

**Swiss  
Scientific  
Society**  
for  
Developing  
Countries

**Swiss Scientific Society**  
*for Developing Countries*  
SWISSSDC Open Repository  
& Archive  
Zürichstrasse 70  
8600 Dübendorf Switzerland  
[info@swissdc.ch](mailto:info@swissdc.ch)  
[www.swissdc.ch](http://www.swissdc.ch)

---

Year: 2025

---

## Potentiality to Actuality: Quantum Physics Inspires Creative Innovation Alzeer, Jawad & Benmerabet Hamid

### ABSTRACT

Throughout history, humans have demonstrated an extraordinary capacity for creativity and innovation, driving progress and shaping our world. This innate ability to imagine, experiment, and push the boundaries of the possible is central to our identity as free-thinking individuals. To explore the cognitive, psychological, and ethical dimensions that influence the transformative process of translating creative ideas into practical realities, understanding this process as a defining characteristic of human innovation and a reflection of our unique capacity for independent thought. This research utilizes a framework that integrates cognitive psychology, neuroscience, and the principles of quantum physics to analyze the multifaceted dimensions influencing the transformation of creative ideas into reality. This framework will examine cognitive processes, psychological balance, and the alignment of material and non-material values. This research demonstrates that a holistic approach to innovation encompassing material and non-material values is crucial for realizing creative potential. This aligns with the principles of quantum physics, where reality emerges from a state of potentiality through conscious observation and interaction. Cultivating free will, critical thinking, and a balanced mentality empowers individuals to harness their creative potential and contribute meaningfully to society. We can unlock human ingenuity and create a brighter future by fostering an environment that encourages independent thought and ethical decision-making.

Originally published at:

Alzeer, Jawad; Benmerabet Hamid (2025). Potentiality to Actuality: Quantum Physics Inspires Creative Innovation. *Jurnal Pijar Mipa*, 2025;20(1):1-6.

<https://jurnalfkip.unram.ac.id/index.php/JPM/article/view/8176>

DOI: <https://doi.org/10.29303/jpm.v20i1.8176>

---

## Potentiality to Actuality: Quantum Physics Inspires Creative Innovation

Jawad Alzeer<sup>1,2\*</sup>, Hamid Benmerabet<sup>2</sup>

<sup>1</sup> College of Medicine and Health Sciences, Palestine Polytechnic University, Hebron, Palestine.

<sup>2</sup> Swiss Scientific Society for Developing Countries, Zürich, Switzerland.

\* e-mail: [jawad.alzeer@uzh.ch](mailto:jawad.alzeer@uzh.ch)

Received: December 9, 2024. Accepted: December 31, 2024. Published: January 23, 2025

**Abstract:** Throughout history, humans have demonstrated an extraordinary capacity for creativity and innovation, driving progress and shaping our world. This innate ability to imagine, experiment, and push the boundaries of the possible is central to our identity as free-thinking individuals. To explore the cognitive, psychological, and ethical dimensions that influence the transformative process of translating creative ideas into practical realities, understanding this process as a defining characteristic of human innovation and a reflection of our unique capacity for independent thought. This research utilizes a framework that integrates cognitive psychology, neuroscience, and the principles of quantum physics to analyze the multifaceted dimensions influencing the transformation of creative ideas into reality. This framework will examine cognitive processes, psychological balance, and the alignment of material and non-material values. This research demonstrates that a holistic approach to innovation encompassing material and non-material values is crucial for realising creative potential. This aligns with the principles of quantum physics, where reality emerges from a state of potentiality through conscious observation and interaction. Cultivating free will, critical thinking, and a balanced mentality empowers individuals to harness their creative potential and contribute meaningfully to society. We can unlock human ingenuity and create a brighter future by fostering an environment that encourages independent thought and ethical decision-making.

**Keywords:** Creativity; Cognitive Mentality; Human Personality; Human Psychology; Innovation; Quantum Physics.

### Introduction

Throughout history, humanity's remarkable achievements have demonstrated our innate capacity for creativity and innovation [1]. From the ancient pyramids of Giza to the cutting-edge advancements in modern technology, our creative spirit has consistently propelled us forward. At the core of this creative and innovative output lies our identity as free-thinking individuals endowed with the unique abilities to make choices and think critically [2].

