

LEADERSHIP IN THE DIGITAL AGE: NAVIGATING COMPLEXITY THROUGH CRITICAL THINKING, CREATIVITY, AND UNCONVENTIONAL APPROACHES

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Abstract: This paper explores various dimensions of leadership in contexts of a new age, emphasising critical thinking, mental flexibility, and innovative development methods. It addresses challenges posed by technological advancements and leaders' need to cultivate adaptability, creativity, and foresight. Using unconventional approaches, such as the sweat lodge method and exploration of altered states of consciousness, provides intriguing avenues for enhancing leadership qualities. Additionally, the role of substances like psilocybin in fostering creativity and well-being is examined. Ultimately, this paper underscores the irreplaceable role of human cognition and leadership amidst technological progress, advocating for continual development in leadership practices to navigate modern complexities.

Keywords: leadership, digital age, critical thinking, mental flexibility, creativity, unconventional approaches, sweat lodge method, altered states of consciousness.

1 Introduction

In today's multifaceted world, leadership stands amidst the complexities of human interaction and organisational dynamics. As society, technology, and culture evolve, so too must our understanding and practice of leadership. Effective leadership now requires a fusion of qualities and competencies that can navigate the ever-changing landscape of the digital age (1). Leaders must be able to improvise amidst uncertainty, cultivate professional intuition, foster creativity, and embrace change with resilience and adaptability. These attributes are the hallmarks of exemplary leadership.

Achieving these qualities, however, is not a passive process; it demands purposeful and methodical development of mental abilities and behavioural tendencies(2,3). Central to this endeavour is the cultivation of both analytical and intuitive thinking, which complement each other in a harmonious dance of cognitive processes. Analytical thinking provides the framework for logical reasoning and systematic problem-solving, while intuitive thinking draws on tacit knowledge and gut instincts to guide decision-making in complex and uncertain situations(4).

This paper embarks on an exploration of the impact of digitalisation on leadership and cognition, highlighting the necessity for leaders to develop mental flexibility and critical thought. It also introduces unconventional methodologies for enhancing leadership qualities, such as the sweat lodge method and the exploration of altered states of consciousness. Furthermore, the potential role of substances like psilocybin in fostering creativity and well-being is examined and supported by contemporary neuroscientific research.

The aim is twofold: to unravel the intricacies of thinking patterns that underpin effective leadership and to advocate for continual development and exploration in leadership practices. By integrating insights from neuroscience, psychology, ancient wisdom traditions, and cutting-edge research, this paper underscores the irreplaceable role of human cognition and leadership amidst technological progress. In doing so, it seeks to prepare leaders for the complexities of the modern era and ensure their ability to lead with innovation, resilience, and foresight.

2 The Impact of Digitalisation on Leadership and Cognition

The environment we create and the lifestyles we cultivate in various societies are evolving more dynamically than our natural surroundings. As these changes and transformations occur, the demands on professionals and leaders for quality, potential, and abilities also shift. Leaders play pivotal roles in organising and governing human systems within these rapidly changing

environments. With advancements in information technology, globalisation, and other transformative forces, our environment is becoming increasingly unstable and complex.

In the context of Industry 4.0(5,6), the natural potential of human resources is scrutinised against the backdrop of information digitalisation, artificial intelligence, virtual reality, and vicarious communication. While these technological advancements offer undeniable advantages and positive effects, they also present secondary, asymmetrical, and complex impacts on the psyche, mind, and cognition of individuals and societies.

