breath characterized by a double inhalation, followed by a single, longer exhalation. **Steps:** Engaging in the physiological sigh is remarkably simple. Begin by taking a deep breath through your nose, filling your lungs completely. Then, without pausing, take another short breath in. This additional inhalation allows you to take in more air than usual. Finally, exhale slowly and steadily through thinly compressed lips until your lungs feel empty. Repeat this sequence several times and also allow yourself to notice how your breath feels in different parts of the body. Once you become familiar with the technique, incorporate the physiological sigh into your daily routine, using it whenever you feel the need. This is particularly beneficial in challenging situations, such as speaking in front of a group, making important decisions, or preparing for difficult conversations. Whenever you experience feelings of being challenged, overwhelmed, intimidated, or afraid, let these emotions serve as a cue to take a deep breath.

Reflection: The physiological sigh can indeed assist in regulating your emotions, fostering a sense of calm and composure, allowing you to approach difficult situations with greater ease and confidence.

What do you think? Why do you believe that breath is intricately intertwined with our emotions? Is there an evolutionary rationale you can propose for this connection? **How do you feel?** What emotions do you notice when employing the technique of the physiological sigh? Reflecting on the existence of a science-based technique that can provide relief in emotionally demanding scenarios, how does it make you feel? **What about the future?** What insights can you glean from this activity? In what life situations do you anticipate benefiting from employing the physiological sigh? What potential obstacles might arise and how could you overcome them?

NOTICER-ACTIVITY. MINDFUL EATING

Background: Our NOTICER aids us in perceiving life through our five senses. Eating is one of the few activities in life that engages all our senses simultaneously. Given that we eat multiple times a day, it presents numerous opportunities to hone our NOTICER skills simply by eating mindfully and fully engaging in the experience. **Steps:** The next time you sit down to eat, take a brief pause (you can use deep breathing to help) to bring yourself into the present moment. Then, engage all your senses to fully experience the food. Begin by visually examining the food, noticing its texture, color, and shape. Take slow, deep breaths to smell the aroma of the food. If appropriate, touch the food with your hands (such as fruits or nuts) and observe how it feels. Before taking a bite, take a moment to explore the food with your lips and tongue, noticing its texture and temperature. As you bite into it, pay attention to the sounds it creates—crunching, popping, or the soft sigh of a tender morsel. Finally, savor the taste, allowing yourself to fully experience its layers and subtle nuances.

Reflection: Mindful eating offers an ideal opportunity for your NOTICER to engage with the present moment through multiple sensory experiences. Each sensation invites you to deepen your appreciation for the food, transforming a simple meal into a rich sensory journey. **What do you think?** Why is eating such a sensory-rich experience, and how does this relate to evolution? **How do you feel?** What emotions do you notice after taking the time to fully experience eating (or another activity) with all your senses? **What about the future?** Can you brainstorm other activities that stimulate multiple senses simultaneously? What obstacles might you encounter when trying to approach different activities mindfully, and how could you address them?

NOTICER-ACTIVITY. WALKING AROUND REALLY STRESSED

Background: Our NOTICER can assist us throughout the day, helping us become aware of [how we feel](#) and how we act on those feelings, including the way we literally move through life. People move in vastly different ways depending on their emotional state, and conversely, the way they move can influence how they feel. This activity is most effective in a group setting. **Steps:** Get up from your current position and walk around the room. (1) Walk as if you're having an extremely stressful day and can't handle the overwhelming number of tasks on your to-do list. Pay attention to your movements and how they make you feel. How do you perceive the other people in the room? (2) Now, walk as if you're mildly stressed, but with the belief that you'll likely finish your to-do list by the end of the day. Notice your movements and how this makes you feel. How do you perceive the other people in the room? How is this different from the first walk? (3) Finally, walk around the room with absolute confidence that you'll complete your tasks, and even if you don't, it's okay—tomorrow is another day. Notice your movements and how they affect your mood. How do you perceive others now? How does this differ from the first two walks?

Reflection: Becoming aware of how we move through our day can reveal a lot about our current mood and provide an opportunity for adjustments. **What do you think?** Why is walking such a strong indicator of how we feel? What aspects of our emotional state are reflected in the way we walk? **How do you feel?** What emotions do you notice as you reflect on yourself in each of the three different scenarios? Which version of yourself did you resonate with the most, and why? **What about the future?** Can you recall times in your life when you walked like you did in any of these three scenarios? Which style of walking would you like to practice more, how could you make that possible, and how might your life change as a result?

NOTICER-ACTIVITY. 360° MEDITATION

Background: Noticing with full awareness, including meditating, is often associated with having your eyes closed. However, your NOTICER also processes visual information, and this can be done mindfully as well. **Steps:** Stand up from your current position and find a spot in the room where you rarely stand. Take 5-15 minutes to remain still in that spot, consciously observing your surroundings. The only movement you're allowed is to shift your feet in small increments, so by the end, you will have rotated once around your own axis. Pay close attention to how your field of vision changes, noticing new sensations that arise and old ones that fade away.

Reflection: Noticing with your eyes open is another way to practice awareness, offering new perspectives and influencing both physical and emotional states. **What do you think?** Why can simply seeing become such an intense experience when done deliberately and with intention? What aspects of this practice make it so powerful? **How do you feel?** What emotions did you experience during and after the exercise? Did any new or unfamiliar feelings arise? **What about the future?** Can you recall moments in your life when you saw something that deeply moved or inspired you? How can your NOTICER help you cultivate more of these experiences, even in everyday contexts that may not seem special at first?

THE DISCOVERER

ADVENTUROUS, CURIOUS, INNOVATIVE, RESILIENT, FLEXIBLE, READY TO TAKE RISKS, ADAPTABLE, BOLD. THAT'S YOUR DISCOVERER, WHO HELPS YOU TO BECOME ACTIVE, ENGAGE WITH THE WORLD AND EXPLORE NEW TERRITORIES IN ORDER TO LEARN AND GROW.

Why is there a DISCOVERER?

Imagine one of your ancient ancestors sitting with his group around the fireplace. They've gone days without food, and hunger gnaws at their bellies. There have been no animals to hunt in the area they've been camped in for weeks, and it's becoming clear that it's time to move on. Crossing the river ahead could be perilous, but it also holds the promise of better hunting grounds. None of them have



ventured there before, so they can't be sure of what they'll find. The only way to discover what's on the other side is to try. This includes the potential for success, such as better living conditions and abundant prey, as well as the risk of failure, which could mean losing some members of the group. Making decisions in our modern world may seem less risky compared to the life-or-death choices our ancestors faced, but many choices still come with uncertainties and consequences we can't fully anticipate. **Your DISCOVERER can help you navigate situations where outcomes are unpredictable. It also helps you track your behavior, allowing you to assess whether it aligns with your values and whether it serves both you and those around you effectively in any given context.** Discovery in the 21st century isn't necessarily about crossing rivers or scaling mountains to find new resources; it often begins with simple, everyday actions—like opening a book, trying a new hobby, or embracing the uncertainty of a new relationship. **It's about taking action to explore what lies beyond and learning from the experience.** And remember, your [NOTICER](#) is there to help you pay attention to the new situation, to tune into your feelings, and to assess whether the path you've chosen feels comfortable and [meaningful](#) to you. However, proceed with caution: your [ADVISOR](#), prone to self-righteousness, often feigns certainty about

outcomes while warning you of potential risks and dangers. This can create hesitation and deter you from taking actions that align with your values and goals.

Getting in touch with your DISCOVERER will help you foster the following metacognitive competencies: Growth Mindset, Future Thinking, Evaluation Competency, Intellectual humility

TALES OF DISCOVERY AND INSIGHT

GOOD? BAD? WHO KNOWS (AJAHN BRAHM)

Long ago, a King ventured out hunting and accidentally cut his finger.

He summoned his trusted doctor, who always accompanied him on hunts. The doctor examined the injury and, as usual, calmly bandaged the wound. "Will it be alright?" inquired the King.

"Good? Bad? Who knows?" replied the doctor, and they continued their hunt. Upon returning to the palace, the wound



had worsened, prompting another visit from the doctor. This time, he cleaned the wound thoroughly and applied ointment before bandaging it again. "Are you certain it will be okay?" asked the King, growing concerned. "Good? Bad? Who knows?" once again echoed the doctor. The King's worry escalated. Unfortunately, in a few days, the finger became so infected that the doctor had to amputate it! Enraged by the incompetence, the King threw the doctor into the dungeon. "How does it feel to be in jail?" the King inquired later. "In prison, Sire... Good? Bad? Who knows?" shrugged the doctor. "You are not only incompetent but also insane!" the King declared before leaving.

Weeks later, while hunting once again, the King wandered too far and got lost in the forest. He was captured by a group of indigenous people who planned to sacrifice him. However, upon noticing his missing finger, they declared him imperfect and unfit for the ritual. They released him and let him go free. Upon returning to the palace, the King immediately visited the doctor, who was still imprisoned in the dungeon. "I now understand the wisdom of your words," the King admitted. "Losing my finger truly saved my life. But I was wrong to have imprisoned you. Please accept my apology." The doctor smiled and replied, "Your Majesty, imprisonment wasn't bad. If I had been free, I would have accompanied you on that hunt—and unlike you, I have all my ten fingers."

Reflection: What do you think? What insights can you draw from this tale regarding the capabilities of the DISCOVERER? Also, how does the tale depict the [ADVISOR](#)? Can you identify these two processes in the behaviors of the king and the doctor? **How do you feel?** When you put yourself in the shoes of the king and the doctor, what emotions do you notice? What do these emotional responses reveal about the presence of the [ADVISOR](#) and the DISCOVERER? **What about the future?** Can you recall situations from your life where you initially labeled an outcome as bad, but it eventually led to something pleasant? How might you apply these experiences and the “Good? Bad? Who knows?” attitude to current or future situations that you might be quick to label as negative?

What scientific perspectives support my DISCOVERER?

Your DISCOVERER becomes particularly valuable when confronted with change, and as we've come to understand, the 21st century is marked by [significant upheavals](#). In times of change, it's common to persist in habitual actions that may no longer be effective. **However, it's certain that new situations require new approaches.** Your DISCOVERER empowers you to engage in novel actions, experience situations with fresh perspectives, and glean insights from any missteps along the way. Below, we will outline several scientific perspectives that underscore the significant role played by the DISCOVERER in our psyche.

MOOD FOLLOWS ACTION

The [ADVISOR](#) can sometimes dominate our thoughts with constant chatter about potential risks and reasons to avoid certain behaviors. As demonstrated in the [ADVISOR-ACTIVITY. THE PINK ELEPHANT](#), it's clear that controlling our thoughts and the resulting emotions can be challenging. However, we do have control over our actions and the values that guide them. Scientists argue that altering our behavior often leads to changes in mood and thoughts. This concept is known as behavioral activation (Kanter et al., 2009). **The premise is that by intentionally engaging in specific behaviors, individuals can activate a more pleasant emotional state.**

The strong connection between activity and mood can be understood through several key mechanisms. Engaging in activities we enjoy naturally brings us pleasure, while challenging ourselves and overcoming periods of inactivity fosters a sense of agency and gratitude. Additionally, participating in activities that help build relationships can create a deeper sense of

connectedness, enhancing our overall well-being. **The key is to take that first step and begin.** The best part is, you have the freedom to connect with your [VALUER](#) and choose the values that will guide your actions. This allows you to explore what resonates best with you and aligns with your personal journey. Consider the [tale](#) you've just absorbed: It teaches us that labeling incidents, actions, experiences, or decisions as definitively good or bad is futile because we can never experience the alternative scenario. Much like the doctor's response could have been, "Good? Bad? Who knows? No one does." **By adopting this humble attitude toward results and avoiding rigid, dysfunctional judgments—especially of ourselves—we open the door to freedom and curiosity, allowing us to explore the real potential in any situation.** While it may be impossible to label something as strictly good or bad, we can always contact our [NOTICER](#) to discern whether an experience feels pleasant or unpleasant, but only by allowing ourselves to experience it firsthand.

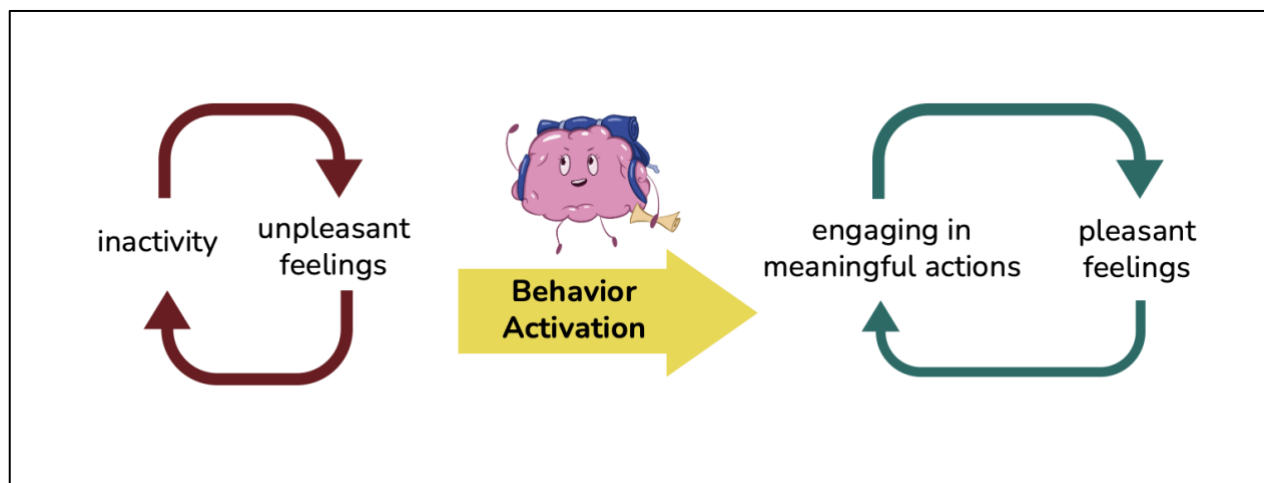


Figure 3. Our DISCOVERER helps us engage in behaviors that have the potential to change how we feel.

This scientific perspective can resonate with and be connected to the following subjects:

Psychology, Biology, Physical Education, Art

YOU ARE NOT YOUR THOUGHTS

Our DISCOVERER empowers us to engage in actions aligned with our values, boosting our mood and overall well-being. However, our dominant and controlling [ADVISOR](#) often convinces us that we are making accurate judgments, even when we're not. It does so to shield us from the

uncertainties that come with the trial-and-error approach of the DISCOVERER, constantly scanning for potential threats. While inactivity may feel unpleasant, it serves the fundamental purpose of survival, a primary task of the [ADVISOR](#). **The real problem arises not from the ADVISOR offering cognitive evaluations, but from our over-reliance on these judgments. We frequently become so fused with these evaluations that we find ourselves unable to take meaningful action or fall into dysfunctional behaviors.** For example, thoughts like “Don’t go to your training session; you’ll be tired” or “Don’t talk to your crush; you’ll be rejected” highlight how we are warned of potential negative outcomes, frequently stopping us from taking action. **To move past these constant warnings and activate your DISCOVERER, you can create intentional distance from this inner chatter. This process, known as Cognitive Defusion (Hayes et al., 2012), involves recognizing that the activity of the ADVISOR is not reality, but simply verbal activity, that can either be helpful or unhelpful.** By observing your thoughts from a defused perspective, you can cultivate strong [NOTICER](#) abilities, allowing you to become aware of your internal dialogue without being consumed by it. **This awareness opens you to new actions and possibilities, many of which will require you to make decisions (DISCOVERER).** In the [tale](#) of the king and the doctor, we see a stark contrast in how they engage with their evaluations and judgments. The King becomes completely fused with his assessments, whereas the doctor maintains a healthy distance from them, preserving his psychological flexibility and granting him greater openness and freedom. **Despite experiencing unpleasant events like doctoring the king’s finger or facing imprisonment, the doctor demonstrates that these occurrences are not inherently "bad" when viewed in the broader context.** This highlights the significance of avoiding fusion with our judgments to maintain openness and adaptability throughout life's processes.

This scientific perspective can resonate with and be connected to the following subjects:

Psychology, Biology, Literature, Art, Foreign Languages

How can I explore and develop my DISCOVERER?

Similar to other processes, your DISCOVERER isn't inherently good or bad - exploring and understanding its workability in a certain context is key. By developing a positive relationship with it, you can leverage its strengths while managing any drawbacks it may present. This process is supported by the following activities. **Not all of them will address the DISCOVERER directly. Given that all the [processes are interconnected](#), it can be essential to address for example the [ADVISOR](#) to create space for the DISCOVERER.**

DISCOVERER-ACTIVITY. MUSCLES OF WILLPOWER

Background: Our DISCOVERER empowers us to embrace new experiences, often urging us to step beyond our comfort zone, even when this triggers uncomfortable emotions. By regularly exercising your DISCOVERER—just like a muscle—you can build the strength to recognize that despite the [ADVISOR's](#) warnings and the presence of [unpleasant emotions](#), you are still capable of pursuing actions that hold meaning for you. Over time, these actions will lead to more positive emotions and a sense of fulfillment. Always remember: [Action first, mood follows](#). **Steps:** Stay alert for situations in life that hold significance for you but might trigger unpleasant emotions—these are perfect opportunities to explore your DISCOVERER. Begin with small, regular steps to cultivate this process. For instance, taking a cold shower in the morning is a simple way to engage your DISCOVERER. While warm showers are comforting, cold showers offer known health benefits (El-Ansary et al., 2024). Stepping into the cold water challenges your natural inclination to seek comfort, yet you can make a conscious decision to embrace the discomfort—again and again. Now, think about other scenarios in your daily life where you can deliberately step out of your comfort zone in order to explore. Your DISCOVERER thrives on exploring these moments, helping you grow and expand your capabilities. Seize the opportunity to engage in these activities as soon as they arise.