Creativity and innovation are the cornerstones of societal development, though they are distinct in nature. Creativity involves the generation of novel and valuable ideas, while innovation applies these ideas practically to solve problems, create opportunities, or improve systems. Together, they form a synergistic relationship that drives advancements in fields ranging from science and technology to art and commerce.

Far from being abstract notions, creativity and innovation are tangible expressions of human ambition and ingenuity [3]. They reflect our capacity to harness innate qualities such as free will and critical thinking to enact positive change. However, what enables individuals to demonstrate these traits consistently? And how do personality characteristics shape their development?

To explore these questions, it is crucial to examine human personality's cognitive, psychological, and moral dimensions [4]. Cognitive flexibility enables individuals to adapt to changing circumstances, consider diverse perspectives, and link seemingly unrelated ideas, all

essential for developing innovative solutions. Emotional and psychological resilience are equally vital, enabling perseverance through setbacks and failures often accompanying the creative process. Furthermore, moral integrity ensures that the fruits of innovation align with ethical principles and contribute positively to society [5].

Understanding these interrelated elements offers insight into how personality shapes creativity and innovation. This perspective underscores the importance of cultivating cognitive adaptability, emotional resilience, and ethical decision-making [6]. By fostering these traits, we can build a culture of creativity and innovation that drives sustainable progress and meaningful global contributions [7].

In this exploration, we delve into the essence of creativity and innovation within the context of human character, free will, and critical thinking. As we navigate this inquiry, a fundamental question arises: how do our inherent attributes and capabilities translate into tangible manifestations of creativity that leave a lasting imprint on society? Through contemplation and analysis, we aim to uncover the mechanisms by which our innate potential is harnessed to drive creative expression and innovation, thus propelling humanity forward in its quest for progress and enlightenment. Yet, internal hurdles such as the fear of failure and external limitations like resource constraints can hinder fully realising one's creative potential [8]. This study investigates the critical role of creativity and innovation in driving societal advancement. It examines the

### How to Cite:

J. Alzeer and H. Benmerabet, "Potentiality to Actuality: Quantum Physics Inspires Creative Innovation", *J. Pijar.MIPA*, vol. 20, no. 1, pp. 1-6, Jan. 2025. <https://doi.org/10.29303/jpm.v20i1.8176>

cognitive, psychological, and ethical dimensions that enable individuals to translate their ideas into meaningful contributions to the world [9].

## Research Methods

This research employs a comprehensive framework that bridges cognitive psychology, neuroscience, and the foundational principles of quantum physics to delve into the intricate dimensions that influence the transformation of creative ideas into tangible realities. By combining insights from these interdisciplinary fields, the framework facilitates an in-depth exploration of how cognitive processes such as attention, memory, and problem-solving contribute to the creative process. Furthermore, it evaluates the role of psychological balance, encompassing emotional regulation and mental resilience, as a pivotal factor in sustaining creativity and overcoming potential barriers. The framework also emphasizes the alignment of material and non-material values, highlighting how the interplay between intrinsic motivations and external influences shapes the manifestation of innovative ideas.

To analyze the data, this study employs a mixed-method approach that integrates qualitative and quantitative methodologies. Qualitative data will be collected through in-depth interviews and focus group discussions with participants actively engaged in creative practices, enabling the exploration of personal experiences and contextual factors. This will be complemented by quantitative analysis using surveys and psychometric tools to assess cognitive processes, psychological states, and value alignment systematically.

## Result and Discussion

### Human Personality

The human personality comprises three foundational elements: cognitive mentality, psychological aspects, and core values. Aligning these factors harmoniously is crucial for fostering creativity [10]. When these elements are not in harmony, conflicts can arise, destabilising the personality and hindering its ability to contribute meaningfully to creativity and positive impact [11].

To create this harmonious system effectively, it is essential to address each of these factors and understand their unique aspects and interactions [12]. By thoroughly exploring these components, we can influence them to cultivate a personality that fosters creativity and drives innovation [13]. This comprehensive approach helps nurture a balanced and innovative mindset essential for personal and professional growth.