There are two primary modalities of digitalisation and vicarious communication's shadowy effects. Firstly, their overuse alters the quality of consciousness and self-awareness, fundamentally changing how individuals perceive themselves and their environments. Secondly, the rise of digitalisation, algorithmisation, and artificial intelligence diminishes the role of intuition and analogy in cognitive processes. This reduction impacts decision-making and behaviour in specific situations, compromising the ability to adapt spontaneously to changing conditions and circumstances. (7)

2.1 Challenges to Fostering Divergent Thinking in Leaders

The mental mobility skill, openness towards changes, and selected subtle skills directly influence the flexibility of the paradigm. Mental mobility allows leaders to shift perspectives and adapt swiftly to respond to unexpected challenges and opportunities, ensuring informed decision-making. Openness towards changes involves embracing novel ideas and methodologies, essential for maintaining relevance in a constantly shifting landscape. Combined with subtle skills such as emotional intelligence and cultural awareness, these qualities are indispensable for modern leaders, enabling them to connect with diverse teams and drive innovation.

Clairvoyance represents the foresight or intuitive ability to anticipate future trends and challenges. This foresight is necessary for a leader's thinking, allowing them to navigate uncertainties with strategic insight. Many programs focusing on NGL—next-generation leadership—are emerging to address this need, aiming to equip leaders with the skills required for future challenges. These programs focus on preparing leaders for an increasingly complex and dynamic world.

The question arises: how do we measure and develop the ability to "foresee"? Developing foresight involves understanding trends, recognising emerging patterns, and envisioning potential outcomes. This predictive ability is linked to an individual's functional creativity level, essential for practical and innovative problem-solving.

However, various threats exist to creative, divergent thinking. The paradigm effect, where existing beliefs limit new possibilities, can block "clairvoyance." Rigid adherence to paradigms, or paradigm paralysis, occurs when individuals or organisations resist change, leading to the blindness of success. Significant investments in the old paradigm can hinder innovation, creating a reluctance to abandon outdated practices.

Personality traits, fear of failure, and impatience are additional barriers. Fear can stifle innovation, while impatience can lead to premature conclusions. Dependency on existing systems and over-reliance on technology can erode intuitive and creative capabilities. To counter these threats, leaders must challenge assumptions, embrace uncertainty, and foster a culture of continuous learning and adaptation, ensuring preparedness for future challenges.

2.2 Leadership Through Mental Agility and Critical Thought

In the dynamic landscape of contemporary leadership, the essence of effective stewardship extends far beyond traditional paradigms. Modern organisational dynamics demand leaders to navigate complexities with mental agility and critical thought. According to Northouse (8), effective leadership integrates various styles and adapts to the context, ensuring responsiveness to changing environments. Additionally, Goleman, Boyatzis, and McKee (9) emphasise the role of emotional intelligence in fostering strong leadership, highlighting the importance of self-awareness and empathy.

This chapter embarks on an exploration of leadership through the lens of mental agility and critical thought, delving into the nuanced interplay between cognitive flexibility, strategic acumen, and visionary foresight. From the intricate dance of systemic adaptability to the art of proactive situational responsiveness, we delve into the foundational elements that underpin leadership excellence in today's multifaceted world. Join us as we uncover the transformative power of mental agility and critical thought in shaping visionary leadership for the challenges of tomorrow.

2.2.1 Systemic (Ecological) and Situational Mobility

Systemic (ecological) mobility encompasses the adaptive prowess required to navigate seamlessly through a kaleidoscope of environments, ranging from the intricately structured urban jungles to the pristine expanses of natural landscapes. Beyond merely traversing physical terrain, it entails a deep understanding of the complex interplay between human-made systems and natural ecosystems, as well as the ability to orchestrate harmonious collaboration within professional circles, cooperative ventures, and collaborative initiatives (4). This holistic adaptability demands not only a keen awareness of the unique challenges posed by each environment but also the strategic acumen to leverage its inherent opportunities for growth and innovation.

Situational mobility epitomises the proactive mindset essential for thriving in an environment characterised by perpetual change and uncertainty. It entails a dynamic responsiveness to evolving circumstances and a keen ability to anticipate and navigate potential challenges with agility and finesse. By fostering a culture of adaptability and resilience, leaders can empower their teams to embrace change as an opportunity for growth rather than a hindrance, enabling them to stay ahead of the curve in an ever-shifting landscape. This nimble approach to leadership not only enhances organisational effectiveness but also cultivates a culture of innovation and continuous improvement, ensuring sustained success in the face of adversity.