Reflection: Engaging in challenging activities is akin to strengthening your DISCOVERER muscle, allowing you to undertake actions that may initially feel uncomfortable but offer substantial long-term benefits. **What do you think?** Why can it be challenging to commit to actions that are ultimately beneficial for us? What role does the DISCOVERER play in venturing beyond our comfort zones? **How do you feel?** What emotions do you notice when contemplating stepping out of your comfort zone? Do these emotions influence your willingness to take action? **What about the future?** How do you plan to incorporate small steps of pushing your boundaries into your routine to cultivate discovery? How will you gauge your success in this endeavor? What potential obstacles do you anticipate, and how do you intend to overcome them?

DISCOVERER-ACTIVITY. NOT YET!

Background: Engaging in actions guided by your DISCOVERER is challenging and always part of a process. This means you'll have to make these decisions repeatedly without ever reaching a state of perfection. Often, we hear our ADVISOR say things like, "You can't do this" or "You're not capable." And perhaps, for the present moment, this might be true. **But remember, *Homo sapiens* is an incredibly adaptable and teachable species.** Just because you can't do something now doesn't mean you won't be able to do it later. **Steps:** You can practice this concept known as the "Growth Mindset" (Dweck, 2006) by first recognizing when your ADVISOR provides dysfunctional input, hindering your process of discovery. You might be tempted to adopt this narrative, believing that you truly can't achieve something, leading you to not even attempt it. The next time you notice your inner or outer voice saying "I can't," simply add a "yet." It's about trying—it's about the process.

Reflection: Embracing a Growth Mindset offers significant potential for enhancing your ability to engage in new actions. **What do you think?** Why can a simple word like "yet" alter our perspective on our capabilities and processes? **How do you feel?** What emotions do you notice when considering that you are an adaptable human being, capable of achieving goals even if they seem out of reach at the moment? **What about the future?** In what life situations would you benefit from adopting a Growth Mindset? How would it empower you to take action, and what specific actions might you undertake?

DISCOVERER-ACTIVITY. BEGINNER'S MIND

Background: Whenever we use tools or objects—be it a pen, a bottle, headphones, or anything else—we typically rely on our established mental models. These models are shaped by past experiences that demonstrate the effectiveness of an object's function, which reflects input from your ADVISOR. Your DISCOVERER, however, can guide you to approach different objects with a beginner's mind. **Steps:** Try to temporarily set aside your preconceived notions about how to use a particular object and explore entirely new ways to utilize it. Select any object that comes to mind and is readily available to you. You can proceed in one of two ways: 1. Make a list of at least 10 alternative uses for that object. There are no limits—feel free to reinvent its usage completely. 2. If you're in a group and want to be more spontaneous, assign an object to a person. That person will then give a 1- to 3-minute speech about the object, praising it and describing all its different uses without mentioning its original function.

Reflection: Generating completely new uses for an object can help silence your ADVISOR, who knows what the object is typically used for, and strengthen your DISCOVERER, who approaches the object with curiosity and the mindset of a beginner. **What do you think?** Why is it so challenging to let go of the established uses and functions of an object we have used countless times? How does this relate to evolution and learning? **How do you feel?** What emotions do you notice when you encounter a familiar object with a beginner's mind? **What about the future?** In what life situations could you benefit from approaching a situation without imposing your existing models on it? How might adopting a beginner's mindset change your behavior?

DISCOVERER-ACTIVITY. THINK ONE THING, DO ANOTHER

Background: Sometimes, engaging in behavior aligned with our values requires us to distinguish between our thoughts (represented by the ADVISOR) and our actions (represented by the DISCOVERER). This separation helps us more easily follow our DISCOVERER's guidance. **Steps:** Let's try something together. Read the following sentences aloud while doing the opposite (touching your nose): "I can't touch my nose. I can't touch my nose. I can't touch my nose. (...)". You can try this with many other expressions.

Reflection: Practicing this exercise repeatedly reinforces the understanding that our verbal expressions, often barriers to action, are just words. Recognizing them as such and even vocalizing them while still taking action opposite to their message lays a firm groundwork for handling situations where verbal barriers impede discovery. **What do you think?** Why do we frequently intertwine our thoughts with our actions? Considering your understanding of the ADVISOR, why is it often vital to differentiate between our thoughts and our actions? **How do you feel?** What emotions do you notice when considering that our thoughts don't always dictate our actions? **What about the future?** In what life situations could you benefit from defusing from what your thoughts dictate?

DISCOVERER-ACTIVITY. MAKE PEACE WITH THE MONSTER

Background: Many of us struggle with difficult thoughts and emotions. Sometimes, they feel so overwhelming that they're like a monster blocking our path and holding us back. When faced with this inner turmoil, our natural response is often to try to control or fight against it, hoping to ease our discomfort. However, trying to control our inner experiences usually doesn't work well. **Steps:** Have you ever thought about giving up the fight instead? Not giving up on life, but making peace with these thoughts and emotions, and carrying them with you on your journey. Though it might feel uncomfortable at first, this act can bring a sense of freedom as the inner turmoil loses its power over you. With this idea in mind, think about and write down three things you might discover along your journey if you were to make peace with your inner struggles and accept them as part of your path.

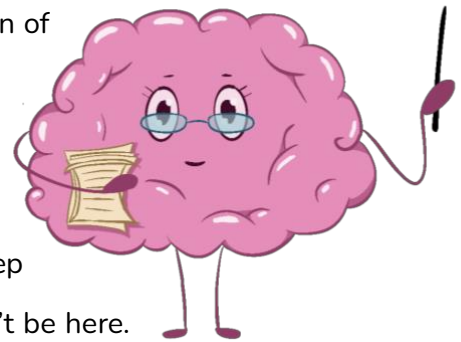
Reflection: Surrendering to our inner struggles and making peace with them can feel counterintuitive at first. However, it's often a more effective approach than trying to control or fight against them, eventually making space for discovery. **What do you think?** Why are we often so busy fighting, avoiding, and controlling our inner experiences? What role might language play in that struggle? Can you also consider how culture influences the way we handle our inner experiences? **How do you feel?** What emotions do you notice when acknowledging that you have plenty more options than fighting, avoiding, and controlling? How would you feel continuing the journey with the monster under your arm? **What about the future?** What lies ahead with this newfound perspective? What range of possibilities unfolds?

THE ADVISOR

KNOWLEDGEABLE, FORWARD-THINKING, PROBLEM-SOLVING, JUDGMENTAL, SAFETY-CONSCIOUS, EFFICIENT, CRITICAL, CONTROLLING, SELF-RIGHTEOUS. THAT'S YOUR ADVISOR, WHO HELPS YOU NAVIGATE THE WORLD EFFICIENTLY AND SAFELY, REDUCING THE NEED FOR TRIAL-AND-ERROR LEARNING. BUT CAN ALSO STOP YOU FROM NOTICING AND DISCOVERING.

Why is there an ADVISOR?

Let's think big for a second. Isn't it amazing to consider the chain of events that led to your existence? You're here today because countless ancestors managed to survive and reproduce over thousands, even millions of years. They navigated a perilous world, making no fatal mistakes before reproducing. One misstep leading to death could have broken the chain, and you wouldn't be here.



At the end of this long chain, you and your mind are the products of natural selection, inheriting a core function: to keep you alive by avoiding mistakes and focusing on threats. Due to our evolutionary history as a social species, these threats have extended beyond the natural world to the social one. Today, for many people threats aren't lions lurking in the bushes but anticipated dangers like presenting in front of a group, taking an exam, or meeting new people in an unfamiliar setting. **Moreover, our capacity for language and symbolic thought has enabled us to imagine and communicate concepts that extend beyond our immediate experiences.** This ability allows us to plan and prepare for future activities, such as a hunt or an exam. It also helps us reflect on past challenges, creating valuable learning opportunities. Additionally, sharing our experiences with others fosters collective learning and nurtures a sense of belonging and shared identity within our communities. When it comes to threats, language not only enables us to identify and respond to external dangers that exist in our environment but also allows us to conceptualize and worry about imagined threats, influencing our perceptions and reactions even in the absence of real danger. This tendency is part of your ADVISOR. When quieting your mind's negativity feels difficult, remember you're not alone—countless others face

the same struggle. It's inherited, natural, and being perfectly human and it plays an important role to what scientists refer to as the negativity bias. **Despite its tendency towards threats and negativity, your ADVISOR can offer useful guidance about your life. The challenge is in becoming aware of this and learning to distinguish between what is helpful and what is not.**

Getting in touch with your ADVISOR will help you foster the following metacognitive competencies: Critical Thinking, Evaluation Competency, Intellectual Humility, Self-Regulation, Growth Mindset

Even though the ADVISOR is merely an internal verbal activity, it does have the power to feel like reality, making us become fused with thoughts. This fusion can lead us to believe that the judgments and criticisms of our ADVISOR are true reflections of ourselves and the world around us, amplifying their impact on our emotions and behaviors.

TALES OF DISCOVERY AND INSIGHT

TWO MONKS AND A WOMAN (ZEN BUDDHISM)

Two monks were traveling together when they came across a fast-flowing river. On the riverbank stood a woman who hesitated to cross the water because she was afraid of being swept away. Seeing her predicament, the older monk immediately offered to help. Without a second thought, he lifted the woman onto his shoulders and carried her across the river, ensuring her safe arrival on the other side. The two monks continued their journey in silence, walking further away from the river for several



*hours. Yet, the younger monk couldn't shake the memory of the woman, which filled him with uncomfortable emotions. The older monk, having assisted the woman, sensed that his companion was troubled by something deeper. The older monk who had helped the woman could sense that his companion was troubled. Finally, unable to contain himself any longer, the younger monk spoke up, "Brother, our vows forbid us to have contact with women. How could you carry that woman across the river?" The older monk looked at his companion and replied, "**I put her down on the other side of the river. You are still carrying her in your mind**"*

Reflection: What do you think? How does this tale relate to ADVISOR behavior? What is the issue addressed in this tale? **How do you feel?** What emotions do you notice when you empathize with the younger monk who did not carry the woman across the river? **What about the future?** Have you ever found yourself holding onto something in your mind long after it happened—or even after it didn't happen? What insights can you draw from this tale to change your relationship with these lingering thoughts and feelings?

What scientific perspectives support my ADVISOR?

Your ADVISOR metaphorically represents our inner voice, which becomes a constant companion by the age of two, ever ready to evaluate, judge, predict, and, most significantly, offer life advice. Its constant presence can make us forget it's even there at times. Below, we will outline several scientific perspectives that underscore the significant role played by the ADVISOR in our psyche.

RELATIONAL FRAME THEORY (RFT)

Relational Frame Theory (RFT) aims to explain how language plays a central role in both the achievements and challenges of our species, highlighting its impact on human success and suffering. **RFT suggests that language and symbolic thinking allow us to derive relationships between stimuli, words, and concepts, even if we haven't directly learned or experienced those connections.** Reflect on the [tale](#) you just read. The younger monk had learned that the term “WOMAN” refers to a person of a different gender who should not be touched. When they reached the river and the older monk carried the woman across, the younger monk felt a wave of emotional discomfort. Although they left the river and the woman behind, this experience continued to haunt him, triggering unpleasant feelings that the older monk eventually sensed. Here's the key: the connection between “WOMAN” and the younger monk's discomfort wasn't rooted in a past experience where hearing the word “WOMAN” caused him distress. Instead, it stemmed from a previous experience involving a distressful event related to a woman. From this experience, the monk's mind derived this relation independently (Figure 4), linking the word “WOMAN” to his uncomfortable feelings. As a result, he found himself ruminating on the situation even though the woman was no longer present.

This illustrates a crucial aspect of human cognition: our minds can construct emotional experiences based on concepts and words alone, even when nothing is happening in the

present moment. This ability to mentally construct scenarios, which is a core function of your ADVISOR, can shape how you feel and act, even though these scenarios may not reflect your current reality. This capacity helps us plan, anticipate, and prepare for future situations. However, it also has a downside. **This mechanism can lead to rumination, worry, mind-wandering, or anxiety. Your mind can feel like it's running wild, leaping from one thought to another, creating feelings of chaos.** In the Buddhist tradition, this experience is often referred to as the Monkey Mind.

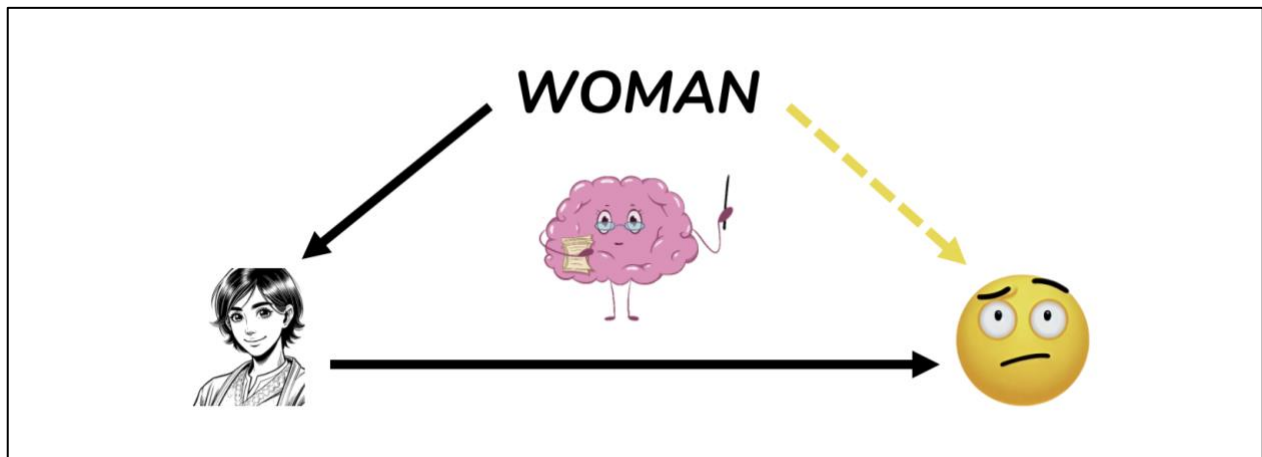


Figure 4. According to RFT, never having had an unpleasant experience when having the word "WOMAN" in mind is not necessary to derive a relationship between the two (yellow arrow).

„I am an old man and have known a great many troubles, but most of them never happened.“

Mark Twain

This scientific perspective can resonate with and be connected to the following subjects:

Philosophy/Ethics, Psychology, Literature, Linguistics, Foreign Languages, Art

THE FREE ENERGY PRINCIPLE AND THE PREDICTING BRAIN

The Free Energy Principle is a theory that explains how our brains and other biological systems work by continuously striving to reduce surprise or uncertainty. It suggests that our brains are always making predictions about what will happen next, aiming to align these predictions as closely as possible with the actual sensations from the world (Friston, 2010). These predictions are embodied in our models of the world and therefore shaped by our past experiences and what we've learned over time. **This process is energy-efficient, as it's much more effective than building our understanding of reality from scratch every time.** When new information comes

in through our senses—what we see, hear, taste, smell or feel—our brains compare this input to the predictions made and they can use this input to update their predictions and eventually improve accuracy next time. This is tied to neuroplasticity, which is especially active during childhood when we're constantly learning and adapting to new information. **However, sometimes our predictions, or “top-down” thinking, become so strong and rigid that they shape how new sensory input, or “bottom-up” information, is processed. Instead of adjusting our models to align with reality, the sensory input is molded to fit what we predict. This means we may not see things as they are, but rather as we are.** Neuroscientists refer to this process as perceptual inference (Aggelopoulos, 2015). This process is a key element in how we construct our reality, and it significantly influences our behavior. Rigid predictions can be compared to having a very dominant ADVISOR, one that doesn't allow much space for the NOTICER to fully experience the present moment or for the [DISCOVERER](#) to explore and gain new insights. **It's essential to remember that our perception of reality isn't a passive process of simply receiving sensory input— just like with our [emotions](#) it's an active construction, blending external stimuli with internal predictions based on past experiences.** Think about the [tale](#) you just read. The monk's prediction—that a monk should never touch a woman—was deeply ingrained through repeated learning (top-down processing). When faced with the reality of his fellow monk actually carrying the woman (bottom-up information), this prediction was disrupted, creating a prediction error and a moment of surprise, which scientists also call Free Energy (Friston, 2010; Fig. 4). This inconsistency between his learned expectation and the sensory input caused him to feel confused and mentally “carry” the woman long after they crossed the river, stuck in rumination. In terms of the DNA-V model, the monk's ADVISOR, based on rigid beliefs formed from past experiences (top-down processing), overshadowed his NOTICER, preventing him from acknowledging the immediate need for help (bottom-up information) and adapting his predictions accordingly. This left him frozen in rumination, unable to move forward. The strong influence of top-down processing also limited his DISCOVERER, keeping him from acting compassionately in a way that aligned with his core values, and prevented him from taking action to assist his fellow monk in carrying the woman across the river. Engaging in this behavior would have provided the monk with new experiences, allowing him to update his mental model of the world. This, in turn, would adjust his future predictions, reduce prediction errors, and lead to a different response next time.