#### *Cognitive Mentality*

Cognitive processes are vital in shaping our understanding of the world and processing the information our minds receive to enhance cognition [14]. Human thought patterns vary widely, from superficial to deep and critical thinking [15]. Superficial thinking often fails to spur creativity, whereas deep contemplation lays the foundation for unlocking creative potential. However, creativity alone

does not guarantee a positive impact; critical thinking is essential for achieving true understanding and enlightenment.

Achieving enlightenment, which results from the fusion of deep introspection and logical analysis, represents a significant milestone in cognitive progress [16]. Scientific inquiry, characterised by meticulous research, experimentation, and measurement, is vital in the quest for truth. However, its effectiveness diminishes when dealing with phenomena beyond empirical observation or when existing methodologies fall short. In such cases, embracing alternative and productive modes of thinking becomes essential for reaching decisive outcomes [17]. Therefore, to overcome these challenges, scientific investigation must be enhanced and accompanied by logical reasoning [18].

Logical thinking involves translating sensory input into mental representations of reality [19]. When the mind has prior knowledge or a general understanding of reality, it can make informed judgments about perceived reality. Thus, continually enhancing our mental abilities through intellectual growth is crucial. The information or mental images stored in the mind must be based on certainty, ensuring their source is verified and aligned with our innate nature [20]. These mental constructs may come from common-sense knowledge or well-established, unequivocally accurate reference points. Certainty in information is indispensable for arriving at definite conclusions or outcomes.

Cognitive processes shape our understanding and creativity, with deep contemplation essential for achieving enlightenment. While scientific inquiry aids in seeking truth, alternative thinking is crucial for tackling complex phenomena. Logical thinking translates sensory input into mental reality, ensuring certainty for definitive conclusions.

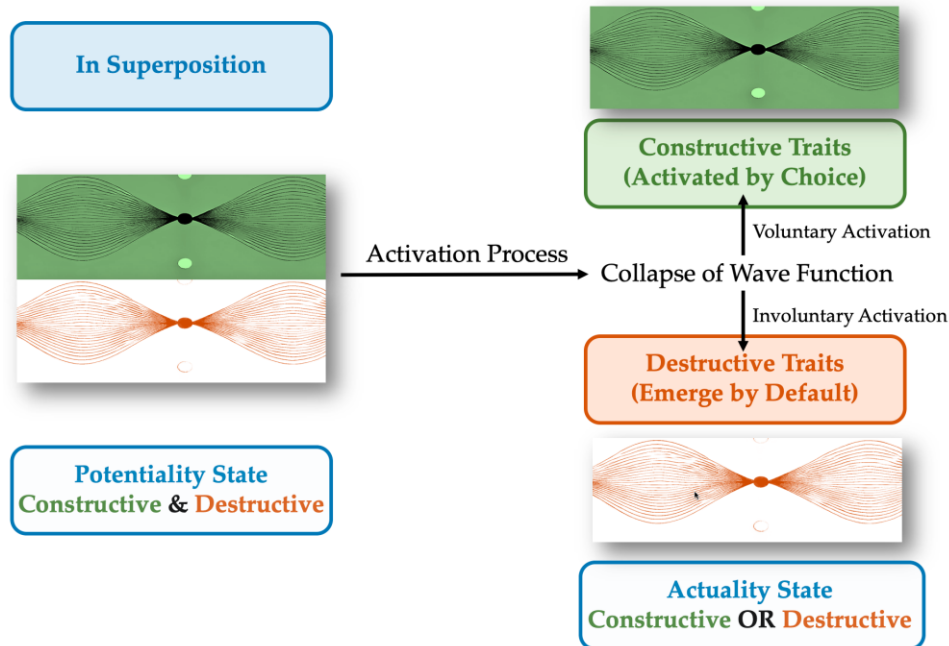
#### *Psychological Aspects*

In human psychology, there are three primary states: tense, repressed, and balanced. Tranquillity, symbolising a balanced psychological state, is attained through understanding the truth in various aspects of life. The deepest form of tranquillity is found when we uncover the truth about the meaning of our existence. To fully grasp the complexities of psychology, it is essential to delve into quantum physics [21]. Even physicists must appreciate quantum physics through the lens of human psychology. Without this integration, quantum physics remains limited by uncertainty and probability, and neglecting quantum physics in psychology can obscure our understanding of human identity [22].