2.2.2 Relationship Mobility

This includes social and organisational mobility, which manifests in the social continuum (self vs team member), organisational continuum (hierarchical vs organisation network structures), as well as in the managerial continuum (control/management/leadership). Flexibility in these realms allows for effective adaptation. (4)

Expanding on this concept, social and organisational mobility encapsulates the adaptability required across various spectra within the organisational landscape. At the social level, individuals must navigate between their individual identities and their roles within team dynamics. Similarly, within the organisational context, adaptability extends to manoeuvring between traditional hierarchical structures and more fluid, network-based organisational frameworks. Moreover, within the managerial realm, effective leadership necessitates the ability to transition seamlessly between roles of control, management, and leadership based on the demands of the situation and the needs of the team.

2.2.3 Mental mobility

Navigating the cognitive, ecological, situational, social, and organisational continuum necessitates a profound shift in individuals' inner attitudes toward self-development and self-actualisation. This transformation is essential for unlocking one's natural potential within professional roles and fostering personal growth (4,10). This shift applies equally to professional moral and value orientations, underscoring the evolving demands within contemporary human systems.

As the landscape of leadership and organisational dynamics evolves, innovative approaches to control, management, and leadership are paramount. These trends necessitate fresh perspectives on identifying and cultivating the resources, potentials, and qualities of leaders operating in today's environments.

The following is one possible way of operationalisation of critical thinking as a quality or ability, which should be found in every individual who takes for himself the right to lead other people and other human systems: *“Critical thinking is an individual ability to create optimal conditions for correct discernment in a situation or a role. This ability is shown in mental mobility. Mental mobility satisfies the following measurable parameters (4):*

- a) *Cognitive variability and mobility between analysis and intuition.*
- b) *Sceptical curiosity and courage, openness, and spontaneity of learning*
- c) *Psychophysical condition, stability of quality and quantity of output of psychological functions in time (attention and memory).(4) “*

In situational and systemic leadership, critical thinking plays a dominant role, manifesting as cognitive mobility across continua. The cognitive continuum is characterised by quasi-rationality, bridging intuition and analysis to facilitate learning and decision-making in diverse contexts (11,12). Thus, embracing critical thinking is vital for leaders to navigate the complexities of modern leadership, ensuring they are well-equipped to lead in dynamic environments.

Moreover, understanding the interplay between digitalisation and cognitive processes is crucial. The overreliance on digital tools can diminish intuitive capabilities, highlighting the need for leaders to balance technological advancements with human cognitive strengths. The cultivation of mental agility and critical thought thus becomes indispensable in preparing leaders for future challenges, fostering environments that promote creativity, foresight, and holistic decision-making.

2.3 Sweat lodge method and its use

The sweat lodge, also known as the 'purification lodge,' emphasises the principles of physical and mental cleansing, with effects lasting for several hours after the ritual (13,14). Participants endure challenging conditions, including alternating physical stress, darkness, humidity, mental discomfort, fatigue, and dehydration. These conditions necessitate focused attention and emotional resilience. The sweat lodge experience provides an effective, complex, and changing load at physical, mental, and emotional levels, combined with significant therapeutic benefits (15–17).

To consider the sweat lodge as a method affecting multiple levels—physical, mental, and spiritual—it is essential to include elements that induce an altered state of consciousness and psychophysical preparation. Only then can the ritual effectively purify and harmonise the body, mind, and soul, making it a multi-dimensional method. Aaland (17) noted that this ritual was extensively used by Native Americans and later by colonists for healing and harmonising the body, mind, emotions, and spirit.

Smith (18) highlights the use of sweat lodges as a form of psychotherapy, comparing the ceremonies to group therapies. These rituals are described as holistic experiences that improve the quality of emotional, physical, cognitive, and spiritual life (15). Colmant & Merta (19) also found that many Native Americans emphasised the importance of strengthening socialisation and friendship through the ceremony's healing nature, which fosters group laughter and a positive mood.