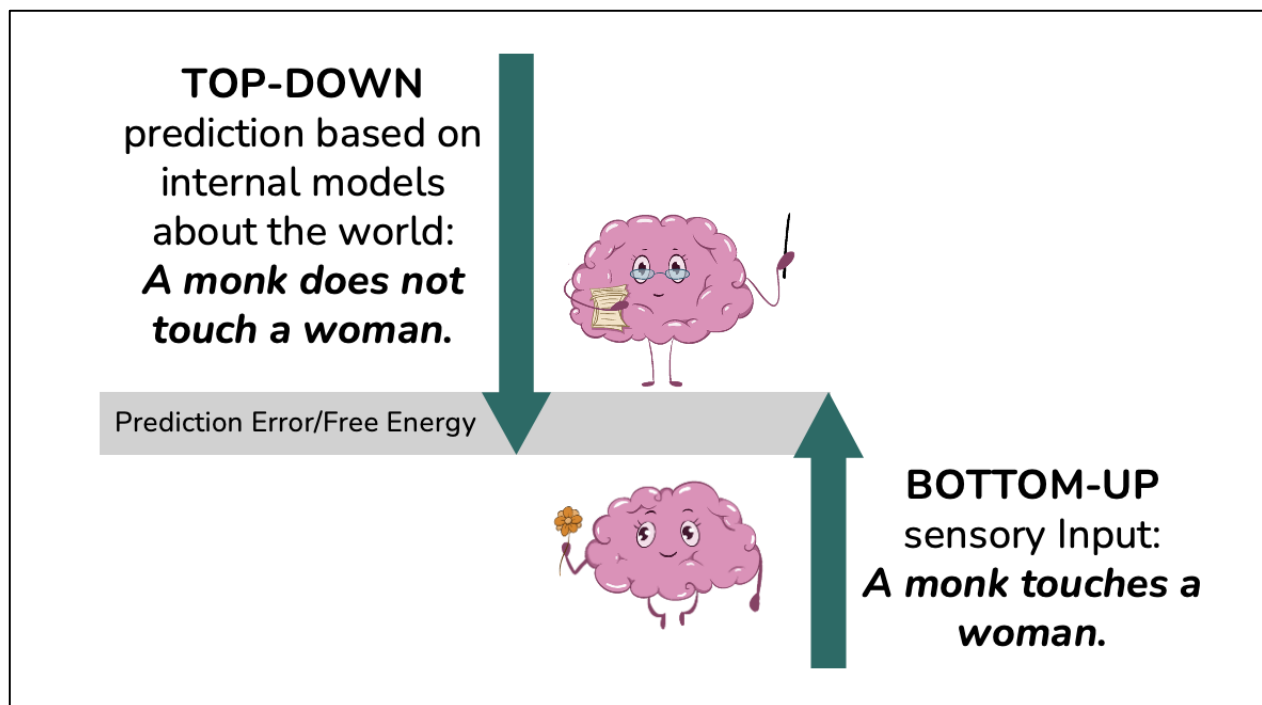


Figure 5. According to the Free Energy Principle, the monk's natural attempt to reduce prediction error, surprise, and uncertainty led him to act based on his top-down prediction, rather than updating it in response to the situation and the bottom-up sensory input.

"We don't see things as they are; we see them as we are." Anaïs Nin

This scientific perspective can resonate with and be connected to the following subjects:

Philosophy/Ethics, Social Sciences, Psychology, Biology, Chemistry, Literature, Art, Physics, Mathematics, Computer Sciences

How can I explore and develop my ADVISOR?

Similar to other processes, your ADVISOR isn't inherently good or bad - exploring and understanding its workability in a certain context is key. By developing a positive relationship with it, you can leverage its strengths while managing any drawbacks it may present. This process is supported by the following activities.

ADVISOR-ACTIVITY. THE PINK ELEPHANT

Background: As we've learned, our ADVISOR continuously generates chatter and judgments automatically, beyond our conscious control. Paradoxically, when we attempt to exert control over these thoughts by pushing them away, we inadvertently amplify their dominance. **Steps:** Now, please attempt to gain control over your thoughts. Close your eyes and consciously try NOT to think about a pink elephant. If you find that this approach is ineffective, intensify your efforts to NOT think about it.

Reflection: You may have observed that the more you strive to suppress specific thoughts, images, or memories, the more they assert themselves in your mind and even influence your actions. **What do you think?** How might this behavior of the ADVISOR contribute to challenging situations in your life? Consider discussing with others to gauge if they experience similar challenges. **How do you feel?** What emotions do you notice when you realize that your attempts to avoid a thought only strengthen its presence in your mind? Do these feelings seem familiar to you? If so, can you recall where or when you've experienced them before? **What about the future?** What insights can you draw from this activity for future challenges?

ADVISOR-ACTIVITY. OUR MODELS PREDICT

Background: As we've learned, our ADVISOR constantly provides us with predictions about the world based on priors and past experiences, shaping our reality in an unconscious manner. **Steps:** Take a moment to observe the image provided. What do you see? You may perceive it as a random assortment of black blobs, and that's entirely valid. However, consider that altering the information you receive about these blobs could lead your ADVISOR to form a different prediction, thereby altering your perception of reality regarding these shapes. Refer to the [appendix](#) to adjust your prediction, then revisit the image. Do you observe any differences? Has your perception changed? Is it possible to erase your prediction and “unsee” what’s in the image?



Reflection: You may have noticed that with just a bit of additional verbal information, your predictions about the image shifted, causing you to perceive it differently. You might have also realized that once you've seen the new image, it's nearly impossible to “unsee” it. This is due to the influence of your prior experiences and the strength of those updated predictions. **What do you think?** What insights does it provide into how our minds, particularly our ADVISORS, function? What does this exercise reveal about the nature of reality? How can predictions made by our ADVISORS complicate situations in our lives? Consider discussing these questions with others to see if they encounter similar challenges. **How do you feel?** What emotions do you notice when contemplating that our reality (or construction of the world) can change simply by receiving new information? How do you feel when noticing that unseeing the image is almost impossible? **What about the future?** Have you ever experienced strong predictions from your mind that are difficult to change? How might you approach these predictions differently in the future, based on what you've just experienced?

ADVISOR-ACTIVITY. THE SURVIVAL GAME

Background: As you've learned, you have inherited your ADVISOR from countless ancestors who managed to survive and reproduce, making [zero fatal mistakes](#) along the way for you to be here. To gain a deeper understanding of how their mind had to work lets empathize with them in this activity by Hayes & Ciarrochi (2015). **Steps:** Take a moment to envision yourself living approximately 100 000 years ago, in a world where humans coexisted with lions in a perilous environment. Picture yourself among a group of humans gathered on grassland frequently visited by lions. Each person in the group possesses a different ADVISOR, and you will step into their shoes to experience the situation through their perspective. **(1)** Imagine you are Person 1, whose ADVISOR is exceedingly positive and encourages exploration. Whenever a sound emanates from the bushes, your ADVISOR responds with enthusiasm, saying, "Oh, how exciting! Let's discover what wonders lie hidden there!" **(2)** Now, imagine you are Person 2, whose ADVISOR is more cautious and insecure, yet not assertive. Despite harboring concerns about potential danger, the ADVISOR falls silent when you dismiss its warnings, saying, "I'm unsure about the situation in those bushes – it might be risky, but who am I to prevent you?" **(3)** Next, envision yourself as Person 3, whose ADVISOR tends to perceive danger in most situations but acknowledges that not every circumstance poses a threat. "Be cautious! The sound from the bushes could be hazardous," warns your ADVISOR. **(4)** Finally, imagine you are Person 4, whose ADVISOR is extremely pessimistic and dominant and interprets even minor indications of danger as significant threats. "If there's a sound in the bushes, it's never just the wind – it's always a lion. Don't hesitate. Don't investigate. Run!" advises your ADVISOR.

Reflection: The varying levels of sensitivity and dominance by the ADVISOR can have life-or-death implications in such perilous environments. **What do you think?** If your primary aim were solely survival and reproduction, which ADVISOR would you prefer to have as your ally to assist you in achieving that? Considering that your ADVISORS are presumed to be the outcomes of an unbroken chain of reproduction, what does this exercise reveal about the nature of your personal ADVISOR? Engage in discussions with others to explore if they encounter similar experiences with their ADVISORS or have different perspectives on the matter. **How do you feel?** What emotions do you notice when you acknowledge that your thought patterns are influenced by a dominant ADVISOR? How does it feel to recognize that we all inherit these ADVISORS, and their origin lies in evolution rather than being our fault? How does this recognition change your relationship to your own ADVISOR? **What about the future?** Do you recognize your ADVISOR constantly perceiving threats around you? How might you change your relationship to these warnings, knowing they'll often be present and difficult to change?

ADVISOR-ACTIVITY. I AM

Background: As we've learned, our ADVISOR is our inner voice that automatically and constantly provides us with predictions and evaluations. **Steps:** Take a moment to read the following statements. Then, pay close attention to what your ADVISOR says about them. There's no right or wrong; simply notice your reactions.

I am weird.- I am brilliant. - I am broken. - I am stupid. - I am ugly. - I am beautiful.

Reflection: You may have observed that your ADVISOR quickly evaluated the statements as right or wrong, or attempted to rationalize them. Perhaps you also noticed your ADVISOR questioning the purpose of this activity. Even though these are mere words from a stranger, your ADVISOR likely interpreted them as if they were about you. **What do you think?** What does this activity reveal about the impact of language on our experience and behavior? How can these evaluations made by our ADVISORS complicate situations in our lives? Consider discussing these questions with others to explore shared challenges. **How do you feel?** What emotions do you notice when you realize that words written by a stranger in the context of a simple and harmless exercise can evoke such strong evaluations and feelings? **What about the future?** Do you notice your ADVISOR often interpreting statements or situations as if they were directed at you? After participating in this activity, how might you change your approach in handling this tendency?

ADVISOR-ACTIVITY. SET THE STAGE FOR YOUR ADVISOR

Background: Our inner voice, represented by the ADVISOR, is deeply intertwined with our linguistic and symbolic capabilities. Recognizing its presence through verbal and non-verbal expressions can provide insights into the omnipresence and the often arbitrary nature of our internal dialogue. **Steps:** Grab a pencil and paper, and for three minutes, jot down everything your ADVISOR says. There are no restrictions - grammar, punctuation, and coherence are not important. Simply record whatever thoughts come to mind. After the three minutes, take a moment to review your writings. If comfortable, compare your output with a partner.

Reflection: You may have noticed your ADVISOR's incessant activity during the exercise, engaging in labeling, evaluation, judgment, questioning, and perhaps even repetitive or worrisome chatter. All this activity occurred within a brief timeframe, with just you, a pen, and paper. **What do you think?** What does this activity reveal about the nature of our ADVISOR? Does it merely react to external stimuli, or can it generate internal dialogue independently? Discussing these questions with others can shed light on shared challenges. **How do you feel?** What emotions do you notice when reviewing your writings? How do you feel realizing the automatic and independent nature of your ADVISOR's actions? **What about the future?** Are you familiar with internal chatter complicating situations in your life? How might this experience shift your relationship with your ADVISOR and its influence on your actions?

Tip: Journaling might be one way to release what your ADVISOR is expressing internally and to reflect on it while reading.

ADVISOR-ACTIVITY. THE BAD COACH

Background: As we've learned, our ADVISOR consistently assesses our behavior in a critical and judgmental manner. **Steps:** Take a moment to envision yourself in a learning environment of your choice—whether it's school, sports training, or an art academy. Now, imagine that the person guiding you through acquiring new skills essential for success continuously criticizes and judges every step of your progress. "You're not good enough" or "You'll never be able to do this" are just a couple of examples. On a sheet of paper, jot down how this treatment would make you feel. Then, shift your focus to considering the kind of teacher you aspire to be. Write down behaviors statements you would offer to support your students.

Reflection: Much like how a critical and judgmental teacher interacts with their students, our ADVISOR often treats us in a similar manner. It's important to note that also real-life experiences with judgmental authority figures can influence the way we judge ourselves. Despite often knowing better when it comes to treating others, applying this knowledge to self-treatment proves challenging. **What do you think?** How would it change your experience if your ADVISOR acted more like the teacher you aspire to be, rather than a critical one? Why are we often harsher on ourselves than we are on others? How does this self-criticism impact our overall learning experience in life, particularly when it comes to handling mistakes? **How do you feel?** What emotions do you notice when considering that we often act as our own harshest critics? How do you feel when you imagine treating yourself with in the same way you would offer your students? **What about the future?** Could you devise small, simple steps to become a good teacher for both others AND yourself.

ADVISOR-ACTIVITY. THANKS ADVISOR

Background: To allow our [DISCOVERER](#) to effectively guide our actions, it's sometimes necessary to reduce the influence of the ADVISOR, particularly when it holds us back. Our ADVISOR plays an important role in keeping us safe. But how do we manage the ADVISOR when we're stepping into new territory and pursuing discovery, without losing its helpful function? **Steps:** Whenever your ADVISOR offers input that seems to hinder valued action and discovery, try acknowledging it with gratitude. You might say to yourself, "Thank you, ADVISOR (or assign it a name), for your input. However, I choose to proceed with this action." It's essential to accept and appreciate the ADVISOR's input, as resisting it can magnify its impact and drain valuable energy needed for engagement.

Reflection: Acknowledging and appreciating the input of our ADVISOR while still choosing to engage in valued actions can be a delicate balance, but it allows us to navigate the tension between safety and discovery. **What do you think?** Why is it important to acknowledge and appreciate the input of our ADVISOR, even when we choose to override it? **How do you feel?** What emotions do you notice when encountering your ADVISOR with acceptance and appreciation for its input? **What about the future?** In what life situations would you benefit from thanking your ADVISOR while still pursuing your valued action?

THE VALUER

REFLECTIVE, DISCERNING, COURAGEOUS, AUTHENTIC, FREE, SUPPORTIVE, UNDERSTANDING, COMMITTED. PRESENTING: YOUR VALUER, WHO HELPS YOU DECIDE WHAT MATTERS TO YOU, CLARIFIES WHERE TO PUT YOUR ENERGY AND SHOWS YOU HOW TO ENGAGE WITH THE OTHER DNA-PROCESSES.

Why is there a VALUER?

Sometimes, [trial and error](#) is the only way to find out what works for you.

However, feedback from the world around us isn't always clear or aligned

with our expectations, which makes it difficult to assess

whether our decisions and actions are effective. While it's

simple to evaluate whether crossing a river leads to more

prey and resources, modern-day challenges like school,

careers, relationships, and personal growth are much more

complex. **In today's world, our concerns extend far beyond basic**

survival and reproduction. This is where your VALUER comes in, guiding you to intentionally

ask, "What is important to me?" **Since we often can't label the outcomes of our actions or**

situations as purely [good or bad](#), focusing on the underlying values behind those actions

provides clarity and direction. Your VALUER becomes a constant companion on your journey,

helping you stay grounded regardless of the outcomes. Evolution and culture have shaped

shared values that support cooperation and coexistence. In this way, values can be seen as an

expression of basic human needs—for example, the need for cooperation to survive may be

reflected in values like connection and love. By living in alignment with your values and

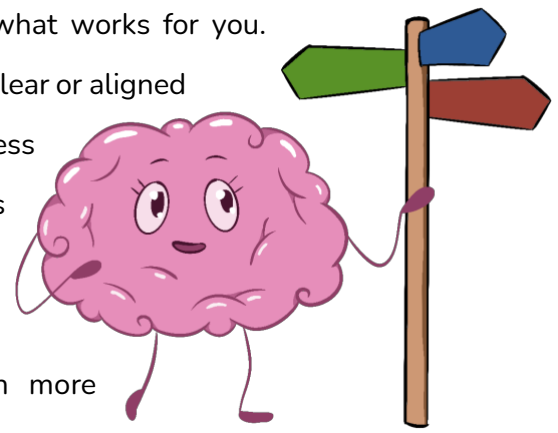
communicating them, you technically positively impact survival, strengthen relationships, and

foster a sense of community. **However, it's important to remember that values are not entirely**

determined by history or evolution. They are deeply personal and, most importantly, can be

freely chosen. Your values play a key role in your personal growth, guiding you toward the life

path you want to follow.

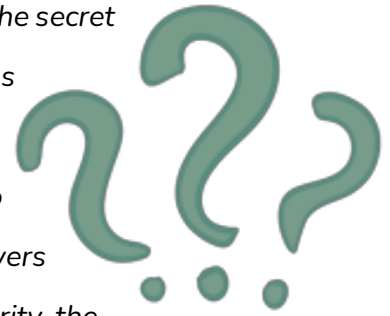


Getting in touch with your VALUER will help you foster the following metacognitive competencies: Intercultural Competency, Future Thinking, Community Science Competency, Intellectual Humility, Evaluation Competency, Self-Regulation

TALES OF DISCOVERY AND INSIGHT

THE THREE QUESTIONS (LEO TOLSTOY)

Once upon a time, in a distant kingdom, there lived a king who sought the secret to living a better life. He believed that the answers to three questions would bring him contentment: **When is the right time for action? Who are the right people? And what is the most important thing to do?** The king sought advice from many learned men, but their answers conflicted, leaving him more confused than before. In his quest for clarity, the king set out on a journey to visit a wise hermit, known for her insight, who lived deep in the forest. Upon meeting the hermit, instead of receiving direct answers, the king was simply asked to help the hermit with her garden. Without complaint, the king assisted, digging and planting alongside the hermit. As they worked, a wounded stranger stumbled upon them, and without hesitation, the king rushed to help her. He tended to the stranger's wounds with care and concern. To the king's surprise, the stranger soon confessed that she had come with the intent to harm the king, seeking revenge for past wrongs. But the king's kindness changed her heart, and the stranger asked for forgiveness. The king, moved by this confession, granted forgiveness and promised to make amends for his past actions. Still pondering his original questions, the king once again approached the hermit. "Wise woman," he said, "I still seek the answers to my three questions." The hermit smiled and replied, "But you have already been answered. Yesterday, had you not stayed to help me with the garden, that woman would have attacked you, and you would have regretted leaving. Therefore, the most important time was when you were digging; I was the most important person, and helping me was the most important task. Later, when the stranger arrived, the most important time was when you cared for her, for if you had not, she would have died without reconciling with you. At that moment, she was the most important person, and tending to her wounds was the most important thing to do." The hermit then added, "Remember, the **only important time is now**, for it is the only time we truly have control over. **The most important person is the one you are with**, for no one can know if you will ever have the chance



to interact with another person again. **And the most important action is to do good to that person, for this is why we are here in life.**”

Reflection: What do you think? What lessons can we glean from this tale about the significance of values? Are they universally applicable principles, or do they vary based on circumstances? Why do you believe the responses provided by the hermit are either credible or questionable? **How do you feel?** When you empathize with the king, what emotions do you notice within you? And how do you react emotionally when considering the hermit's responses to the questions in the context of your own life experiences? **What about the future?** Have you ever found yourself asking questions similar to those the king asked in the tale? How would you answer them now, given the insights from the tale and your current context in life?