Psychology encompasses a spectrum of traits that shape human actions, serving as a mirror reflecting both positive and negative impacts. These traits can potentially influence individuals and society in either beneficial, healthy ways or detrimental, unhealthy ways [23]. According to quantum mechanics, traits exist in a state of potentiality, akin to a vast warehouse storing all possible characteristics. Upon activation, a trait transitions from potentiality to actuality. Within this

superposition, each trait presents dual facets: one embodies positive attributes and the other harbouring negative ones, each with values ranging from minimum to maximum. Traits exist in this superposition until observed or measured, at which point the wave function collapses, leading them to

emerge from potential existence into actual existence (Figure 1).



**Figure 1.** The Duality of Human Nature: Constructive Traits vs. Destructive Traits

The key question is how to activate the constructive aspect of these traits. Generally, this constructive trait is activated voluntarily, originating from within the individual. Conversely, if the constructive aspect remains dormant, the destructive facet of the trait tends to surface spontaneously. The manifestation of either facet is reflected through action: constructive behaviour indicates the activation of the constructive aspect, while destructive behaviour signifies the activation of the destructive facet. For example, the trait of honesty versus dishonesty in humans exists in a superposition state. When an individual actively chooses honesty and tries to embody it, the trait of honesty transitions from potential to actual existence, manifesting in observable actions. Conversely, dishonesty may emerge involuntarily, constructing a personality rooted in deceit if this positive trait is not consciously activated. Traits are interconnected, forming a linked network within an individual's personality. Activating the trait of honesty often triggers a cascade effect, activating traits such as courage, generosity, trustworthiness, and integrity. Conversely, activating the trait of dishonesty can set off a similar chain reaction in the opposite direction [24-25].

When individuals consciously embrace creativity and innovation, they activate a pathway toward progress and growth. However, failing to pursue these endeavours actively can lead to a state of scientific inertia characterised by a reluctance or resistance to change, exploration, or experimentation. This inertia often arises from fear of failure or a lack of motivation to explore new ideas. Without proactive efforts to nurture creativity and innovation, individuals risk stagnation in both personal and professional growth, hindering opportunities for advancement and improvement.

Understanding human psychology requires delving into quantum physics, as both are intertwined. Traits exist in potentiality before activation, with constructive traits usually activated voluntarily, leading to positive actions. Failing to embrace creativity and innovation can result in scientific inertia, which hinders progress and growth.

### Core Values

The ultimate goal of creativity and innovation is to leave a positive impact on the world. However, the nature of this impact is often influenced by the underlying motivations driving the creative process. If the primary motivation is purely materialistic, such as pursuing wealth, social status, or fame, the potential for achieving a positive impact may be diminished [26]. In contrast, when innovation is fueled by a combination of material and non-material values—such as human dignity, moral principles, and spiritual fulfilment—the likelihood of positive outcomes increases [27].

Aligning material and non-material values creates a holistic approach to innovation, extending considerations beyond immediate gains to broader societal benefits and ethical considerations [28]. Innovations driven by these values are more likely to address pressing social needs, promote sustainability, and foster inclusivity, thereby contributing to society's greater good [29]. Cultivating a mindset prioritising material and non-material values is essential for ensuring that creativity and innovation result in meaningful and lasting positive impacts.

While creativity and innovation aim to impact, motivations grounded solely in materialism positively

may limit this potential. Therefore, aligning innovation with material and non-material values fosters holistic outcomes that effectively address societal needs and promote sustainability [30]. By integrating these diverse values, we can ensure that our creative and innovative efforts bring substantial and enduring benefits to individuals and communities.

## Discussion

One of the most profound reasons for humanity's existence is to embody the highest universal ideals and symbolise the best of what it means to be human. Central to this purpose is our innate capacity for creativity, innovation, and the desire to make a difference and leave a positive impact. This aspiration becomes especially significant given our finite existence, where leaving a lasting legacy is a natural goal. The key lies in harnessing our unique strengths by converting potential (voluntary acquired energy) into constructive actions. Freedom of choice empowers us to explore different paths, experiment with new ideas, and, ultimately, discover our unique talents and passions. Critical thinking, on the other hand, provides the framework for evaluating options, identifying potential challenges, and developing effective strategies.