The physiological effects of the sweat lodge are comparable to those observed in studies on Finnish saunas. Research by Prystupa, Wołyńska, and Ślężyński (20) demonstrated significant changes in hemodynamics of the circulatory system in men and women using Finnish saunas, indicating improved cardiovascular function and resilience (20). This supports the potential of sweat lodge ceremonies to enhance physical health and endurance, further reinforcing their value in leadership development programs.

The healing properties of the sweat lodge are also supported by research on its role in addressing intergenerational trauma and substance use. Marsh et al. (21) identified the sweat lodge ceremony as a healing intervention for these issues, highlighting its potential for addressing deep-rooted psychological challenges. This is particularly relevant for leadership development, as leaders who understand and can address trauma are better equipped to support their teams effectively (21).

In addition to these traditional uses, modern applications of the sweat lodge method have shown potential in leadership training and development. The intense physical and mental challenges mirror the high-pressure situations leaders often face, making the sweat lodge an effective tool for enhancing resilience, focus, and emotional regulation. By simulating crisis environments, the sweat lodge helps leaders develop the skills necessary to maintain composure and make clear decisions under stress (22,23), thus improving their overall leadership capabilities.

These practices align with the broader trend of integrating traditional healing practices into modern therapeutic frameworks, as discussed by Moodley and West (24). Their work emphasises the importance of a holistic approach that incorporates spiritual, cultural, and emotional healing methods into counselling and psychotherapy. This integration enhances the overall effectiveness of leadership development programs by addressing the full spectrum of human experience (24,25).

<i>Method</i>	<i>Sweat lodge</i>
<i>Classification</i>	<i>Complex, activation-transformation method</i>
<i>Purpose & Effect</i>	<i>Examination of mental and psychophysical resilience, ability to cooperate and communicate, creation of values, teambuilding, cultivation of psychophysical flexibility and adaptability to challenging situations</i>
<i>Advantages</i>	<i>high complexity, efficiency and utility</i>
<i>Restrictive conditions</i>	<i>The difficulty of preparation, the necessity of implementation in field conditions, the necessity of the presence of an experienced facilitator</i>

Table 1: Method of the Sweat Lodge (26)

The sweat lodge technique is a valuable tool for identifying favourable traits essential for effective managerial and leadership roles (4,27,28). Research indicates that approximately 20% of individuals exhibit these traits, demonstrating the ability to adapt to dynamically changing environments, withstand fatigue and exhaustion, and regenerate quickly (7,29). These individuals exemplify leadership by setting a strong example, naturally respecting others, and effectively communicating while leading teams.

By employing the sweat lodge method, it is possible to simulate heightened psychophysical stress rapidly and efficiently, creating an environment that mirrors crisis conditions. This simulation is

invaluable for preparing and developing the psychophysical resilience of managers and leaders. Studies have shown that physical stress increased by 21% and mental stress by 20% during these sessions. Despite these stressors, 15 participants maintained or improved their cognitive performance in subsequent tests. Cluster analysis further allowed researchers to classify participants into performance-based groups, revealing more intricate relationships between their responses to stress (30).

In summary, the sweat lodge method not only serves traditional healing and spiritual purposes but also offers a robust framework for modern leadership development. It enhances the resilience, adaptability, and cognitive performance of individuals in high-stress environments, equipping future leaders with the skills necessary to thrive under pressure. (20,21,24)

2.4 Psychological Perspectives on Altered States of Consciousness.

Altered states of consciousness have long fascinated psychologists, offering insights into the depths of human experience and potential. Maslow (31) referred to these mystical experiences as a form of rebirth, or "little death," drawing from various sources to outline their characteristics. He meticulously analysed these experiences, identifying several key features.