What scientific perspectives support my VALUER?

Psychological flexibility hinges on our capacity to move toward actions aligned with our values. The DNA processes serve as pillars in supporting this journey. Among them, your VALUER stands out, aiding you in discerning what holds personal significance over the long term and guiding you towards actions that reflect these values. **Values extend beyond mere beliefs; they manifest in our actions and, significantly, in how we choose to embody them.** Below, we will outline scientific perspectives that underscore the significant role played by the VALUER in our psyche.

VALUES ARE NOT JUST GOALS

Values serve as fundamental guiding principles that shape how we aim to live and act in various areas of our lives. Unlike goals, which have clear endpoints and can be achieved, values provide continuous direction without a final destination. Psychologists often describe values as cardinal directions that help us navigate life, while goals are like specific places we aim to reach (Hayes et al., 2012). For instance, if your goal is to reach the easternmost point of your country, such as a specific city, you know when you've arrived. But living by values is like always moving east—there's no end. This difference is important because, while some goals may take time to achieve or might be unattainable, acting in alignment with our values allows for immediate action and ongoing progress. And you can start that journey right now! Scientists have demonstrated that

having values in addition to goals leads to improved outcomes. For example, students who align their goals with their personal values achieve better academic performance compared to those who pursue goals without considering the underlying values (Chase et al., 2013). **Living by your values shifts the focus from fixed accomplishments to a mindset of being present and engaging in life’s ongoing process. It encourages us to stay aware, actively [noticing](#) and [interacting with the world around us](#).** One way psychologists recommend to anchor values in our behavior is through language, by formulating them as adverbs, or words ending in “-ly” that describe how we engage with the world (Hayes et al., 2012). For example, living according to values might mean working diligently, loving wholeheartedly, or communicating calmly. In addition, defining and committing to your values can prompt action which often leads to [increased mood](#), fulfillment, and [meaning](#). In the [tale](#) of the king who sought answers to three crucial questions about living a better life, we observe a shift from a goal-oriented mindset to a value-driven one. Initially, the king’s thinking is fixed on obtaining clear answers, but through his interactions with the hermit, he begins to engage in flexible behaviors guided by values like cooperation, kindness, and adaptability. The hermit’s answers highlight the importance of context, the present moment, and taking actions grounded in doing good rather than obsessing over specific goals. The king learns that **life is less about reaching defined destinations and more about navigating in a value-based direction, shaped by the context and the people around us.**

“Roads were made for journeys, not destinations.” Confucius

“The good life is a process, not a state of being. It is a direction, not a destination.” Carl Rogers

This scientific perspective can resonate with and be connected to the following subjects:

Philosophy/Ethics, Psychology, Literature, Foreign Languages, Art

THE SQUARE OF VALUES AND DEVELOPMENT

The process of selecting and living in accordance with our values is inherently shaped by ongoing development. **As verbal beings, we have the privilege of freely choosing our values, yet this freedom can sometimes lead to confusion about how to navigate this process.** Building on the

work of philosopher Nicolai Hartmann (2010) communication psychologist Friedemann Schulz von Thun (2022) refined a model that aids in finding a functional balance between our values. The Square of Values and Development describes how every value can only be fully and comprehensively developed when there exists a positive counterpart, maintaining equilibrium between two poles. **Without this balance, a value can easily slide into exaggeration, becoming “too much of a good thing” or simply being overkill.** Reflecting on the [tale](#) of the king who seeks answers to his questions about leading a good life, we can recognize his value of being determined in his quest. However, he doesn’t effectively balance this determination with a positive counterpart, leading him to become excessively determined, which can be described as rigid. However, throughout his journey and as he gains insights, he also cultivates a sense of adaptability for his search (Figure 6, yellow arrow). Together with the value of determination, this adaptability maintains a functional equilibrium. **Similar to the Chinese philosophical concept of yin and yang, seemingly contradictory values complement each other, forming a new state - just like rain and sun create a rainbow.**

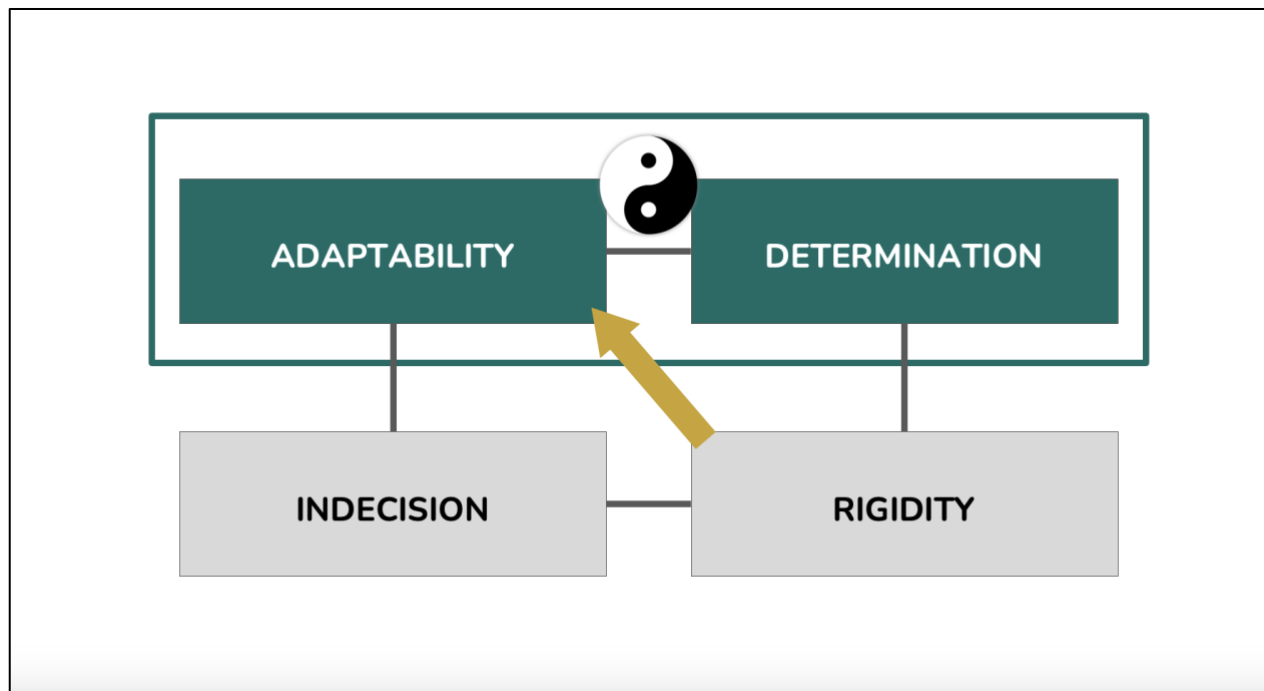


Figure 6. The Square of Values and Development describes how every value (such as adaptability) can only be fully and comprehensively developed when there exists a positive counterpart (such as determination), maintaining equilibrium between two poles.

This understanding can indeed aid us in identifying and selecting our values. It recognizes that within every trait that may appear dysfunctional (such as indecision), there exists a functional value (like adaptability) that, when balanced with a counterpart (such as determination), can be prevented from becoming “too much”. This perspective challenges the notion of the xcontsomething unilateral and [centralized](#). **And by the way, values are not just something that individuals struggle with, but sometimes larger structures such as societies and cultures.** The Square of Values and Development can also be used to describe and encounter value conflicts between different cultures. According to this model, we often believe that our in-group is in the upper part of the square and accuse the out-group of being in the lower part of the other side - not recognizing their virtue when there is so much to learn (Kumbier & Schulz von Thun, 2021).

“Out beyond ideas of wrongdoing and rightdoing, there is a field. I’ll meet you there.” Rumi

“Morality binds and blinds. It binds us into ideological teams that fight each other as though the fate of the world depended on our side winning each battle. It blinds us to the fact that each team is composed of good people who have something important to say.” Jonathan Haidt

*This scientific perspective can resonate with and be connected to the following subjects:
Philosophy/Ethics, Social Sciences, Psychology, Literature, History, Foreign Languages, Art*

How can I explore and develop my VALUER?

Similar to other processes, your VALUER isn't inherently good or bad - understanding its workability in a certain context is key. By developing a positive relationship with it, you can leverage its strengths while managing any drawbacks it may present. This process is supported by the following activities.

VALUER-ACTIVITY. IT'S ALL ABOUT CHOOSING

Background: Values are important aspects of our lives that we can freely choose. Despite their significance, many of us don't often take the time to think about what values matter most to us. **Steps:** Choose 10 values from the provided list that feel important to you right now. From these, select 3 values that hold special meaning for you. Share these three values with your group by simply reading them aloud. Then, take some time to reflect on how these values are connected in your life. Create a story or narrative that illustrates how these values relate to each other and share it with the group.

Acceptance -- Adventure -- Assertiveness -- Authenticity -- Beauty -- Caring -- Challenge -- Compassion -- Connection -- Contribution -- Conformity -- Cooperation -- Courage -- Creativity -- Curiosity -- Encouragement -- Equality -- Excitement -- Fairness -- Fitness -- Flexibility -- Freedom -- Friendliness -- Forgiveness -- Fun -- Generosity -- Gratitude -- Honesty -- Humor -- Humility -- Industry -- Independence -- Intimacy -- Justice -- Kindness -- Love -- Mindfulness -- Order -- Open-mindedness -- Patience -- Persistence -- Pleasure -- Power -- Reciprocity -- Respect -- Responsibility -- Romance -- Safety -- Self-awareness -- Self-care -- Self-development -- Self-control -- Sensuality -- Sexuality -- Spirituality -- Skillfulness -- Supportiveness -- Trust

Reflection: Engaging with our values and expressing them within the context of our lives allows us to gain clarity and flexibility in our actions, particularly during challenging times. **What do you think?** Why do you think we often overlook the importance of connecting with our values? How might the act of consciously choosing values from a list impact our behavior and decision-making? **How do you feel?** What emotions do you notice when sharing your value narrative with the group? Did participating in this activity change your emotional state compared to before? **What about the future?** In what life situations do you believe it would be beneficial to be mindful of your values? How might this awareness influence your choices and actions moving forward?

VALUER-ACTIVITY. LETTER TO THE FUTURE

Background: Our VALUER plays a crucial role in guiding us towards what is important to us in the present moment, providing direction for our next steps. **Steps:** Reflecting on the values you identified in Activity [IT'S ALL ABOUT CHOOSING](#), compose a letter to your future self, whether it be in 1, 3, or 5 years. Describe how you intend to translate these values into action, imagining where this path might lead you over time. Allow yourself to envision both the successes and challenges you may encounter along the way. Close the letter with care and store it in a safe place, ensuring you remember its location. Set a reminder in your calendar for 1, 3, or 5 years from now to revisit the letter. This exercise can evoke deep emotions, so approach it with kindness and an open mindset as you speak to

Reflection: Life's unpredictability often leads us down unexpected destinations, diverging from our initial visions. Despite these twists and turns, our values remain present, serving as lighthouses to guide us through periods of immense change. **What do you think?** Why is it crucial to maintain a connection with our values, especially during times of significant upheaval, when our goals may shift unexpectedly? **How do you feel?** What emotions do you notice as you write to your future self? How does it feel to contemplate reading this letter again in 1, 3, or 5 years, knowing you'll have grown and changed in that time? **What about the future?** Once the letter is safely stored away, how do you envision integrating the sentiments and insights from your writing session into your daily life?

VALUER-ACTIVITY. BE THE VALUE-MIRROR

Background: While it's important to connect with our own values, it's also valuable to recognize the values of those around us. Sometimes, people express values without even realizing it, and we can help reflect those values back to them. **Steps:** First, think about three moments in your life that felt really important to you, like they helped shape who you are. They can be everyday moments, as long as they mean something special to you. Then, pick two people you trust to share these stories with. They just need to listen and write down all the values they see in your stories. After you tell your stories, they'll have a conversation to figure out three key values that stand out. Your job is simply to listen. Don't forget to write down these values and keep them somewhere you can see them. Then, move on to the next person, repeating the process until everyone has had a chance to share and have their values acknowledged. Remember to listen actively and respectfully during each person's turn.

Reflection: Our lives are infused with values, yet we may not always recognize or consciously connect with them. This activity serves as a powerful reminder, highlighting the values that underpin our actions and experiences, perceived by the people around you. **What do you think?** Why do you think we sometimes lose touch with our values, despite their influence on our behavior? How does this exercise facilitate a conscious reconnection with our values? **How do you feel?** What emotions do you notice when you hear others identify the values in your actions? **What about the future?** Understanding how values guide our actions, how might you approach future decisions and experiences differently?

VALUER-ACTIVITY. FINDING BALANCE IN THE SQUARE

Background: As you have learned from the *Square of Values and Development* every value can only be fully and comprehensively developed when there exists a positive counterpart. **Steps:** Think about a situation in your life in which you perceived your behavior as something dysfunctional, where things simply did not work out or caused unpleasant emotions. Take a moment to reflect on this experience, and ask yourself: what trait or behavior bothers you the most in that situation? The next step is to use this trait to form a Square of Values and Development. (1) Start by placing the dysfunctional behavior (e.g., "Indecision") in the lower left part of the square. (2) Then, identify the functional behavior behind this dysfunctional behavior (e.g., "Adaptability") and write it in the upper left part of the square. **Remember that the dysfunctional behavior often stems from an excessive version of this functional behavior.** (3) Next, find the positive counterpart or opposite of the functional behavior (e.g., "Determination") and write it in the upper right part of the square. **This represents the balanced expression of the functional behavior.** (4) Lastly, recognize that even the positive counterpart can have its dysfunctional expression, which you can write in the lower right part of the square (e.g., "Rigidity" as too much trust). (5) Draw an arrow from the lower left to the upper right. **This arrow represents your potential development direction, creating a functional balance between values.**

Reflection: The Square of Values and Development highlights the interplay between values, language, and personal growth. It reveals how understanding the functional value behind a dysfunctional expression and finding its functional counterpart can guide us towards a healthier balance in our lives. **What do you think?** Reflecting on the example you chose, how can acknowledging the positive counterpart (upper right) empower you in your life? How might it influence your decision-making and behavior moving forward? **How do you feel?** What emotions do you notice, when realizing that there's a functional value behind a dysfunctional expression? How does it feel to consider that both values of the upper part of the square can coexist and be integrated into your life? **What about the future?** Considering this awareness, what specific actions or changes could you implement to fully embrace both sides of the upper part of the square in your life and move along the arrow you drew?

VALUER-ACTIVITY. THE RHYTHM OF MY LIFE

Background: Music often serves as a powerful medium for expressing ourselves and can be deeply intertwined with our values and experiences. **Steps:** This activity aims to explore the connection between your values and the music that has been significant in your life. Create a playlist on your preferred music platform featuring your top five (or ten) songs. **Choose these songs based on the meaning they held for you at specific times in your life, rather than solely on your current preferences.** Some individuals may find it challenging to narrow down their selection to only five (or ten) songs. **Remember that this playlist is not set in stone, and you always have the opportunity to expand or modify it in the future.** Arrange the songs in chronological order, starting with the one that was most meaningful when you were youngest. Then, share each song with a trusted person (or group), explaining why it holds significance for you and how it connects to your life experiences. During the conversation, everyone should pay attention to how your values are reflected in your choice of songs, and write them down.

Reflection: This activity provides a unique avenue for connecting with your values by recognizing their presence and significance in the music that has shaped our lives. **What do you think?** How is it that music can hold such profound meaning for individuals? What does this reveal about human learning and behavior? **How do you feel?** What emotions do you notice when listening to your songs, each carrying its own set of memories and significance? **What about the future?** How can you integrate the insights gained from your playlist into moments where you feel disconnected from your values?

VALUER-ACTIVITY. MY LIFE IN PICTURES

Background: Images serve as a powerful medium for expressing and connecting with our values, offering a visual representation of what matters most to us in life. **Steps:** For this activity, gather a large sheet of paper or cardboard, along with some illustrated magazines, scissors, and perhaps pens or brushes and paint. Use these materials to create a collage by cutting out images or text snippets from the magazines and gluing them onto the paper. You can further enhance your artwork with other mediums like pens, brushes, and colors. As you create your collage, consider the following questions as prompts:

How do I want to live my life? What things are important to me in my life? What do I value? What do I want my life to stand for? What directions do I want to pursue? Which values matter to me, and which ones do I want to orient my life around?

There are no strict rules on how to structure your collage; you have artistic freedom to arrange the elements as you see fit. Once you've completed your collage, take some time to observe and reflect on it. Notice if there are any patterns or themes that emerge. Feel free to share your collage with people who are significant to you, and discuss the meanings behind the images and text you've chosen. You can also display your artwork in a prominent spot in your room.

Reflection: Creating a collage of your values serves as a lasting reminder of what matters most in your life, offering guidance beyond the activity itself. Using imagery to represent values makes them easier to recall in the future. **What do you think?** Why is visualization so impactful for memory? **How do you feel?** When observing your collage, what emotions do you notice? Do you also experience any discomfort, and if so, what does it feel like? **What about the future?** How can you integrate the insights gained from your collage into moments where you feel disconnected from your values?

