International Journal of Health Science

Acceptance date: 08/11/2024

FROM NLP TO NEUROLEADERSHIP: SCIENCE-BASED NEUROLEADERSHIP FOR THE DEVELOPMENT OF LEADERS AND TEAMS

Fabiano de Abreu Agrela Rodrigues https://orcid.org/0000-0003-0112-2520

Thiago Duarte Germano

Lincol Nunes Cruz https://orcid.org/0009-0008-7916-4062

Luiz Felipe Chaves Carvalho https://orcid.org/0000-0003-3777-5910

Adriel Pereira da Silva https://orcid.org/0009-0003-1157-8318

Francis Moreira da Silveira https://orcid.org/0000-0002-4602-8717

Elodia Avila https://orcid.org/0009-0007-0195-0277

Gustavo Garcia Medeiros



All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).

Abstract: This article presents Neuroleadership, an innovative approach that integrates neuroscience, cognitive-behavioral psychology and elements of NLP to develop high-performance leaders and teams. Neuroscience provides the scientific basis for understanding brain function and how it influences human behavior in the workplace. Based on this knowledge, strategies and techniques are proposed to optimize decision-making, people management, communication and problem-solving, with the aim of creating healthier, more productive and innovative work environments. The article also explores the application of neuroscience in areas such as neuromarketing and neuro-sales, demonstrating the potential of this approach to optimize various areas of business.

Keywords: Neuroleadership, Neuroscience, Leadership, Neurolinguistic Programming (NLP), Emotional Intelligence, Neurobusiness, Neuromarketing, Neurosales.

INTRODUCTION

Effective leadership is a crucial factor in the success of any organization. However, in an increasingly complex and dynamic world, leaders face unprecedented challenges. Neuroscience, the science that studies the nervous system and the brain, has provided valuable insights into human behavior, decision-making and people management. The application of this knowledge in the context of leadership, known as Neuroleadership, has proved to be a powerful tool for developing more effective leaders and high-performance teams.

Neuroleadership is based on the premise that the brain is the central organ of leadership. By understanding how the brain works, leaders can develop skills and strategies to optimize their performance and that of their teams. Neuroscience offers a map of how the brain processes information, makes decisions, deals

with emotions and relates to other people. This knowledge can be applied to improve communication, motivation, problem-solving and conflict management, among other essential leadership skills.

DEVELOPMENT

The application of neuroscience to the development of leaders and teams, known as Neuroleadership, offers an innovative and scientifically based approach to organizational leadership. This methodology stands out because it uses in-depth knowledge of how the brain works to improve decision-making, people management and effectiveness in the corporate environment.

Neuroleadership is underpinned by principles of neuroscience, which examine how neurotransmitters and the various areas of the brain influence human behavior in the business context. According to Agrela Rodrigues et al. (2022), "the study of brain areas and how neurotransmitters act in the context of a company is of paramount importance for formulating new theories and taking advantage of existing knowledge" (p. 1700). This knowledge enables the creation of strategies that optimize the performance of leaders, helping them to manage their teams more effectively and empathetically.

Developing leaders through Neuroleadership involves adopting practices that increase the production of positive neurotransmitters such as dopamine, serotonin and oxytocin. Agrela Rodrigues et al. (2022) point out that "activities that increase the level of dopamine, serotonin, endorphin and oxytocin are fundamental to increasing productivity and quality of life" (p. 1712). Coaching techniques, mentoring and activities that promote an increase in these neurotransmitters are essential for creating a healthy and efficient corporate environment.

The integration of Neuro-Linguistic Programming (NLP) with solid neuroscience foundations offers a robust method for developing leadership skills. While NLP provides practical tools for communication and problem-solving, neuroscience offers the theoretical basis needed to validate and improve these techniques. The combined use of these approaches allows for the creation of a leadership protocol that is not only effective, but also scientifically validated.

In a recent study, Agrela Rodrigues et al. (2022) observed that "leaders who follow the principles of neuroleadership are managing to extract the best from each employee, the best from their companies" (p. 1713). The age of technology and industry 4.0, moving towards industry 5.0, demands leaders who know how to use brain science to promote innovation and manage change effectively.

The conclusion is that Neuroleadership represents an evolution in the field of organizational leadership, combining practice similar to NLP, but with a scientific basis and the advances of neuroscience to develop more capable leaders and more cohesive teams. This approach not only improves individual and collective performance, but also contributes to creating healthier and more productive work environments.

PRACTICAL EXAMPLES OF APPLYING NEUROLEADERSHIP

IMPLEMENTATION OF EMOTIONAL INTELLIGENCE TRAINING PROGRAMS

At a technology company, an emotional intelligence training program was introduced for managers and team leaders. This program used principles of neuroscience to teach meditation and mindfulness techniques, practices that are known to increase levels of dopamine and serotonin

in the brain. Dopamine and serotonin are neurotransmitters associated with feelings of well-being and happiness. During the training sessions, participants were instructed to focus on their breathing and practice mindfulness, which helps to reduce stress and improve mental clarity. In addition, they were taught active listening and empathy techniques, which are fundamental skills for emotional intelligence. As a result, the leaders began to communicate more effectively and resolve conflicts more easily, which led to a significant improvement in employee satisfaction and team productivity.