Understanding the unique elements that contribute to constructing our personalities is essential to activating our potential for creativity and innovation [5, 31]. Organising these elements within a compatible system unlocks the power of synergy, providing the energy needed for creativity and innovation. Synergistic outcomes are linked to the activation of compatible systems, paving the way for a harmonious operation that maintains internal balance and homeostasis [32-34], foundational for achieving our goals with clarity and purpose [35].

A clear vision is cultivated by fostering a balanced mentality and psychology [36]. Understanding the purpose behind our goals, actions, and innovations becomes paramount, especially in light of our transient existence. To remain steadfast on the right path, satisfying a balanced set of values encompassing both material and non-material aspects is vital. Human behaviour mirrors our inherent traits [37]. Quantum physics offers profound insights into human psychology, particularly in understanding how personality traits exist in a state of potentiality before becoming active. The constructive expression of these traits is not automatic; it demands a deliberate and voluntary choice driven by an innate will to channel positive potential energy. Without this conscious effort, the destructive aspect of these traits may involuntarily surface, resulting in the buildup of entropic (negative) energy that fosters disorder, confusion, and psychological distress [38-40]. Such states diminish well-being, heighten vulnerability to illness, and increase the likelihood of unethical or harmful actions, underscoring the importance of intentional self-regulation and positive action [41-42].

The collaboration between physicist Wolfgang Pauli and psychoanalyst Carl Jung exemplifies this interplay between physics and psychology. Pauli, grappling with vivid dreams and personal challenges, turned to Jung to uncover their deeper meaning. Jung's analysis revealed how Pauli's unconscious mind intertwined scientific concepts

with personal struggles, highlighting the profound influence of the unconscious on even the most logical and rational thinkers. Their partnership facilitated Pauli's individual growth and bridged disciplinary boundaries, challenging traditional scientific perspectives by emphasising the interconnectedness of the conscious and unconscious mind. This collaboration underscores the value of integrating diverse fields to understand better human potential and the dynamic forces that shape our actions and experiences. [43].

Creativity and innovation are not just intellectual pursuits; they are fundamental to our humanity, driving progress and shaping our future. To unlock this potential, we must cultivate an environment that fosters free will, critical thinking, and a balanced mindset. This requires a conscious effort to activate these innate abilities, aligning them with a sense of purpose and a commitment to ethical and responsible innovation [44]. Human, moral, and spiritual values fulfil our intangible aspirations, while material wealth meets our tangible needs. Maintaining harmony between these values is essential, ensuring our pursuit of positive impact resonates with our inner fulfilment. Finding contentment in making a meaningful difference brings satisfaction to ourselves and those we impact. Ultimately, this fulfilment and positive effects can evoke a sense of spiritual peace, assuring the legacy we leave behind [45].

As we move forward, it is crucial to recognise that creativity and innovation are not just tools for individual success but are integral to societal advancement. By fostering an environment that supports free will, critical thinking, and ethical considerations, we can unlock the full potential of human creativity. This holistic approach ensures that our contributions are meaningful, sustainable, and aligned with the broader goals of human progress and enlightenment. We create a balanced and harmonious existence by managing our potential energy effectively and minimising entropy. This benefits individual well-being and contributes to society's collective progress, leaving a legacy of positive impact and continued advancement for future generations.

## Conclusion

This study emphasises the crucial role of creativity, innovation, and human personality in advancing society, offering practical recommendations for fostering these qualities in educational and organisational settings. Key findings highlight the importance of cognitive flexibility, emotional resilience, and moral integrity in cultivating an innovative mindset, with logical reasoning and alternative thinking essential for overcoming challenges. Educational institutions are encouraged to design curricula and environments that nurture creative thinking, adaptability, and ethical decision-making. At the same time, organisations should foster a culture of innovation through psychological safety, resources, and opportunities for experimentation. Aligning material and non-material values is fundamental to ensuring that innovation

addresses societal needs and promotes sustainability. Future research should delve deeper into the connection between quantum physics and human psychology to further illuminate the mechanisms behind creativity. Individuals and organisations can drive meaningful progress and leave a legacy of impactful innovation and spiritual fulfilment by cultivating balanced mindsets, clear goals, and aligned values.