VALUER-ACTIVITY. WHAT BRINGS YOU ENERGY?

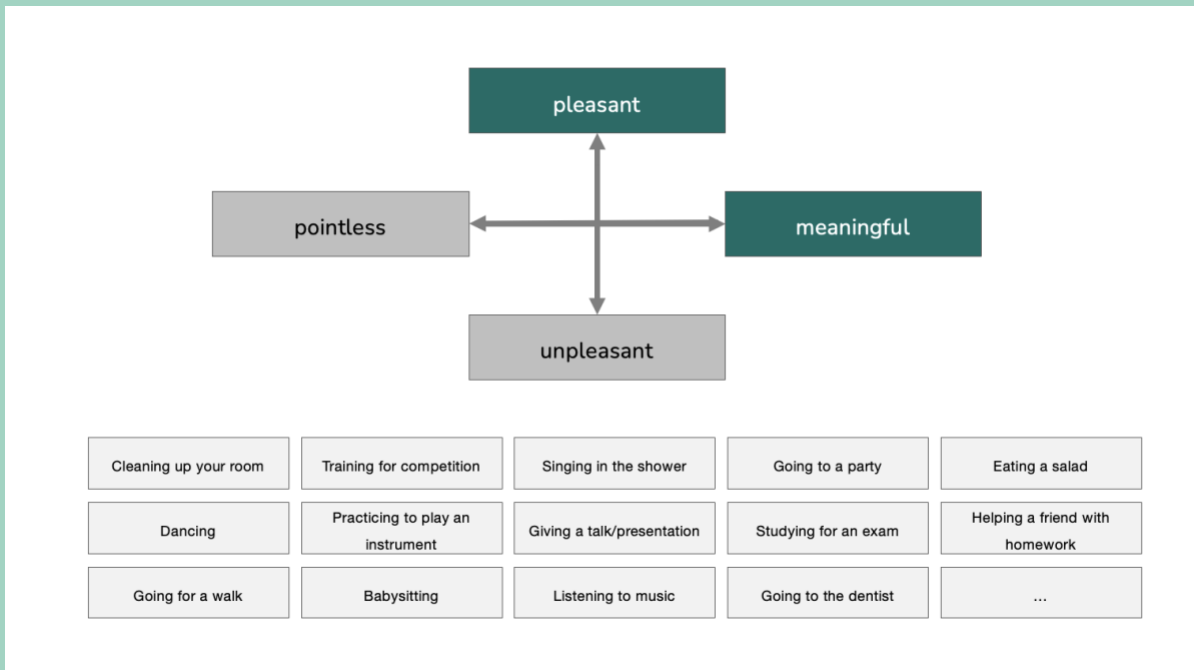
Background: When we face challenges in life, our minds often focus on the negative, dwelling on unpleasant memories—this tendency is known as [negativity bias](#), can be traced back to a dominant ADVISOR, and is sometimes referred to as problem trance (Schmidt, 2023). As a result, we often overlook the many moments in life when we actually felt energized and alive. Consciously recalling these positive experiences can help us reconnect with what truly matters to us. **Steps:** Take some time to reflect on activities or moments that brought you a sense of vitality and positive energy. These could be from last week, last year, or even across your entire life. Write down at least five instances where you felt particularly energized. Then, pair up with someone and share what occurred in those situations, focusing on how you felt, what made the experience special, and which values you were honoring and fulfilling. This discussion can be dynamic, enriched by thoughtful questions and careful interpretations.

Reflection: Deliberately focusing on moments when you felt pleasantly energized and alive can shift your mindset from a problem trance to a solution trance (Schmidt, 2023), creating a space where you can reconnect with what truly matters in your life. **What do you think?** Why do you believe that simply reflecting on specific moments in life can have such a powerful impact on how we feel in the present? How does this solution trance create room to think more clearly about your values? **How do you feel?** When you reconnect with what's important in your life through specific memories, what emotions do you notice? **What about the future?** Can you recall times in your life that felt like a problem trance? How can this activity help you shift your focus to values and enter a solution trance the next time you feel stuck?

Tip: Focusing on pleasantly energizing moments doesn't mean pushing away current unpleasant experiences. Instead, it opens a space to remember that there have indeed been times when things were different, which has the potential to reconnect us with our [values](#). When you find yourself in a situation that feels unpleasant, remind yourself that this is part of [being perfectly human](#). Rather than despairing that this is the case, you can metaphorically frame these challenging situations as an "Alarm Clock for Solutions" (Schmidt, 2023) - when it rings and you consciously [notice it](#), you know it's the perfect time to reconnect with your values and take a [different course of action](#).

VALUER-ACTIVITY. THE VALUE MATRIX

Background: Engaging in various everyday activities can reflect different values in life and is accompanied by a range of emotional states that can be both pleasant and unpleasant. The following activity by Porosoff & Weinstein (2019) can help you place any activity in a matrix, allowing you to evaluate the importance these activities hold in your life. **Steps:** Take some time to reflect on the actions you engage in throughout your daily life. You can find a list of different activities here, but feel free to add any others that you participate in. Then, plot these activities on the matrix below. Do they evoke pleasant or unpleasant feelings? Would you evaluate them as pointless or meaningful? Carefully position all your activities on the matrix and observe how contemplating these activities and their placements affects your feelings. You may share your experiences with a partner or a group.



Reflection: We often engage in countless activities without being fully aware of their significance or how they impact our emotions. Placing them in the matrix can foster awareness and ultimately change the way we relate to these actions. **What do you think?** Why are we often unaware of what our actions mean to us? How might this phenomenon be explained through an evolutionary lens, and what function does it serve? What are the potential downsides of this unawareness? **How do you feel?** What emotions arise as you reflect on the matrix of your actions? Did you place any activities in the unpleasant/meaningful quadrant, and how does contemplating about them make you feel? **What about the future?** After plotting different activities on the matrix, do you feel inclined to change how you approach them? What would this change look like, and what do you hope to achieve from it?

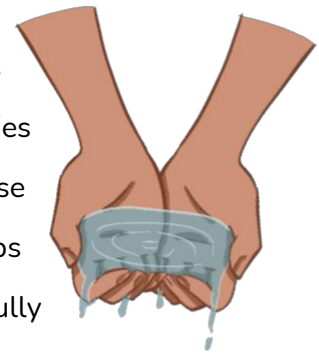
SELF-VIEW

“WHAT A LIBERATION TO REALIZE THAT THE VOICE IN MY HEAD IS NOT WHO I AM.

‘WHO AM I, THEN?’ THE ONE WHO SEES THAT.” ECKHART TOLLE

Why is there a SELF?

Exploring the idea of the self is a question that has fascinated humanity for ages. People from various fields have tried to understand what makes up the self and where its boundaries lie. A question that often preoccupies them is “Who am I?”—yet finding a clear answer is challenging because the self is so intricate. Is it just our body, our thoughts, or perhaps something more profound and elusive that we have yet to fully



comprehend? **While we can't definitively say what the self is, we do know it is shaped by both internal and external influences.** Some scientists believe that language plays a significant role in how we construct the SELF-VIEW (McHugh et al., 2019). It helps us draw distinctions between ourselves and others, creating a sense of individuality and separation. This conceptual separation likely played an important role in the development of higher cognitive functions and in facilitating complex SOCIAL interactions and cooperation. **The concept of the self isn't fixed; it evolves as we engage with the world and reflect on our experiences.** Since fully exploring all the potential functions and origins of the self goes beyond the scope of this guide, we have addressed it in more depth in a separate source dedicated to [exploring the self](#).

Getting in touch with the SELF-VIEW will help you foster the following metacognitive competencies: Systems Thinking, Evolutionary Thinking, Self-regulation Competency, Growth Mindset, Critical Thinking, Intellectual Humility

TALES OF DISCOVERY AND INSIGHT

THE QUEENS'S CHARIOT (BUDDHIST TALE)

Once upon a time, a wise woman visited a queen. As was customary, the queen asked the wise woman about her well-being and requested that she introduce herself. The wise woman replied, "At this moment, I feel a bit weary, as I have traveled a long distance to reach your kingdom. As an elder, I've spent nearly a century on this earth. My parents named me Nāgasena, but that name is just a conventional label, as is the term 'wise woman.' In reality, there is no person or 'Self.'" The queen, a well-educated and worldly woman, found this response overly mystical and became frustrated. Unfazed, the wise woman calmly offered to explain her perspective further. Knowing the queen's attachment to her beloved chariot, the wise woman asked the queen about it. "Is it the pole that constitutes your chariot, Your Majesty, or perhaps the axle?" the wise woman asked. "Neither," replied the queen. "Then, is it the wheels, the framework, the ropes, the yoke, the spokes, or the goad? Are any of these your chariot?" the wise woman continued. Again, the queen negated each suggestion. "Yet, if we gather all these separate parts and pile them up, would this heap be considered your chariot?" the wise woman inquired further. "No," the queen replied. "Is there anything beyond these parts that could be identified as your chariot?" pressed the wise woman. "Certainly not," replied the queen, puzzled. "What is your point?" The wise woman then remarked, "It seems the chariot cannot be located within these parts. Should we conclude that you, Your Majesty, falsely claim ownership of a chariot?" The queen, instead of feeling offended, found the conversation fascinating. She said, "I have spoken no untruth, wise woman. We use the word 'chariot' because of the presence of all its parts—the pole, axle, wheels, frame, ropes, yoke, spokes, and goad—and how they work together. It is only when these elements come together that we call it a 'chariot.'" The wise woman smiled calmly.

Reflection: What do you think? What insights can be gleaned from this tale about the concept of the self? How might the queen benefit from this analogy and experience a shift in perspective? **How do you feel?** When you put yourself in the shoes of the queen what emotions do you notice before and after the wise man told the tale? How do you personally feel after having read the tale? And who is noticing this? **What about the future?** Can you recall any moments when you felt curious, had insights, or experienced struggles related to understanding your sense of self? How might the insights from the tale shape your reflections the next time you find yourself contemplating these thoughts?

What scientific perspectives support my SELF-VIEW?

The SELF plays a pivotal role in our ability to function and interact within society. However, it can be perceived in various ways, depending on the context. **In the framework of [CBS](#) and [RFT](#), the SELF is viewed as an outcome of our ability to form relationships with the world around us (McHugh et al., 2019).** By continually connecting our experiences to a stable point of reference, which remains consistent over time, we develop a sense of SELF. From this perspective, the SELF can manifest in three distinct forms or senses, which will be outlined below.

SELF AS CONTENT

The conceptualized SELF encompasses your memories, beliefs, interpretations, categorizations, and more. It is the coherent narrative you construct to answer the question, “Who am I?” If the SELF were merely the sum of these stories, it would be like a chariot being just a pile of its individual parts. However, you know the SELF is far more complex and dynamic. While you could count and name the parts of a chariot to understand its composition, the SELF is shaped by countless conscious and unconscious experiences, making it impossible to fully grasp. These experiences shape the way you construct your SELF and the world around you. **Therefore, psychologists advise you to approach these conceptualizations of the SELF with a sense of flexibility and openness** (Hayes et al., 2012). One way to do this is by recognizing them as content—simply the experiences of your life. Another approach is to observe any attachments you may have to these experiences and how they influence your present behavior. Identifying yourself with this content is a natural inclination and a logical starting point, but it’s an incomplete perspective that can hinder your ability to discover yourself and the world around you and live in alignment with your values. **This SELF-VIEW can be likened to a dominant ADVISOR that tries to convince you that its interpretations of the world, particularly about yourself, are the absolute truth.**

SELF AS PROCESS

As verbal beings, we have the unique ability to stay connected to our ever-changing experiences—whether they be thoughts, [emotions](#), or sensations—by bringing awareness to the present moment. **This ongoing awareness loosens the rigid conceptualizations we hold about the past and future, as well as the judgments tied to them, creating greater freedom and**

openness toward what constitutes our SELF and the selves of others across different situations. Just as the SELF is in constant evolution, the queen’s carriage in the [tale](#) is always in flux. The wheels turn, the axles creak, parts may fall off and be replaced, yet it remains unmistakably a carriage. **This SELF-VIEW provides the opportunity for DNA-V to exist as a dynamic system, where different processes continuously shape our experience and behavior.** These processes are constantly influenced by the world around us, ever-changing, and interacting fluidly with one another.

SELF AS CONTEXT

What might initially seem abstract and complex is actually something we can tap into every moment of our lives—our observing sense of SELF through perspective-taking. This isn’t about the events or changes themselves but rather our awareness of them. It holds the potential to free us from being defined by specific experiences or broader concepts like “SELF” and “I.” **No matter how significant or painful an experience may be, it doesn’t exclusively define the experiencer.** When the wise woman introduces herself to the queen, she mentions her name, her perceived wisdom, and her current physical condition, but she clarifies that none of these labels, attributes, or experiences define her as a “SELF.” Despite these aspects, the wise woman retains the ability to be aware of, observe, and communicate them without being fused or over-identified with them. This opens the possibility for a deeper sense of self that transcends any specific content. **This SELF-VIEW can be supported by a mindful [NOTICER](#) that allows us to observe our experiences from a detached, observing perspective while at the same time being aware of the observation.** Furthermore, according to this SELF-VIEW, the self can be metaphorically described as an empty container—a metaphor commonly used in Buddhism. All the DNA-V processes exist within this container, and you have the power to decide how to engage and apply these processes throughout your life.

*These scientific perspectives can resonate with and be connected to the following subjects:
Philosophy/Ethics, Social Sciences, Psychology, Biology, Literature, History, Foreign Languages, Art*

How can I explore and develop my SELF-VIEW?

Understanding the SELF can feel like trying to catch water with your hands—complex and elusive. Yet, exploring the various angles and perspectives is a worthwhile effort. **Each perspective offers something valuable, and learning to deliberately navigate between them can increase your psychological flexibility.** The following activities are designed to help you dive deeper into these perspectives, enabling you to make the most of what they reveal.

SELF-VIEW-ACTIVITY. THE CONTENT I REMEMBER

Background: Humans have an innate curiosity about understanding themselves, often seeking answers to the timeless question, "Who am I?" However, the complexity of the SELF means that this question doesn't have a simple or complete answer. But a good starting point is to begin by writing your life story. **Steps:** Find a quiet spot with pen and paper and take some time to reflect on the question, "Who am I?" Jot down everything that comes to mind, even if it's messy or unstructured. Think back through your life and note down any memories, experiences, or traits that feel relevant. Then, take these scattered thoughts and try to weave them into a coherent narrative or story. You can choose to write it in an exciting, humorous, or any other style that feels right to you.

Reflection: Crafting a coherent narrative about our lives is not just a one-time activity; it's an ongoing process that our minds engage in constantly. This activity allows you to make sense of your experiences and create a story that gives meaning to your existence. However, it's important to recognize that our narratives are selective, and there are countless events and experiences that we may not include or even think about. **What do you think?** What sense of SELF becomes apparent through this activity? Why do our minds prioritize creating coherent stories about our lives? What function does this serve in our daily functioning and sense of identity? Why do you think certain information gets left out or overlooked in our life stories? **How do you feel?** What emotions do you notice when you read the story you've written about yourself? How does it feel to consider the vast amount of information that wasn't included in your narrative? **What about the future?** Can you recall situations in your life when fully identifying with the content of your experience was either helpful or unhelpful? How could this activity and your reflections on it influence the way you approach the question "Who am I?" in the future? In what situations do you think this SELF-VIEW could be beneficial?

SELF-VIEW-ACTIVITY. 101 TRUTHS ABOUT YOU

Background: We often construct our identity based on a few key life moments that are readily available in our memory. But aren't there countless other experiences that we don't instantly recall or perhaps don't remember at all, which have also shaped who we are today? **Steps:** (1) Pair up with a partner. Take turns sharing the story of how and why you became the person you are today. Speak for 5 minutes while your partner listens, then switch roles. (2) After both of you have shared, take a second turn and this time, tell a completely different story about how and why you became the person you are today. Again, take 5 minutes each to share. (3) Repeat this process as many times as you like, continuing to tell different stories each round. (4) Once you've finished sharing, take some time to compare the stories. Discuss how they relate to the idea of truth.

Reflection: Often when people are asked to recount the life events that made them who they are, they tell a coherent, seemingly complete narrative. But if you ask them what they were doing on their 11th birthday or on the 5th, 10th, and 20th days afterward, most won't be able to recall. Yet, those forgotten days were also influential and form part of their life story. **What do you think?** What sense of SELF becomes apparent through this activity? Why do you think some aspects of our life are so immediately available and others aren't? What evolutionary function could this relate to and how could it relate to the Free Energy Principle and the predicting brain? **How do you feel?** What emotions do you notice when reading the different stories about yourself that are all true? How do you feel when contemplating that the list is almost endless, taking into account all your birthdays and the 364 days in between? **What about the future?** Can you remember situations from your life when you have told different stories about yourself that weren't exclusive? How could this activity and your reflections on it influence the way you approach the question "Who am I?" in the future? In what situations do you think this SELF-VIEW could be beneficial?

SELF-VIEW-ACTIVITY. 101 TRUTHS ABOUT YOU

Background: We often construct our identity based on a few key life moments that are readily available in our memory. But aren't there countless other experiences that we don't instantly recall or perhaps don't remember at all, which have also shaped who we are today? **Steps:** (1) Pair up with a partner. Take turns sharing the story of how and why you became the person you are today. Speak for 5 minutes while your partner listens, then switch roles. (2) After both of you have shared, take a second turn and this time, tell a completely different story about how and why you became the person you are today. Again, take 5 minutes each to share. (3) Repeat this process as many times as you like, continuing to tell different stories each round. (4) Once you've finished sharing, take some time to compare the stories. Discuss how they relate to the idea of truth.