In exploring therapeutic methods that can induce altered states of consciousness, it is essential to consider recent research on neuropeptides like galanin. Ullrich and Mac Gillavry (32) suggest that galanin may play a significant role in the neuroendocrine stress response, influencing behavioural patterns through its interactions with dopamine and norepinephrine systems. This research indicates potential new avenues for PTSD treatment and prevention, particularly relevant for high-stress professions such as the military, first responders, and police. Understanding these interactions could enhance the effectiveness of leadership training programs that aim to build resilience and adaptive capacity in leaders (32).

At the peak of these experiences, individuals often perceive the universe as an integrated and united whole, leading to a profound change in cognition that is non-judgmental, non-comparative, and non-evaluating. This state allows for an objective view of the world, including outside objects and other people, separate from personal interests. Individuals may reach a state of ego-transcendence, characterised by a lack of needs or requirements, and the ability to forgive oneself and be selfless. Mystical states assert their own truth and inner value, often becoming desired ends rather than means to other goals. Commonly, there is a disorientation or non-perception of time and space, and the world is perceived as beautiful, valuable, and attractive, with negative aspects viewed more holistically. This positive perception is closely linked to an all-encompassing understanding and inner values of existence, infinite truths, and the highest spiritual and religious values.

During these experiences, individuals become more ready and capable of deeper listening, and emotions such as wonder, awe, respect, humility, surrender, and reconciliation dominate. Dichotomies of life, polarities, and conflicts dissolve, and fear, anxiety, reservations, awkwardness, and defence mechanisms temporarily disappear. These experiences often have a profound and transformative effect on individuals, either immediately or gradually, akin to a visit to a personally defined heaven. People feel a greater sense of responsibility to themselves, and experience increased "free will." Liberation from self and ego transcendence are directly related to one's strength and purity of identity, fostering spontaneity, honesty, and freedom through an increased ability to love and accept. Governed more by psychological laws, particularly those of a "higher life," individuals find that selflessness and decreased motivation lead to a lack of wants, needs, or wishes. Feelings of gratitude and all-encompassing love become prevalent, and the polarity between humility and pride disappears, often resulting in a sacred sense of unified consciousness.

These characteristics underscore the transformative power of altered states of consciousness, which offer profound insights into human potential and well-being. By exploring these experiences, psychologists like Maslow have highlighted the importance of transcending ordinary perceptions and embracing the deeper, more unified aspects of existence. Such altered states can foster personal growth, enhance self-awareness, and contribute to a more holistic understanding of life and one's place within it.

Below, we present some of the principles and techniques that can be used to reach altered states of consciousness, modified based on Grof (33). These techniques include working with mind and attention through meditation, prayer, contemplation, self-hypnosis, and visualization, which help focus the mind and enhance self-awareness. Direct and indirect work with breath, such as pranayama, throat singing, nada yoga, and holotropic (34,35) breathwork, use breath control to alter consciousness and promote deep relaxation. Sound techniques, including drumming, rattling, recitation, and rhythmic sounds, can induce trance states and facilitate spiritual experiences. Dancing, specifically whirling dance or trance dance, allows the body to move rhythmically, aiding in entering altered states of consciousness.

Social isolation and sensory deprivation, such as isolated stays in remote places, deprivation of one or more senses, and sudden changes in the environment, can lead to profound inner experiences. Sensory overload, combining acoustic, visual, and other sensory inputs or even experiencing pain, can overwhelm the senses and shift consciousness. Physiological means like fasting, sleep deprivation, and dehydration alter the body's physiological state, impacting consciousness. Specific bodywork and stretching, including practices like yoga and qigong, combine physical movement with mindfulness to alter states of consciousness. Zero gravity simulation, such as floating in a sensory deprivation tank, can create a feeling of weightlessness, promoting deep relaxation and altered states. Additionally, the consumption of certain plants or animal secretions has been traditionally used to induce altered states of consciousness.

Using these techniques, practitioners can enter states of trance, facilitating profound personal transformation. These altered states offer the possibility for significant enhancements in personality, quality of life, creativity, and inspiration. Additionally, they can strengthen specific ways of thinking and reasoning, providing new perspectives and insights.