#### Author Contribution

J. Alzeer wrote the article. H. Benmerabet contributed equally to the conceptualisation of this work.

#### Acknowledgments

We would like to thank Prof. Loay Awad, Prof. Khaled Abou Hadeed, and Reem Alzeer for their useful discussion and support.

#### References

- [1] M. West, "Sparkling fountains or stagnant ponds: An integrative model of creativity and innovation implementation in work groups," *Applied Psychology*, vol. 51, no. 3, pp. 355–387, 2002. <https://doi.org/10.1111/1464-0597.00951>
- [2] H. Urbancová, "Competitive advantage achievement through innovation and knowledge," *Journal of Competitiveness*, vol. 5, no. 1, pp. 82–96, 2013. <https://doi.org/10.7441/joc.2013.01.06>
- [3] J. Doran and G. Ryan, "The role of stimulating employees' creativity and idea generation in encouraging innovation behaviour in Irish firms," *The Irish Journal of Management*, vol. 36, no. 1, pp. 32–48, 2017. <https://doi.org/10.1515/ijm-2017-0005>
- [4] R. Shefiu, "Innovation and creativity as the 'nucleus' of entrepreneurship," *SSRN Electronic Journal*, 2019. [Online]. Available: <https://ssrn.com/abstract=3504150>
- [5] J. Alzeer and H. Benmerabet, "The Development of Human Personality: A Comprehensive Overview," *Psychol Dis Res*, vol. 6, no. 1, pp. 1–8, 2023. <https://doi.org/10.31487/j.PDR.2023.01.01>
- [6] R. Zainal, "Creative and innovative management culture," *International Journal of Academic Research in Business and Social Sciences*, vol. 8, no. 7, 2018. <https://doi.org/10.6007/IJARBS/v8-i7/4564>
- [7] K. Hwang, "The artist's creativity and the plastic surgeon's creativity," *Journal of Craniofacial Surgery*, vol. 32, no. 8, pp. e845–e846, 2021. <https://doi.org/10.1097/SCS.0000000000007894>
- [8] R. Handayani, "The effect of human capital on batik SMEs innovation: The mediating role of adaptive creativity," *Binus Business Review*, vol. 11, no. 2, pp. 105–113, 2020. <https://doi.org/10.21512/bbr.v11i2.6178>
- [9] A. Hugill and H. Yang, "The creative turn: New challenges for computing," *International Journal of Creative Computing*, vol. 1, no. 1, p. 4, 2013. <https://doi.org/10.1504/IJCRC.2013.056934>
- [10] P. Tierney, S. Farmer, and G. Graen, "An examination of leadership and employee creativity: The relevance of traits and relationships," *Personnel Psychology*, vol. 52, no. 3, pp. 591–620, 1999. <https://doi.org/10.1111/j.1744-6570.1999.tb00173.x>
- [11] W. Cai, S. Khapova, B. Bossink, E. Lysova, and J. Yuan, "Optimizing employee creativity in the digital era: Uncovering the interactional effects of abilities, motivations, and opportunities," *International Journal of Environmental Research and Public Health*, vol. 17, no. 3, p. 1038, 2020. <https://doi.org/10.3390/ijerph17031038>
- [12] P. Moreira, R. Inman, K. Cloninger, and C. Cr, "Student engagement with school and personality: A biopsychosocial and person-centred approach," *British Journal of Educational Psychology*, vol. 91, no. 2, pp. 691–713, 2020. <https://doi.org/10.1111/bjep.12388>
- [13] J. Dul, C. Ceylan, and F. Jaspers, "Knowledge workers' creativity and the role of the physical work environment," *Human Resource Management*, vol. 50, no. 6, pp. 715–734, 2011. <https://doi.org/10.1002/hrm.20454>
- [14] P. Grossenbacher and J. Quaglia, "Contemplative cognition: A more integrative framework for advancing mindfulness and meditation research," *Mindfulness*, vol. 8, no. 6, pp. 1580–1593, 2017. <https://doi.org/10.1007/s12671-017-0730-1>
- [15] L. Rajkumar, C. Dubowy, and A. Khatib, "Impact of practicing mindful breathing in class," *Teaching and Learning Excellence Through Scholarship*, vol. 1, no. 1, 2021. <https://doi.org/10.52938/tales.v1i1.1361>
- [16] W. Gordon, S. Saphiang, and E. Shonin, "Contemplative psychology: History, key assumptions, and future directions," *Perspectives on Psychological Science*, vol. 17, no. 1, pp. 99–107, 2021. <https://doi.org/10.1177/1745691620984479>
- [17] R. Gerritsen and G. Band, "Breath of life: The respiratory vagal stimulation model of contemplative activity," *Frontiers in Human Neuroscience*, vol. 12, 2018. <https://doi.org/10.3389/fnhum.2018.00397>
- [18] J. Alzeer and H. Benmerabet, "Recognizing limitations: overcoming challenges in enhancing health and preventing disease," *Eur J Gen Med*, vol. 3, no. 1, pp. 1–7, 2023. <https://doi.org/10.31487/j.EJGM.2023.01.01>
- [19] A. Prados-Bo, M. Rabassa, M. Bosch, and G. Casino, "Online information in Spanish on probiotics, yoghurt, kefir, kombucha, fibre and prebiotics: An analysis of the quality of information and the certainty of the evidence supporting health claims," *BMJ Open*, vol. 12, no. 8, p. e063316, 2022. <https://doi.org/10.1136/bmjopen-2022-063316>
- [20] S. Venditti, L. Verdone, C. Pesce, N. Tocci, M. Caserta, and T. Ben-Soussan, "Creating well-being: Increased creativity and prongf decrease following quadrato motor training," *Biomed Research International*, pp. 1–13, 2015. <https://doi.org/10.1155/2015/275062>