Reflection: Often when people are asked to recount the life events that made them who they are, they tell a coherent, seemingly complete narrative. But if you ask them what they were doing on their 11th birthday or on the 5th, 10th, and 20th days afterward, most won't be able to recall. Yet, those forgotten days were also influential and form part of their life story. **What do you think?** What sense of SELF becomes apparent through this activity? Why do you think some aspects of our life are so immediately available and others aren't? What evolutionary function could this relate to and how could it relate to the [Free Energy Principle and the predicting brain](#)? **How do you feel?** What emotions do you notice when reading the different stories about yourself that are all true? How do you feel when contemplating that the list is almost endless, taking into account all your birthdays and the 364 days in between? **What about the future?** Can you remember situations from your life when you have told different stories about yourself that weren't exclusive? How could this activity and your reflections on it influence the way you approach the question "Who am I?" in the future? In what situations do you think this SELF-VIEW could be beneficial?

SELF-VIEW-ACTIVITY. JOURNALING IS THE PROCESS

Background: As we've explored, the concept of the SELF extends far beyond mere memories of the past; it encompasses our ongoing experiences in every moment. While it may be challenging to fully capture these experiences retrospectively, one effective way to do so in the present moment is through [mood tracking](#) or journaling. **Steps:** Set aside time whenever you can to sit down and reflect on your day by writing in a journal. Record the experiences you had and how they influenced your internal events such as thoughts and emotions. **Be as descriptive and explicit as possible in your entries, knowing that they are for your eyes only.** As you accumulate journal entries over time, take the opportunity to review them and observe any patterns, similarities, or differences that emerge.

Reflection: Engaging in this activity highlights both the common threads and the unique nuances of our daily experiences, emphasizing the ever-changing nature of the SELF. Despite the variety of experiences recorded, they all contribute to our sense of SELF. **What do you think?** What sense of SELF becomes apparent through this activity? Why do you believe experiences can vary so widely from day to day or even moment to moment? What factors influence these differences? **How do you feel?** What emotions do you notice as you review your journal entries, recognizing that they all reflect your personal experiences and perceptions? **What about the future?** Can you recall moments in your life when your sense of SELF shifted or evolved? How could this activity and your reflections on it influence the way you approach the question "Who am I?" in the future? In what situations do you think this SELF-VIEW could be beneficial?

SELF-VIEW-ACTIVITY. I AM. SOMETIMES. AND ALSO.

Background: When we think about ourselves, we tend to identify with a collection of traits, preferences, and roles that shape our identity. But are these characteristics truly what define us, and do they apply in every situation? **Steps:** (1) Take an empty sheet of paper and make a list of traits that you believe describe who you are, based on situations from your life that come to mind. Leave space next to each trait. For example: “I am confident...” (2) In the next step, reflect on moments when you’ve displayed the opposite traits. Write these opposites next to each corresponding trait, starting with the phrase “but also.” For example: “I am confident, but also insecure” or “I am anxious, but also courageous.” (3) Finally, take a moment to think about traits you haven’t written down but would like to embody. Add these to the bottom of your list, using the phrase “I am also.”

Reflection: The SELF is ever-changing, flexible, and often more expansive than we can immediately think of or identify with. This activity may have revealed new or different aspects of yourself, all equally true and valid. **What do you think?** What sense of SELF becomes apparent through this activity? Why is it that we tend to form ideas about our identity so quickly, yet with more time for reflection, we discover other layers that were cognitively available all along but overlooked? **How do you feel?** What emotions do you notice as you look at the list of everything (else) that you are? How does it feel to read the “I am also” statements that describe aspects of yourself you might not currently identify with but would like to embody? **What about the future?** Can you recall moments from your life when overidentifying with one part of yourself limited opportunities or experiences? How will this activity and your reflections on it influence the way you approach the question “Who am I?” in the future? What new possibilities might this open up for you?

SELF-VIEW-ACTIVITY. WHO IS NOTICING?

Background: As we've explored, the SELF consists of memories that form a coherent narrative as well as ongoing experiences in every moment. However, there must be more to it since all these things can be observed by the SELF as well. **Steps:** On an empty sheet of paper, jot down answers to the following questions that all lead towards defining yourself.

What are my core traits? What are my important roles in life? What events changed me the most? Who are the people that inspired me to be who I am? Who do I want to be? What are my values and my goals? How did I feel as a child? How did I feel last year? How did I feel last week? How do I feel right now?

Then, lay down the pen and observe what you have written. **Notice that you are noticing. This noticing quality is also part of your SELF.** Just like the empty page on which you have written all this content, your SELF is the container of these experiences, able to hold and observe them.

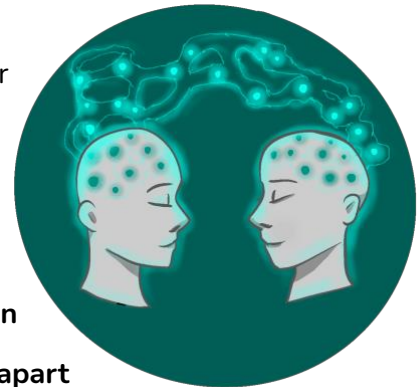
Reflection: Engaging in this activity highlights how both content and processes that define the SELF can be observed by an observing perspective that is also part of the SELF. **What do you think?** What sense of SELF becomes apparent through this activity? What do you think is unique about this sense of SELF? Can come up with different names to describe it? **How do you feel?** What emotions do you notice as you step into this sense of SELF? Are there any? And who is noticing these emotions? **What about the future?** How will this activity and your reflections on it influence the way you approach the question "Who am I?" in the future? In what situations do you think this SELF-view could be beneficial?

SOCIAL-VIEW

“THE BEST THING FOR YOUR NERVOUS SYSTEM IS ANOTHER HUMAN. THE WORST THING FOR YOUR NERVOUS SYSTEM IS ALSO ANOTHER HUMAN.” LISA FELDMAN BARRET

Why are there SOCIAL CONNECTIONS?

What do you think makes humans special compared to other animals? Is it intelligence? Larger brains? Language? While all of these might be true to some extent, many scientists argue that one of the most critical factors for the survival and development of our species is cooperation (Harari, 2015). **Our ability to function**



in large groups and form complex social connections sets us apart

from other animals. This capacity for cooperation has enabled us to build villages, political parties, empires, and global trade markets. Even though we can't personally know everyone in a large system like a town, school, or even a football team, abstract thinking and shared beliefs allow for a level of trust and cooperation—concepts that can be metaphorically described as stories (Harari, 2015). That said, functioning in large systems, with all the complexity and [ambiguity](#) they bring is not always easy. Conflicts arise both personally and politically. However, cooperation has proven to work, as these systems have not only ensured the survival of our species but also allowed it to expand, with over 7 billion people currently inhabiting the planet. But social connections aren't just vital at the macro level. **It's often those closest to us who have the most significant impact on our experience and behavior.** Research has shown that strong and meaningful social connections are a key pillar of our existence and well-being. In fact, loneliness can harm both your mental and physical health, reducing life expectancy in ways comparable to smoking (Holt-Lunstad et al., 2010). The COVID-19 pandemic, which severely restricted our ability to engage in social interactions, helped many of us realize just how crucial these connections are to our well-being. **Part of fostering social connections is remembering that the people around us are also guided by DNA-V processes, and their behavior is shaped by these same dynamics.** Understanding this can help us approach others with greater empathy and patience.

Getting in touch with the SOCIAL-VIEW will help you foster the following metacognitive competencies: Systems Thinking, Evolutionary Thinking, Interdisciplinary Thinking, Critical Thinking, Cooperation Competency, Intercultural Competency, Evaluation Competency, Community Science Competency

TALES OF DISCOVERY AND INSIGHT

THE STORY OF THE MUSTARD SEED (BUDDHIST TALE)



Once, in a small village in ancient India, there lived a young woman named Kisa Gotami. Tragedy struck when her dear dog, a loyal companion for years, fell ill and died suddenly. Kisa Gotami was devastated and felt incredibly sick. In her grief, she could not accept his death. The villagers, seeing her sorrow, pain and desperation, pitied her but could not help. Finally, someone suggested she visit the wise old hermit, who was known for his great wisdom and compassion. Kisa Gotami went to the hermit, pleading for a way to revive her dog. The hermit listened to her with great compassion and then made a simple request: "Bring me a mustard seed from a household that has never known sorrow. With that seed, I will make a medicine to cure your grief." Filled with hope, Kisa Gotami set off on her quest. She went from house to house, asking for a mustard seed, but every family she met had experienced loss and suffering. Some had lost parents, others children, and others still had faced illness and hardship. Each household she visited shared their own stories of grief and sorrow.

As night fell, Kisa Gotami slowly began to grasp the hermit's profound teaching. She realized that suffering and death are inevitable, universal experiences that spare no one. This newfound wisdom softened her heart, and she understood that she wasn't alone in her grief. By sharing her pain and story with the villagers, she found deep connection and compassion, which provided more healing than any medicine ever could.

Reflection: What do you think? What lessons can we glean from this tale about the significance of social connections? What is one fundamental basis of social connections, and how can we foster it? **How do you feel?** When you empathize with the woman before and after her search, what emotions do you notice within yourself? If you notice a change, what do you think led to this change? **What about the future?** How important are social connections in your life? After reflecting on the tale, what are some ways you could actively nurture and strengthen those connections in the future?

What scientific perspectives support my SOCIAL-VIEW?

SOCIAL connections play a critical role in our lives, enabling us to live healthier and more satisfied lives, to reproduce, and to form collaborations to achieve personal and collective goals. Below, we outline several scientific perspectives that underscore the significant role of SOCIAL connections.

YOUR NERVOUS SYSTEM CONNECTS WITH OTHERS

The ability to cooperate has been a major adaptive advantage for humans in evolution. Neuroscientist Lisa Feldman Barrett, whom we referenced in the section on [noticing emotions](#), argues that **human brains manage and regulate how other brains use bodily resources, helping maintain balance in our bodily systems**. This highlights the essential nature of social connections. When changes occur in one person's body, it often prompts changes in another's, like the synchronization of breath and heartbeat. This co-regulation happens in various situations, including romantic relationships, family interactions, conflicts, and even psychotherapy (Kleinbub et al., 2020). This process is also the foundation of empathy. **Our brains predict what others think and feel, which can have both pleasant and unpleasant effects**. Loving relationships can form the basis of a healthy and fulfilling life, boosting our overall well-being and performance. However, these connections also make us vulnerable, especially during difficult times such as loneliness, breakups, or the loss of loved ones. Losing someone important can feel like losing part of ourselves, as our brains and nervous systems are intertwined with those we care about. The grief experienced by the woman in the [tale](#) above is not only mental but also physical—she literally lost a key part of her emotional and physiological regulation. **Other species regulate each other's bodily systems through chemical exchanges, such as pheromones, as well as through sounds and gestures. In addition to those, humans uniquely**

possess the ability to influence one another through words. A kind message from a friend, even across the world, can calm our bodies, while harsh words can cause real, physical pain. As the woman in the [tale](#) connected with others while searching for the mustard seed, their words and physical presence helped her cope with her loss. **Recognizing how deeply we are connected at the level of our brains and nervous systems reminds us of the powerful impact we have on each other.** It encourages us to honor these connections in our lives and remember that just as we depend on others, we also have the ability to fulfill these essential needs for others as well.

This scientific perspective can resonate with and be connected to the following subjects: Philosophy/Ethics, Social Sciences, Psychology, Biology, Chemistry, Literature, Art

AWARENESS, COURAGE AND LOVE

Whenever human beings come together, they influence one another, impacting both psychological and physiological states. One setting where this dynamic is particularly intense is psychotherapy. In this space, individuals often open up about their dysfunctional behavioral patterns, ready to work on improvement. Psychologists have observed that these patterns frequently emerge within the therapeutic relationship itself. To harness this phenomenon, they developed a framework called Functional Analytic Psychotherapy (FAP), which promotes closeness and creates an opportunity to develop new behavioral and emotional patterns using basic learning principles (Kohlenberg & Tsai, 1991). **One key principle is operant conditioning—the idea that behaviors can be encouraged or discouraged through rewards (which increase the likelihood of a behavior) and punishments (which decrease it).** In Functional Analytic Psychotherapy, the focus is on reinforcing healthy, functional behaviors through awareness, courage, and love. Based on the underlying model by Reis & Shaver (1988), the theory posits that closeness develops when individuals are aware of their own vulnerabilities and needs (awareness), take the risk of expressing those needs to others (courage), and receive a warm, compassionate response (love), which reinforces this healthy behavior. The principles of awareness, courage, and love are echoed in the [tale](#) above. In her search for the mustard seed, the woman became *aware* of her own emotional struggles and vulnerability after her loss. It took *courage* for her to communicate her pain and longing for connection to others. In turn, the people

she encountered responded with *love* and compassion, sharing their own experiences, which reinforced her decision to reach out to the community and seek connection. This led to the development of meaningful, healing relationships. Research shows that fostering intimacy and connection in this way can be powerful in therapy (Kanter et al., 2009) and can be applied to any relationship, creating deeper emotional bonds and promoting personal growth.

This scientific perspective can resonate with and be connected to the following subjects:

Philosophy/Ethics, Social Sciences, Psychology, Literature, Art

How can I explore and develop my SOCIAL-VIEW?

SOCIAL connections are an essential part of our well-being and overall functioning. Building meaningful and loving relationships can significantly improve the quality of life. The following activities can help you enhance the various aspects of SOCIAL connections.

SOCIAL-VIEW-ACTIVITY. METTA MEDITATION

Background: In the section about the [NOTICER](#), you were introduced to mindful techniques, which can often resemble a meditative state. These activities typically involve directing attention inward, focusing on private events such as thoughts, feelings, and bodily sensations. However, in a Loving-Kindness or Metta Meditation, you shift your attention outward, intentionally directing it toward other people. This practice can additionally involve focusing on individuals you love, like, feel neutral about, or even those you may struggle with. The aim is to evoke a sense of boundless warmth and compassion (to them but also towards yourself) through the repetition of specific phrases and words. **Steps:** To practice Metta Meditation, begin by finding a comfortable position. Start by observing your breath as it flows in and out of your body. You can choose to close your eyes or softly gaze at the ground or the room around you. Since it can be challenging to cultivate love for others without first nurturing self-love, start by directing the following phrases to yourself: *"May I be well. May I be safe. May I be peaceful and at ease."* As you repeat these phrases in your mind, notice any feelings that arise, and observe them with curiosity and acceptance. Next, extend these phrases to other people in your life, beginning with those closest to you, such as family members and friends. *"May you be well. May you be safe. May you be peaceful and at ease."* Gradually, expand to include individuals who are more distant, like classmates or neighbors. You can even direct these words toward strangers you barely know or people who may evoke challenging emotions in you. As you do this, simply [notice](#) the emotions that you feel. It's normal for feelings like anger, grief, or sadness to surface during this process, and these can also be met with curiosity and compassion. You can conclude the meditation whenever you feel ready, focusing on whoever feels right to you. Take your time to reconnect with the present moment by focusing on your breath, and then gently bring your attention back to your surroundings. Guided Loving-Kindness or Metta meditations are widely available online. Then, lay down the pen and observe what you have written. **Notice that you are noticing. This noticing quality is also part of your SELF.** Just like the empty page on which you have written all this content, your SELF is the container of these experiences, able to hold and observe them.

Reflection: We often perceive love as something that happens beyond our control, dictated by circumstances. While this may be true in some situations, depending on your definition of love, there is also the potential to cultivate a loving feeling deliberately. Metta Meditation offers a powerful tool for doing just that, enabling you to nurture and expand your capacity for love and compassion toward yourself and others. **What do you think?** Why might the deliberate cultivation of loving-kindness during meditation positively impact our well-being? How could compassion be a key factor in this process? **How do you feel?** What emotions do you notice when you think about intentionally nurturing feelings of loving-kindness? How do you feel after engaging in a Metta meditation? **What about the future?** How can you bring these phrases and insights into your daily life, even outside of structured meditation? Are there specific situations or interactions where adopting this attitude might be especially helpful? How might cultivating this mindset of love and openness influence your relationships and the way you engage with others?

SOCIAL-VIEW-ACTIVITY. SECRET ACTS OF KINDNESS

Background: Throughout history, receiving love in the form of care and safety from those around us has been essential for survival. Being loved and cared for undoubtedly feels good, but have you ever tried spreading love and kindness without expecting anything in return? Simply giving, without expecting anything in return, can be incredibly fulfilling when it aligns with our values. Why not give it a try? **Steps:** The next time you find yourself in a SOCIAL situation, think of something you can do to brighten someone else's day. This could be something visible, like holding the door for someone, offering a sincere compliment, or bringing cookies to share with your peers. Alternatively, you could choose to do something kind in secret, simply for the joy of doing good, like leaving an encouraging note for someone or quietly tidying up after a class activity when everyone else has left.

Reflection: Engaging in acts of kindness, even when no one else knows, can bring a unique sense of satisfaction. The pleasure of doing good without seeking recognition becomes a special secret you share only with yourself - a quiet, personal reward that needs no external validation. **What do you think?** Why do you think doing good, without anyone else knowing, can make us feel better? How might dynamics in SOCIAL systems play a role here? **How do you feel?** What emotions do you notice after conducting a secret act of kindness? How do you imagine the person receiving the act of kindness will feel? **What about the future?** What other acts of kindness come to mind that could be done regularly, and how might making these a habit impact your overall well-being and your relationships with those around you?