Moreover, the application of these techniques extends beyond personal development. In the context of leadership and professional growth, these methods can help individuals develop greater resilience, creativity, and emotional intelligence. By exploring altered states of consciousness, leaders can gain deeper self-awareness and empathy, enhance their decision-making capabilities, and foster a more holistic approach to problem-solving. This holistic development is crucial for navigating the complexities of modern organisational environments and driving innovation and success in various professional fields.

In conclusion, the exploration of altered states of consciousness through these diverse techniques provides valuable opportunities for personal and professional growth. By integrating these practices into daily life, individuals can unlock new levels of potential, creativity, and well-being, ultimately leading to a more fulfilling and impactful existence.

3 Psilocybin and its effect on the creativity of thinking and well-being.

"Contemporary neurological studies prove effective methods for increasing the neuroplasticity of the brain and the growth of new neurons. "Psilocybin is a certain biological key, which we use to open and enable a psychological material, such as suppressed emotions, for psychotherapy." (36) Carhart-Harris and Goodwin (37) provide a comprehensive review of the therapeutic potential of psychedelic drugs, suggesting that these substances can

facilitate profound psychological transformations. Pollan (38) also explores the renewed interest in psychedelics for mental health, pointing to their potential in addressing issues like depression and anxiety.

The newest study proved a very intense neuroplasticity effect of members of the leading chemical groups of serotonergic psychedelics in vitro and in vivo. (39,40) LSD, DMT, and DOI increased the complexity of the dendritic tree (neuritogenesis), stimulated the growth of dendritic spines (spinogenesis) and stimulated the formation of synapses (synaptogenesis). (36,40)

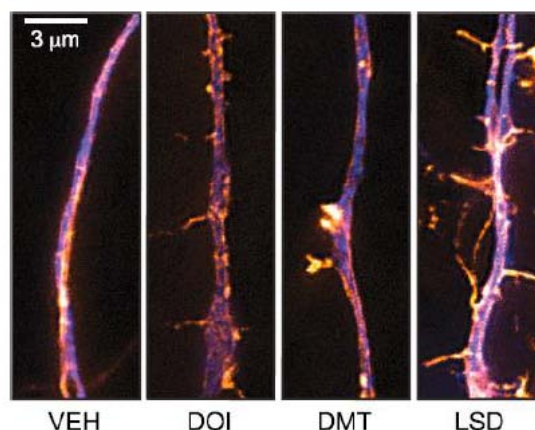


Figure 1: Neuron growth after administration of various psychedelic substances (39)

The potential applications of psilocybin extend to various areas including personal and personality development, stress reduction, enhancement of the creative process, mental activities, prevention of psychological dysfunctions, and resolution of complex dilemmas. Individuals considering psilocybin for these purposes should thoroughly understand the potential risks and consequences. Proper setting and integration of the experiences that psilocybin brings are crucial for maximising its benefits while minimising risks. (41)

Future research on psilocybin should build on well-designed studies, such as the approach taken by Daws, Timmermann, Giribaldi et al. (42). Their research design includes comprehensive exclusion criteria to ensure participant safety, such as a personal or immediate family history of psychosis, serious suicide attempts, and physical health conditions.

3.1 Functional connectivity

In their study, functional connectivity (FC) was analysed by using a functional atlas to divide the cerebral cortex into 100 regions of interest (ROIs). The FC between each pair of ROIs was calculated using Pearson correlation coefficients between their mean signal time courses, representing fluctuations in neural activity. This produced an FC matrix, where each element indicated the connectivity strength between pairs of ROIs. Positive values were Fisher-transformed to z-scores, and this procedure was independently repeated for each patient and scan, both at baseline and post-treatment.

3.2 Brain Network Modularity

The study measured brain network modularity, which involves the segregation of the brain's functional networks. Each FC matrix was summarised using a Louvain-like community detection algorithm to maximise the separation of brain areas into non-overlapping communities or modules. High modularity scores indicate strong segregation within brain networks, with weak connections to other parts of the brain.