- [21] J. Alzeer and H. Benmerabet, "Exploring the Intersection of Quantum Mechanics and Human Psychology," *Psychol Dis Res*, vol. 7, no. 1, pp. 1–8, 2024.
- [22] Z. Wang, J. Busemeyer, H. Atmanspacher, and E. Pothos, "The potential of using quantum theory to build models of cognition," *Topics in Cognitive Science*, vol. 5, no. 4, pp. 672–688, 2013. <https://doi.org/10.1111/tops.12043>
- [23] J. Busemeyer and Z. Wang, "What is quantum cognition, and how is it applied to psychology?," *Current Directions in Psychological Science*, vol. 24, no. 3, pp. 163–169, 2015. <https://doi.org/10.1177/0963721414568663>
- [24] W. Bleidorn et al., "Personality trait stability and change," *Personality Science*, vol. 2, Article e6009, 2021. [Online]. Available: <https://doi.org/10.5964/ps.6009>
- [25] J. Magidson, B. Roberts, A. Collado-Rodriguez, and C. Lejuez, "Theory-driven intervention for changing personality: expectancy value theory, behavioral activation, and conscientiousness," *Developmental Psychology*, vol. 50, no. 5, pp. 1442–1450, 2014. <https://doi.org/10.1037/a0030583>
- [26] L. Gumusluoglu and A. İlsev, "Transformational leadership, creativity, and organizational innovation," *Journal of Business Research*, vol. 62, no. 4, pp. 461–473, 2009. <https://doi.org/10.1016/j.jbusres.2007.07.032>
- [27] E. Martins and F. Terblanche, "Building organisational culture that stimulates creativity and innovation," *European Journal of Innovation Management*, vol. 6, no. 1, pp. 64–74, 2003. <https://doi.org/10.1108/14601060310456337>
- [28] I. Shafique, B. Ahmad, and M. Kalyar, "How ethical leadership influences creativity and organizational innovation," *European Journal of Innovation Management*, vol. 23, no. 1, pp. 114–133, 2019. <https://doi.org/10.1108/EJIM-12-2018-0269>
- [29] P. Ye, L. Liu, and J. Tan, "The influence of organisational justice and ethical leadership on employees' innovation behaviour," *European Journal of Innovation Management*, vol. 26, no. 4, pp. 1129–1149, 2022. <https://doi.org/10.1108/EJIM-08-2021-0421>
- [30] J. Alzeer, "Integrating medicine with lifestyle for personalized and holistic healthcare," *J Public Health Emerg*, vol. 7, p. 33, 2023. <https://doi.org/10.21037/jphe-23-71>
- [31] N. Anderson, K. Potočnik, and J. Zhou, "Innovation and creativity in organizations," *Journal of Management*, vol. 40, no. 5, pp. 1297–1333, 2014. <https://doi.org/10.1177/0149206314527128>
- [32] J. Alzeer, "Lifestylopathy: Unlocking Potential by Embracing Duality and Homeostasis for Improved Healthcare," *Int J Regenr Med*, vol. 6, no. 2, pp. 1–6, 2023. <https://doi.org/10.31487/j.RGM.2023.02.02>