Tip: Research highlights the positive impact gratitude can have on mental health - while classic practices like journaling about things you're grateful for have proven effective, even greater benefits can be gained from immersing oneself in a story or narrative where gratitude is received (Fox et al., 2015; Hazlett et al., 2021). Knowing this, you can be confident that the next time you genuinely express heartfelt gratitude to someone, you're not only performing an act of kindness but also positively contributing to that person's mental well-being.

SOCIAL-VIEW-ACTIVITY. THE FOUR SIDES OF A MESSAGE

Background: Communication in social contexts involves more than just exchanging information. According to Frindte & Geschke (2019) communication is a social process in which the people involved stimulate each other to construct their reality. This means we can never be entirely sure if our message is understood in the way we intended. To address this, the concept of meta-communication can be useful. Meta-communication involves talking about communication itself, helping us navigate and clarify how messages are received. **Steps:** Communication psychologists identify four distinct facets or sides of any message, whether verbal or non-verbal. Understanding these facets can enhance how we interpret and convey messages:

(1) Factual Side: Contains objective information, such as data, facts, and statements. It's usually straightforward and easy to identify. **(2) Self-Revealing Side:** The sender shares personal information about themselves, including their feelings, attitudes, or beliefs. **(3) Relationship Side:** Reflects the nature of the relationship between the sender and receiver. It reveals how the sender perceives the receiver and their interpersonal dynamics. **(4) Appeal Side:** Represents the sender's request or call to action, indicating what they want the receiver to do or how they want them to respond.

Take a message from your everyday life or past experiences and analyze it using the model's four sides of communication. Identify what information the message conveys on each level.

Reflection: Being aware that every message contains information on these four sides can greatly improve your understanding of social interactions. **Recognizing and addressing these facets allows you to express your intentions more clearly and to better interpret the messages you receive from others.** This awareness also helps you identify which layer you are emphasizing in your communication. Additionally, it enables you to ask the other person which aspect of the message they wish to focus on, facilitating clearer and more effective conversations. **What do you think?** How do you think being aware of the different sides of every message can impact our communication? In what ways might this awareness contribute to nurturing SOCIAL connections and enhancing our well-being? **How do you feel?** What emotions do you notice when you become aware of the various facets of a message? How do you feel about applying the Four-Sides Model in your SOCIAL interactions? **What about the future?** Are there specific relationships in which you think this model could be especially helpful? How do you imagine applying the model might enhance your awareness and improve communication within these relationships?

SOCIAL-VIEW-ACTIVITY. NON-VIOLENT COMMUNICATION

Background: Suffering is a natural part of the [human experience](#), and conflicts arise in various SOCIAL situations. However, there are different ways to approach and handle them. One method, aimed at fostering connection and ensuring that everyone's needs are considered, is called Non-Violent Communication (NVC), a principle developed by Marshall Rosenberg. **Steps:** NVC is based on four key processes that can be applied to various SOCIAL interactions. These are particularly useful when conflicts arise, as they help you express what you observe, feel, value, and wish for in a constructive way. These processes align well with the processes of DNA-V, providing a complementary framework for mindful communication:

Observation (NOTICER): What do I observe? - *"When I see, hear..."*

Feelings (NOTICER): What do I feel? - *"I feel..."*

Values (VALUER): What do I value in this situation? - *"Because I value..."*

Request (DISCOVERER): What concrete actions do I wish for? - *"Would you be willing to..."*

Think about a challenging SOCIAL situation you've experienced. Apply the four processes of Non-Violent Communication to explore how your response to the situation might have looked different. Get together in a group and act the situation out. Rehearse both the original version and the revised conversation using the NVC framework, noticing the difference in tone, connection, and outcomes.

Reflection: Conflict in social situations is unavoidable, but the four processes of NVC can transform tense interactions into moments of understanding and connection. **What do you think?** What mechanisms do you think allow NVC to work effectively? How do you see the DNA-V processes supporting this framework? **How do you feel?** What emotions do you notice, when you communicate with this awareness and intention? How do you think you would feel if others responded to you in this way? **What about the future?** How might you integrate NVC into your daily life? What benefits do you anticipate, both for your relationships and for your own well-being? How could these skills help foster more understanding, empathy, and cooperation in your interactions moving forward?

Tip: Whenever you're having a conversation—whether it's casual small talk, a disagreement, or a deep exchange where emotions are shared—pause to take a deep breath before you respond. This simple action slows the conversation, encourages genuine listening, fosters [co-regulation](#), and gives you the space to respond thoughtfully and from the heart, rather than automatically replying with something you had already planned to say.

SOCIAL-VIEW-ACTIVITY. CREATING MEANINGFUL CONNECTIONS

Background: Creating connections that feel meaningful to us often happens naturally and shouldn't be forced with a specific agenda. However, certain principles—such as the [awareness, courage, and love](#) described above - can support us in sharing vulnerabilities. When shared in a safe environment, this openness can foster deeper closeness. **Steps:** You can form small groups of 2-5 people. Before starting, it's crucial to agree on some basic rules. The most important rule is that anything shared within the group must remain completely confidential. Additionally, emphasize that no one should be interrupted while speaking. Once the rules are clear, the activity can proceed as follows: (1) One person begins by sharing something personal related to a pre-decided topic (such as loneliness, heartbreak, impermanence, etc.). What they share should still feel comfortable (courage), even if it involves stretching their comfort zone a bit—but not too far. (2) While one person is speaking, the others simply listen (awareness), without reacting or providing feedback. (3) Once the person finishes sharing, the listeners take turns expressing how they felt while listening. This should not involve giving advice or turning the focus to their own story, but instead should come from the heart (love). (4) Take turns until everyone has had a chance to share.

Reflection: Stepping out of your comfort zone to share something you deeply care about can be challenging, but it often creates an opportunity for deeper, more meaningful connections. **What do you think?** Why does showing vulnerability have the potential to foster meaningful connections? How could this be understood from an evolutionary perspective? **How do you feel?** After completing the activity—both sharing and listening—what emotions are you experiencing? **What about the future?** Are there any relationships in your life that you'd like to deepen? How can the insights from this activity assist you in this desire, and what potential risks could arise? Are you willing to accept these risks, assuming that deepening the connection aligns with your values?

Tip: This activity is inspired by the philosophy of regular meetings held worldwide by an international community dedicated to transformative growth through authentic, heartfelt interactions, known as the [Awareness, Courage & Love Global Project](#). Be sure to check if there are meetings in your area!

Find the online collection
of additional material here:



INTEGRATION OF THE MODEL

After reading this chapter you will know more about ...

... how to integrate the DNA-V model into both your personal and professional life.

... the concept of learned helplessness and how to overcome it through broadening perspectives and challenging old beliefs.

... how to consult the “Inner Team” to manage and navigate internal conflicts effectively.

... the potential of using the DNA-V model to foster group dynamics, enhance collaboration, and improve communication.

... real-life examples of integrating DNA-V processes into creative contexts and educational workshops.

Liberation through new perspectives

We live in a [world of increasing complexity](#), presenting us with challenges often tied to uncertainty - challenges that can feel insurmountable with the knowledge and tools traditionally provided by society, education, and upbringing. Sometimes, conditioning and our social environment can narrow our perspective on life, limiting our ability to face obstacles. This aspect can be seen as a contributing factor to what psychologists call ‘learned helplessness’ – a state in which we feel incapable of changing a situation, not because it is genuinely impossible, but because we have been conditioned to believe it is. **If we don’t question old beliefs and seek new perspectives and experiences, facing new challenges will remain difficult.** We hope this guide helped you to broaden your understanding of the human mind, challenge outdated concepts, and offer fresh perspectives that will help to explore your potential and expand your ability to navigate complexity and face life's obstacles.

“The significant problems we have cannot be solved at the same level of thinking with which we created them.” Albert Einstein

TALES OF DISCOVERY AND INSIGHT

THE ELEPHANT IN THE CIRCUS (JORGE BUCAY)

When I was a boy, I loved going to the circus. What caught my attention most of all were the elephants. The giant creatures, who were also so powerful, remained tied to a small stake driven into the ground with a rope around one of their legs. The stake was just a small piece of wood. Despite their strength, the elephants didn't break free and I wondered why. **If the elephants are so powerful, why don't they use their strength to escape?** I asked one of the trainers, who explained it to me: "When elephants are very young and much smaller, we use the same size stake to tie them. At that age, it's enough to hold them. As they grow up, they're conditioned to believe they cannot break free. They believe the stake can still hold them, so they never try to break free." [...]



Reflection: **What do you think?** What does this tale teach us about learned helplessness? How can this apply to your life? **How do you feel?** What emotions do you notice when you empathize with the elephant? What does it stir in you to think about untapped potential - both in the elephant and in yourself? **What about the future?** What are the "ropes" holding you back in your own life? If you knew you had what it takes to break free, how would you act differently?

Integration of DNA-V into work and life

When presenting our work to educators, one of the first questions we often hear is, "How should this be integrated?" This reflects the reality that teachers already struggle to cover the full curriculum on time or may find it hard to connect their subject with a model that focuses on psychological flexibility and mental health. We fully acknowledge the challenges many teachers face due to the demands of the modern school system, and we deeply respect the expertise they bring to their subjects.

We hope this guide will be seen as a supportive tool, one that appreciates the remarkable work done by educators who dedicate their lives to teaching and the subjects that inspire them. At the same time, we also recognize that the growing mental health challenges of the 21st century demand immediate attention. *People need new perspectives now.* And since lasting change doesn't happen overnight but builds up gradually, we invite you to explore opportunities

for integrating the DNA-V model into your life and teaching - adapting it within a system that may not be designed for it yet.

While dedicated mental health days and special projects are important, this guide encourages you to see these ideas as a more sustainable inspiration for shaping your outlook and attitude toward life. **Over time, these insights could subtly influence your teaching and routines, becoming a natural part of your approach. By blending this model with your own expertise, you can create a more holistic learning experience for both yourself and your students.**

We recognize the risks and challenges involved in making such changes, but we are eager to see whether integrating these insights can gradually influence the system from within—raising awareness about mental health, psychological flexibility, and their role in shaping the curricula of the future.

Real-life experience from the authors about connecting DNA-V with your passion

We understand that your expertise may lie in a field that at first glance seems unrelated to the DNA-V processes. However, they can complement the work you are already doing. Whether you teach History, Sports, Geography, or Biology, **offering your students the opportunity to explore their DNA-V processes through the lens of your subject can foster a unique learning experience.** For example, as the authors of this guide, we have already applied this by presenting the DNA-V model at congresses through body percussion and musical exercises, an activity we were passionate about. Participants not only engaged deeply with the creative approach to the topic but also gained a deeper understanding of the model and its processes. The worksheets can be helpful for exploring any experience you'd like to apply the DNA-V processes to.

Tip: The [worksheets](#) illustrating the DNA-V processes and leaving space for their content can support you in exploring these concepts with the people you work with—adaptable to whatever approach or context arises.

Find the online collection
of additional material here:



Everything is connected

Understanding means differentiating (Maturana & Varela, 1980). To grasp the workings of the mind, models like DNA-V aim to present the processes as distinct entities. However, as you can see from the links throughout the guide, which connect to other sections, all these processes are interconnected. **They influence one another and can only fully develop in relation to the others. Just like the qualities in the upper part of the [Square of Values and Development](#) the DNA-V process can only be fully realized when their positive counterparts are present, maintaining a functional balance.** Without this equilibrium, a process may become exaggerated or overemphasized—“too much of a good thing.” For instance, to follow your values without taking unnecessary risks, a well-developed [DISCOVERER](#) needs a balanced [ADVISOR](#) to ensure a healthy approach (Figure 7) . **So, when integrating the processes into your work, the challenge lies in presenting them as distinct for clarity and understanding, while also emphasizing their interconnectedness.** Maintaining a holistic perspective is essential for applying the knowledge effectively, ensuring that the processes are understood not in isolation but as parts of a greater, integrated system.

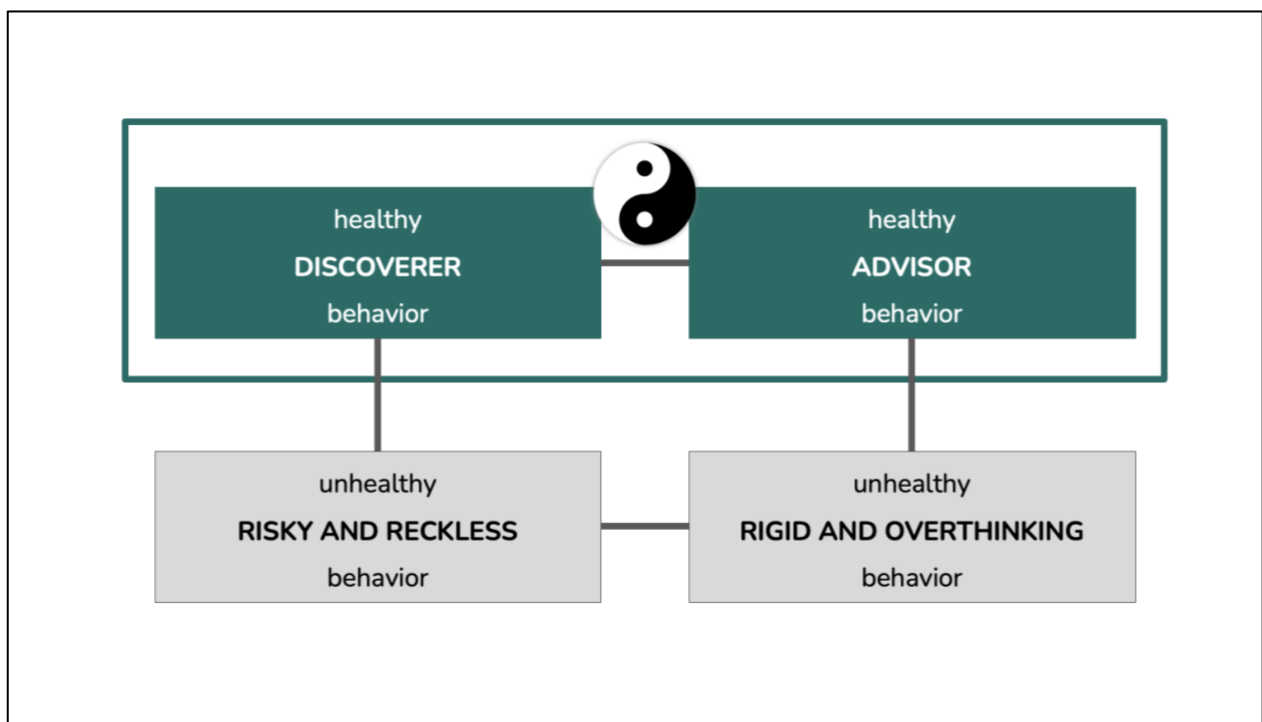


Figure 7. The DNA-V processes are all interconnected and rely on each other as complementary counterparts to prevent exaggeration. As such, they can be placed within the Square of Values and Development.

INTEGRATION-ACTIVITY. INTEGRATE THE PROCESSES IN YOUR INNER TEAM

Background: One way to maintain a holistic perspective that acknowledges the simultaneous presence of all DNA-V processes and ensures their harmonious interaction is through the metaphor of the "Inner Team" (Schulz von Thun, 2013). The idea behind the inner team is that the dynamics of cooperation and conflict, often associated with social interactions, also occur within individuals. Inside us, there are various internal voices that may sometimes clash, and at other times, work together harmoniously. These voices are countless, and this "inner plurality" is actually desirable - after all, united forces can create synergistic effects. **Steps:** Now, take a moment to reflect on your own inner team, with a special focus on the DNA-V processes. You may want to choose a challenging situation from your life, something that occupies your mind, and consider how each DNA-V process might have its own perspective within your inner team. What you can do now is to call an "inner council meeting," where you pay close attention to what each process contributes to the topic, as well as how they interact with one another. Remember, you are the leader of this inner team, and you can observe and navigate this process in alignment with your values. You can take notes in the worksheet provided online and use the following questions as well as all the prior chapters to explore your inner team: **NOTICER:** What feelings and thoughts am I noticing in this situation? **DISCOVERER:** What is something new I would like to try, stepping out of my comfort zone? What steps would be necessary to move forward, and are these steps in service of my chosen values? **ADVISOR:** What advice am I receiving from my inner voice? Is it helpful for my journey, or does it hold me back from following my values? **VALUER:** What values do I choose to prioritize in life?

Reflection: The metaphor of the inner team illustrates that the dynamic of inner plurality brings both internal conflicts and synergistic cooperation. It's important to observe these processes mindfully and to recognize that a chaotic dynamic can be completely normal. **What do you think?** How can we explain that, within a single individual, there can be different parts with varying opinions? How might this inner plurality make life more challenging at times? **How do you feel?** What emotions do you notice when observing the "inner council meeting" as the leader of your inner team? How does it feel to navigate different voices within yourself? **What about the future?** Can you think of moments when the dynamic between your inner processes felt chaotic or conflicting? How could the concept of the inner team, with its plurality of voices, help you navigate future challenges and decisions? How might it assist in managing internal conflicts more effectively? What role do you want your inner team leader to play in guiding these internal dialogues?