3.3 Functional Cartography

The community detection procedure assigned each ROI to a community. These community labels were used to assess the extent to which ROIs were recruited into their typical functional networks, as defined by healthy adults. An allegiance matrix was created to represent the probability that two regions were assigned to the same community across multiple iterations of the modularity algorithm. This matrix helped summarise how often ROIs formed communities with others from the same functional network or different networks.

3.4. Dynamic flexibility

The short TR used in the fMRI protocol generated approximately twice the number of time points, allowing for additional analysis of dynamic flexibility. Multilayer modularity estimation was conducted using a matrix of volume-sliding windows with overlap. For each patient and scan, multilayer modularity was estimated multiple times, and the flexibility metric was calculated as the number of times an ROI changed its community allegiance over time. Flexibility scores close to 0 indicated rigid ROIs with stable community allegiance, while scores close to 1 represented highly flexible ROIs with frequently changing community allegiances.

Daws, Timmermann, Giribaldi et al. (42) concluded that psilocybin therapy's antidepressant efficacy is correlated with decreased brain modularity, suggesting underlying brain mechanisms. This antidepressant action appears specific to psilocybin therapy, as no changes in modularity were observed with the conventional SSRI antidepressant, escitalopram.

For exploring the effects of psilocybin on leadership, integrating the Leadership Judgment Indicator (LJI) with these imaging methods could provide valuable insights. The LJI assesses four main leadership styles—directive, consultative, consensual, and delegate—each divided into two substyles. This comprehensive assessment could help determine how psilocybin influences leadership abilities and decision-making processes.

4 Conclusion

This paper has delved into various dimensions of contemporary leadership, exploring the impact of digitalisation, the importance of critical thinking and mental flexibility, and innovative methods for leadership development. It has addressed the challenges posed by technological advancements and emphasised the necessity for leaders to cultivate adaptability, creativity, and foresight.

The discussion on mental agility and critical thinking underscores the need for leaders to develop both analytical and intuitive thinking. Analytical thinking provides a framework for logical reasoning and systematic problem-solving, while intuitive thinking taps into tacit knowledge and gut instincts, guiding decision-making in uncertain and complex situations. By cultivating these cognitive faculties, leaders can better navigate the complexities of modern environments, making informed decisions that balance logic and intuition.

The examination of the sweat lodge method highlights its potential for holistic impact on physical, mental, and emotional resilience. This traditional practice, by simulating crisis conditions and enhancing psychophysical endurance, demonstrates its relevance in preparing leaders for high-pressure situations. As noted, the sweat lodge method "creates an environment with the attributes of a crisis environment, which is usable in the preparation and development of the psychophysical condition of managers and leaders" (4).

Psilocybin's role in enhancing creativity and well-being has been explored through its profound effects on brain neuroplasticity and connectivity. Studies have shown that psilocybin significantly impacts brain function, with potential applications in personal and personality development, stress reduction, and

creative problem-solving. "Psilocybin is a certain biological key, which we use to open and enable psychological material, such as suppressed emotions, for psychotherapy" (36). The application of psilocybin in leadership contexts, combined with tools like the Leadership Judgment Indicator (LJI), presents a promising avenue for future research.

A leader must have good mental flexibility, critical thinking, and continuous reflection. Fulfilment of these attributes leads to the leader's ability to adapt to the environment and to act quickly, creatively, and effectively (43); the military environment has used the term "mindset" for it (44). This highlights the crucial role of mindset in leadership, emphasising the importance of adaptability and continuous improvement.

In conclusion, this paper underscores the irreplaceable role of human cognition and leadership amidst technological progress. It advocates for the continual development and exploration of unconventional methodologies to prepare leaders for future challenges. By integrating insights from neuroscience, psychology, and traditional practices, leaders can foster environments that promote innovation, resilience, and holistic well-being. As technological advancements continue to reshape our world, the development and cultivation of adaptable, creative, and foresighted leaders remain crucial for achieving organisational success and navigating the complexities of the modern era.

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