- [33] J. Alzeer, "Balancing Potential Energy and Entropy: The Foundations of Lifestylopathy and Homeostasis," *J Public Health Emerg*, vol. 8, p. 8, 2024. <https://doi.org/10.21037/jphe-23-140>
- [34] J. Alzeer, "The role of buffers in establishing a balance of homeostasis and maintaining health," *American Journal of Medicinal Chemistry*, vol. 4, no. 1, pp. 1–6, 2023. <https://doi.org/10.31487/j.AJMC.2023.01.01>
- [35] R. Pučėtaitė, A. Novelskaitė, A. Lämsä, and E. Riivari, "The relationship between ethical organisational culture and organisational innovativeness: comparison of findings from Finland and Lithuania," *Journal of Business Ethics*, vol. 139, no. 4, pp. 685–700, 2016. <https://doi.org/10.1007/s10551-016-3051-8>
- [36] R. Ettun, M. Schultz, and G. Bar-Sela, "Transforming pain into beauty: On art, healing, and care for the spirit," *Evidence-Based Complementary and Alternative Medicine*, pp. 1–7, 2014. <https://doi.org/10.1155/2014/789852>
- [37] P. Tierney and S. Farmer, "The pygmalion process and employee creativity," *Journal of Management*, vol. 30, no. 3, pp. 413–432, 2004. <https://doi.org/10.1016/j.jm.2002.12.001>
- [38] J. Alzeer, "Entropy and potential energy as a key role of Halalopathy in disease prevention and cure," *Longhua Chin Med*, vol. 3, p. 20, 2020. <https://doi.org/10.21037/lcm-20-40>
- [39] J. Alzeer, "Halalopathy: Improving potential energy and minimising entropy offer an integrative approach for more effective treatment," *Medicon Med Sci*, vol. 2, pp. 21–24, 2022.
- [40] J. Alzeer, "Directionality of chemical reaction and spontaneity of biological process in the context of entropy," *Int J Regenr Med*, vol. 5, no. 2, pp. 1–7, 2022. <https://doi.org/10.31487/j.RGM.2022.02.06>
- [41] J. Alzeer, "Lifestylopathy: A Holistic Approach to Healthcare," *J Alter Med Ther*, vol. 101, 2024. <https://doi.org/10.59462/JAMT.1.1.101>
- [42] J. Alzeer, "Halalopathy: Stimulation of the Immune System Through Enrichment of Potential Energy," *Int J Regenr Med*, vol. 5, no. 1, pp. 1–5, 2022. <https://doi.org/10.31487/j.RGM.2022.01.02>
- [43] M. Donati, "Beyond synchronicity: the worldview of Carl Gustav Jung and Wolfgang Pauli," *J Anal Psychol*, vol. 49, pp. 707–728, 2004. <https://doi.org/10.1111/j.0021-8774.2004.00496.x>
- [44] V. Richard, D. Holder, and J. Cairney, "Creativity in motion: examining the creative potential system and enriched movement activities as a way to ignite it," *Frontiers in Psychology*, vol. 12, 2021. [Online]. Available: <https://doi.org/10.3389/fpsyg.2021.690710>
- [45] H. Hasanah and M. Malik, "Blended learning in improving students' critical thinking and communication skills at university," *Cypriot Journal of Educational Sciences*, vol. 15, no. 5, pp. 1295–1306, 2020. <https://doi.org/10.18844/cjes.v15i5.5168>