EPILOGUE

How to deal with challenges, limitations and setbacks

When integrating insights from the guide into your work and life, it's inevitable that you will encounter challenges, experience limitations, and even face setbacks. This is a completely natural part of the process and doesn't mean you're doing something wrong (even though your ADVISOR might try to convince you otherwise). Both in life and work, the systems we operate within are often resistant to change and new perspectives. Additionally, the reality is that there's often simply no time to implement new strategies, even when they align with your VALUES. **Whatever obstacles you face, we encourage you to integrate the DNA-V processes into your journey, especially when things get tough.** Let your NOTICER help you observe the situation non-judgmentally, paying attention to how you and the people around you are feeling throughout the process. When trying out new things or offering new perspectives, let your DISCOVERER help you explore what works and what doesn't. Be honest with yourself and others about functionality—some approaches may work better than others. **We invite you to report back on what doesn't work, and share the context in which these challenges arise, so we can all learn and expand this guide together, growing from missteps and discovering new strategies as a community.** When things get difficult, tune into your ADVISOR for explanations about why things aren't going as planned. But be cautious—your ADVISOR may also reflect insecurities or past experiences that don't align with the current situation and offer explanations that won't be helpful - you decide what's useful! **After all, it's crucial to believe in your interventions for them to succeed. Finally, find your own way of applying the DNA-V principles according to your unique expertise and passion.** Let your VALUER remind you what's important in your life, generating ideas for how you can inspire others to explore their minds. **The possibilities are endless, and your personal approach can bring the model to life in powerful ways.**

We truly hope that this guide has offered you a valuable introduction to the DNA-V model, grounding it in its origins and demonstrating how it can bring fresh perspectives to today's pressing challenges—particularly those faced in education. Our goal was to share the core

concepts behind each DNA-V process, and show how they align with human evolution and various scientific theories. We also hope that the activities presented here spark your DISCOVERER, inspiring you to experiment with what works in your unique context, and integrate the DNA-V processes into both your personal and professional life. We view these two areas as deeply connected, especially in roles that focus on human interaction, where one area informs the other. Finally, we hope our deep appreciation and enthusiasm for the evolution of the human mind, and the way these insights can guide us in navigating the complexities of the modern world, have been clearly conveyed to you. May this guide ignite within you a sense of flexibility, hope, humility, and awe for the magic and wonder that surrounds and resides within us all.

“Learning how something works doesn't make it less magical.” Lisa Feldman Barrett

APPENDIX

The Orange Riddle (Solution)

SOLUTION: INTRODUCTION-ACTIVITY (3). THE ORANGE RIDDLE

The mother should ask each daughter about their purpose for wanting the orange, understanding the specific context behind their requests. One daughter explains that she needs the orange peel for a baking recipe, while the other wants the juice to drink. With this information, the mother can divide the orange so that each daughter receives exactly what she needs: she gives the peel to the daughter who's baking and squeezes the juice for the daughter who wants to drink. This way, both daughters are satisfied without having to compromise or sacrifice.

Our models predict (Solution)

SOLUTION: ADVISOR-ACTIVITY. OUR MODELS PREDICT

On the left side of the picture, you can see a **cow's head**.

REFERENCES

- Aggelopoulos, N. C. (2015). Perceptual inference. *Neuroscience & Biobehavioral Reviews*, 55, 375–392. <https://doi.org/10.1016/j.neubiorev.2015.05.001>
- Barrett, L. F. (2017). *How emotions are made: The secret life of the brain* (S. xv, 425). Houghton Mifflin Harcourt.
- Basile AJ, Renner MW, Hidaka BH, Sweazea KL. An evolutionary mismatch narrative to improve lifestyle medicine: a patient education hypothesis. *Evol Med Public Health*. 2021 Feb 24;9(1):eoab010. doi: 10.1093/emph/eoab010. PMID: 33747517; PMCID: PMC7962761.
- Biglan, A., & Hayes, S. C. (2016). Functional contextualism and contextual behavioral science. In *The Wiley handbook of contextual behavioral science* (S. 37–61). Wiley Blackwell.
- Binda, D. D., Greco, C. M., & Morone, N. E. (2022). What Are Adverse Events in Mindfulness Meditation? *Global Advances in Health and Medicine*, 11, 2164957X221096640. <https://doi.org/10.1177/2164957X221096640>
- Boukhris, O., Suppiah, H., Halson, S., Russell, S., Clarke, A., Geneau, M. C., Stutter, L., & Driller, M. (2024). The acute effects of nonsleep deep rest on perceptual responses, physical, and cognitive performance in physically active participants. *Applied Psychology: Health and Well-Being*, n/a(n/a). <https://doi.org/10.1111/aphw.12571>
- Bryan, C. J., Yeager, D. S., Hinojosa, C. P., Chabot, A., Bergen, H., Kawamura, M., & Steubing, F. (2016). Harnessing adolescent values to motivate healthier eating. *Proceedings of the National Academy of Sciences of the United States of America*, 113(39), 10830–10835. <https://doi.org/10.1073/pnas.1604586113>
- Carhart-Harris, R. L., Leech, R., Hellyer, P. J., Shanahan, M., Feilding, A., Tagliazucchi, E., Chialvo, D. R., & Nutt, D. (2014). The entropic brain: A theory of conscious states informed by neuroimaging research with psychedelic drugs. *Frontiers in Human Neuroscience*, 8. <https://doi.org/10.3389/fnhum.2014.00020>
- Chase, J. A., Houmanfar, R., Hayes, S. C., Ward, T. A., Vilardaga, J. P., & Follette, V. (2013). Values

- are not just goals: Online ACT-based values training adds to goal setting in improving undergraduate college student performance. *Journal of Contextual Behavioral Science*, 2(3), 79–84. <https://doi.org/10.1016/j.jcbs.2013.08.002>
- Craig, A. D. (2003). Interoception: The sense of the physiological condition of the body. *Current Opinion in Neurobiology*, 13(4), 500–505. [https://doi.org/10.1016/s0959-4388\(03\)00090-4](https://doi.org/10.1016/s0959-4388(03)00090-4)
- Dweck, C. S. (2006). *Mindset: The new psychology of success* (S. x, 276). Random House.
- Eccles, J., & Wigfield, A. (2002). Motivational Beliefs, Values and Goals. *Annual Review of Psychology*, 53, 109–132. <https://doi.org/10.1146/annurev.psych.53.100901.135153>
- El-Ansary, M. R. M., El-Ansary, A. R., Said, S. M., & Abdel-Hakeem, M. A. (2024). Regular cold shower exposure modulates humoral and cell-mediated immunity in healthy individuals. *Journal of Thermal Biology*, 125, 103971. <https://doi.org/10.1016/j.jtherbio.2024.103971>
- Faulkner, S. A. (2019). *Targeting Psychological Flexibility in Youth to Enhance Health-Related Behaviors*. <http://hdl.handle.net/10342/7437>
- Flujas, J., & Becerra, I. (2018). Improving flexible parenting with Acceptance and Commitment Therapy: A case study. *Journal of Contextual Behavioral Science*. <https://doi.org/10.1016/j.jcbs.2018.02.006>
- Fortuna, L. R., Porche, M. V., & Padilla, A. (2018). A treatment development study of a cognitive and mindfulness-based therapy for adolescents with co-occurring post-traumatic stress and substance use disorder. *Psychology and Psychotherapy*, 91(1), 42–62. <https://doi.org/10.1111/papt.12143>
- Fox, G. R., Kaplan, J., Damasio, H., & Damasio, A. (2015). Neural correlates of gratitude. *Frontiers in Psychology*, 6. <https://doi.org/10.3389/fpsyg.2015.01491>
- Frindte, W., & Geschke, D. (2019). *Lehrbuch Kommunikationspsychologie*. Beltz.
- Friston, K. (2010). The free-energy principle: A unified brain theory? *Nature Reviews Neuroscience*, 11(2), 127–138. <https://doi.org/10.1038/nrn2787>
- Hancock, K. M., Swain, J., Hainsworth, C. J., Dixon, A. L., Koo, S., & Munro, K. (2018). Acceptance and Commitment Therapy versus Cognitive Behavior Therapy for Children With Anxiety: Outcomes of a Randomized Controlled Trial. *Journal of Clinical Child & Adolescent Psychology*, 47(2), 296–311. <https://doi.org/10.1080/15374416.2015.1110822>
- Harari, Y. N. (2015). *Sapiens: A brief history of humankind* (First U.S. edition). Harper.

- Harari, Y. N. (2018). *21 lessons for the 21st century* (First edition). Spiegel & Grau.
- Harris, R. (2008). *The happiness trap: How to stop struggling and start living* (S. x, 246). Trumpeter Books.
- Hartmann, N. (2010). *Ethik*. De Gruyter. <https://doi.org/10.1515/9783110823523>
- Hayes, L., Boyd, C. P., & Sewell, J. (2011). Acceptance and commitment therapy for the treatment of adolescent depression: A pilot study in a psychiatric outpatient setting. *Mindfulness*, 2(2), 86–94. <https://doi.org/10.1007/s12671-011-0046-5>
- Hayes, L. L., & Ciarrochi, J. (2015). *The thriving adolescent: Using acceptance and commitment therapy and positive psychology to help teens manage emotions, achieve goals, and build connection ; [for therapists, teachers & school counselors]* (First printing). Context Press, an Imprint of New Harbinger Publications, Inc.
- Hayes, L. L., Ciarrochi, J. V., & Bailey, A. (2022). *What makes you stronger: How to thrive in the face of change and uncertainty using acceptance and commitment therapy*. New Harbinger Publications, Inc.
- Hayes, S. C., Strosahl, K., & Wilson, K. G. (2012). *Acceptance and commitment therapy: The process and practice of mindful change* (2nd ed). Guilford Press.
- Hazlett, L. I., Moieni, M., Irwin, M. R., Haltom, K. E. B., Jevtic, I., Meyer, M. L., Breen, E. C., Cole, S. W., & Eisenberger, N. I. (2021). Exploring neural mechanisms of the health benefits of gratitude in women: A randomized controlled trial. *Brain, Behavior, and Immunity*, 95, 444–453. <https://doi.org/10.1016/j.bbi.2021.04.019>
- Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social relationships and mortality risk: A meta-analytic review. *PLoS Medicine*, 7(7), e1000316. <https://doi.org/10.1371/journal.pmed.1000316>
- Kabat-Zinn, J. (2005). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*, 15th anniversary ed (S. xxxiii, 471). Delta Trade Paperback/Bantam Dell.
- Kanter, J. W., Busch, A. M., & Rusch, L. C. (2009). Behavioral activation: Distinctive features (S. xiv, 184). Routledge/Taylor & Francis Group.
- Kashdan, T. B., & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review*, 30(7), 865–878. <https://doi.org/10.1016/j.cpr.2010.03.001>

- Kemani, M. K., Kanstrup, M., Jordan, A., Caes, L., & Gauntlett-Gilbert, J. (2018). Evaluation of an Intensive Interdisciplinary Pain Treatment Based on Acceptance and Commitment Therapy for Adolescents With Chronic Pain and Their Parents: A Nonrandomized Clinical Trial. *Journal of Pediatric Psychology*, 43(9), 981–994. <https://doi.org/10.1093/jpepsy/jsy031>
- Killingsworth, M. A., & Gilbert, D. T. (2010). A wandering mind is an unhappy mind. *Science* (New York, N.Y.), 330(6006), 932. <https://doi.org/10.1126/science.1192439>
- Kleinbub, J. R., Talia, A., & Palmieri, A. (2020). Physiological synchronization in the clinical process: A research primer. *Journal of Counseling Psychology*, 67, 420–437. <https://doi.org/10.1037/cou0000383>
- Kohlenberg, R. J., & Tsai, M. (1991). *Functional analytic psychotherapy: Creating intense and curative therapeutic relationships* (S. xiv, 217). Plenum Press. <https://doi.org/10.1007/978-0-387-70855-3>
- Kumbier, D., & Schulz von Thun, F. (Hrsg.). (2021). *Interkulturelle Kommunikation: Methoden, Modelle, Beispiele* (10. Auflage, Originalausgabe). Rowohlt Taschenbuch Verlag.
- Levin, M. E., Hildebrandt, M. J., Lillis, J., & Hayes, S. C. (2012). The Impact of Treatment Components Suggested by the Psychological Flexibility Model: A Meta-Analysis of Laboratory-Based Component Studies. *Behavior Therapy*, 43(4), 741–756. <https://doi.org/10.1016/j.beth.2012.05.003>
- Livheim, F., Hayes, L., Ghaderi, A., Magnusdottir, T., Högfeltdt, A., Rowse, J., Turner, S., Hayes, S., & Tengström, A. (2014). The Effectiveness of Acceptance and Commitment Therapy for Adolescent Mental Health: Swedish and Australian Pilot Outcomes. *Journal of Child and Family Studies*, 24. <https://doi.org/10.1007/s10826-014-9912-9>
- Maturana, H. R., & Varela, F. J. (1980). *Autopoiesis and Cognition: The Realization of the Living* (Bd. 42). Springer Netherlands. <https://doi.org/10.1007/978-94-009-8947-4>
- McCarthy, B. (1981). *The 4MAT System: Teaching to Learning Styles with Right/left Mode Techniques*. EXCEL.
- McCarthy, B., & McCarthy, D. (2006). *Teaching around the 4MAT cycle: Designing instruction for diverse learners with diverse learning styles*. Corwin Press. <http://catdir.loc.gov/catdir/toc/ecip0515/2005018388.html>
- McGorry, P. D., Mei, C., Dalal, N., Alvarez-Jimenez, M., Blakemore, S.-J., Browne, V., Dooley, B.,

- Hickie, I. B., Jones, P. B., McDaid, D., Mihalopoulos, C., Wood, S. J., Azzouzi, F. A. E., Fazio, J., Gow, E., Hanjabam, S., Hayes, A., Morris, A., Pang, E., ... Killackey, E. (2024). The Lancet Psychiatry Commission on youth mental health. *The Lancet Psychiatry*, 11(9), 731–774. [https://doi.org/10.1016/S2215-0366\(24\)00163-9](https://doi.org/10.1016/S2215-0366(24)00163-9)
- McHugh, L., Stewart, I., & Almada, P. (2019). *A contextual behavioral guide to the self: Theory and practice* (S. ix, 218). Context Press/New Harbinger Publications.
- Pintrich, P. R. (2003). A Motivational Science Perspective on the Role of Student Motivation in Learning and Teaching Contexts. *Journal of Educational Psychology*, 95(4), 667–686. <https://doi.org/10.1037/0022-0663.95.4.667>
- Porosoff, L., & Weinstein, J. H. (2019). *Two-for-one Teaching: Connecting Instruction to Student Values*. Solution Tree Press.
- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In *Handbook of personal relationships: Theory, research and interventions* (S. 367–389). John Wiley & Sons.
- Rosenzweig, S. (1936). Some implicit common factors in diverse methods of psychotherapy. *American Journal of Orthopsychiatry*, 6(3), 412–415. <https://doi.org/10.1111/j.1939-0025.1936.tb05248.x>
- Ross, L. (1977). The Intuitive Psychologist And His Shortcomings: Distortions in the Attribution Process1. In L. Berkowitz (Hrsg.), *Advances in Experimental Social Psychology* (Bd. 10, S. 173–220). Academic Press. [https://doi.org/10.1016/S0065-2601\(08\)60357-3](https://doi.org/10.1016/S0065-2601(08)60357-3)
- Schmidt, G. (2023). *Liebesaffären zwischen Problem und Lösung: Hypnosystemisches Arbeiten in schwierigen Kontexten* (Zehnte Auflage). Carl-Auer Verlag GmbH.
- Schulz von Thun, F. (2022). *Miteinander reden. 2: Stile, Werte und Persönlichkeitsentwicklung: differenzielle Psychologie der Kommunikation / Friedemann Schulz von Thun* (40. Auflage, Originalausgabe). Rowohlt Taschenbuch Verlag.
- Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being* (S. xii, 349). Free Press.
- Sherry, Diana. (2019). Does knowledge of evolutionary biology change high school students' attitudes about healthy eating?. *Evolution: Education and Outreach*. 12. [10.1186/s12052-019-0111-4](https://doi.org/10.1186/s12052-019-0111-4).
- Swain, J., Hancock, K., Dixon, A., & Bowman, J. (2015). *Acceptance and Commitment Therapy for*

- children: A systematic review of intervention studies. *Journal of Contextual Behavioral Science*, 4(2), 73–85. <https://doi.org/10.1016/j.jcbs.2015.02.001>
- Tan, T. Y., Wachsmuth, L., & Tugade, M. M. (2022). Emotional Nuance: Examining Positive Emotional Granularity and Well-Being. *Frontiers in Psychology*, 13, 715966. <https://doi.org/10.3389/fpsyg.2022.715966>
- Thun, F. S. von. (2013). *Miteinander reden 3: Das „Innere Team“ und situationsgerechte Kommunikation: Kommunikation, Person, Situation*. Rowohlt Verlag GmbH.
- Tinbergen, N. (1963). On aims and methods of Ethology. *Zeitschrift Für Tierpsychologie*, 20(4), 410–433. <https://doi.org/10.1111/j.1439-0310.1963.tb01161.x>
- van Dooren, M. M. M., Visch, V., Spijkerman, R., Goossens, R. H. M., & Hendriks, V. M. (2020). Mental Health Therapy Protocols and eHealth Design: Focus Group Study. *JMIR Formative Research*, 4(5), e15568. <https://doi.org/10.2196/15568>
- Williams, K. E., Ciarrochi, J., & Heaven, P. C. L. (2012). Inflexible Parents, Inflexible Kids: A 6-Year Longitudinal Study of Parenting Style and the Development of Psychological Flexibility in Adolescents. *Journal of Youth and Adolescence*, 41(8), 1053–1066. <https://doi.org/10.1007/s10964-012-9744-0>
- Yeager, D. S., Carroll, J. M., Buontempo, J., Cimpian, A., Woody, S., Crosnoe, R., Muller, C., Murray, J., Mhatre, P., Kersting, N., Hulleman, C., Kudym, M., Murphy, M., Duckworth, A. L., Walton, G. M., & Dweck, C. S. (2022). Teacher Mindsets Help Explain Where a Growth-Mindset Intervention Does and Doesn't Work. *Psychological Science*, 33(1), 18–32. <https://doi.org/10.1177/09567976211028984>



<http://openevo.eva.mpg.de>