COACHING SESSIONS BASED ON NEUROSCIENCE:

A financial institution adopted personalized coaching sessions for its executives, based on a combination of Neurolinguistic Programming (NLP) and neuroscientific principles. During the coaching sessions, the executives learned to use visualization techniques to improve decision-making and increase self-confidence. For example, they were encouraged to visualize successful scenarios and to practice emotional self-regulation, techniques that stimulate the production of oxytocin and endorphin, neurotransmitters that strengthen confidence and reduce stress. The coaches also used the technique of positive reinforcement, praising desirable behaviour and helping executives to recognize and replace negative behaviour patterns. This holistic approach, which considers both emotional and cognitive aspects, has resulted in more assertive and effective leaders who are able to motivate and inspire their teams.

CREATING STIMULATING WORK ENVIRONMENTS:

An organizational consulting firm has implemented changes to the physical work environment to stimulate employees' positive neurotransmitters. Based on neuroscience studies showing the benefits of exposure to natural light and nature, the company renovated its offices to include large windows, plants and outdoor rest areas. Exposure to natural light helps regulate circadian cycles and increase serotonin production, while the presence of plants can reduce levels of cortisol, the stress hormone. In addition, the company has organized regular team building activities, such as outdoor walks and yoga sessions, which promote the production of endorphins and dopamine. These activities not only improve employees' mood and mental health, but also encourage collaboration and creativity. As a result, the company has seen an increase in innovation and employee satisfaction, as well as a reduction in absenteeism rates.

SCIENCE-BASED NEUROLEADERSHIP METHOD: A DETAILED AND ENHANCED PROTOCOL THEORETICAL FOUNDATIONS

This enhanced method integrates principles of neuroscience, cognitive behavioral psychology (CBT), elements of Neurolinguistic Programming (NLP) with a scientific basis and incorporates new dimensions for more effective and inspiring leadership:

- **Neuroscience:** Provides knowledge about brain function, neural plasticity and the role of neurotransmitters in motivation, well-being and confidence.
- Cognitive-Behavioral Psychology (CBT): Offers tools to modify dysfunctional thinking and behavior patterns, promoting positive change through cognitive restructuring and modeling.

- Neurolinguistic Programming (NLP): Provides effective communication techniques, such as rapport and anchoring, and problem-solving strategies, such as reframing.
- Emotional Intelligence: The ability to recognize, understand and manage one's own emotions and those of others is fundamental to creating a positive and productive work environment.
- Persuasive communication: The use of coherent arguments, with examples, statistics and inspiring narratives, increases the power of persuasion and team engagement.
- Human Interaction and Contact with Nature: Stimulating social interaction and contact with nature promotes well-being, creativity and collaboration.
- **Personalization:** "Soul mapping" makes it possible to understand the personality, temperaments, motivations and communication style of each individual, adapting leadership and development in a personalized way.

ENHANCED PROTOCOL STEPS

SOUL MAPPING AND INITIAL ASSESSMENT:

- Apply psychometric assessment tools to identify the personality traits, temperaments and individual motivations of each leader and team member.
- Conduct interviews and group dynamics to gain a deeper understanding of individual and team characteristics.

Breakdown: The first stage of the protocol consists of a deep dive into the individual universe of each leader and team member. The aim is to map the soul, i.e. to understand the nuances of the personality, the predominant temperaments, the intrinsic motivations and the communication style of each person. To

do this, psychometric assessment tools are used, such as Big Five personality tests, Myers-Briggs Type Indicator (MBTI) and motivation questionnaires, which provide quantitative data on personality traits and values. In addition, individual interviews and group dynamics are carried out to gain a deeper understanding of individual characteristics and the team as a whole.

Practical example: In a technology company, the soul mapping stage revealed that the development team was predominantly made up of introverts, with a high need for autonomy and a focus on results. The sales team, on the other hand, was mostly extroverted, with a great need for social interaction and recognition. Based on this mapping, the company's leadership adopted different communication and motivation styles for each team, promoting a more harmonious and productive working environment.

TRAINING IN NEUROSCIENCE, EMOTIONAL INTELLIGENCE AND PERSUASIVE COMMUNICATION:

- To provide leaders with knowledge about the functioning of the brain, neurotransmitters, neural plasticity and emotional intelligence.
- Develop persuasive communication skills, including the use of storytelling, data, examples and body language.

In this stage, leaders are immersed in knowledge about the functioning of the brain, neurotransmitters, neural plasticity and emotional intelligence. The aim is for them to understand how the brain works and how their emotions and thoughts influence their actions and decisions. Topics such as neuroplasticity, neurotransmitters (dopamine, serotonin, oxytocin), the reward system, mirror neurons and decision-making are covered. Emotional intelligence skills are also developed, such as recognizing and managing emotions, empa-

thy and social skills. Persuasive communication training covers storytelling techniques, the use of data and examples, body language and rapport creation, based on mental triggers and neuroscience principles.

Practical example: In a retail company, training in neuroscience and emotional intelligence gave leaders a new perspective on managing their teams. They learned to identify the signs of stress and demotivation in their employees, to use empathetic communication to build relationships of trust and to apply positive feedback techniques to stimulate performance and engagement. The training in persuasive communication also enabled them to present their ideas more clearly and convincingly, winning the support of their teams and superiors.

DEVELOPING PERSONALIZED LEADERSHIP SKILLS:

- Offering training in leadership skills such as effective communication, conflict resolution, strategic thinking and decision-making, adapted to individual profiles.
- Use CBT techniques, such as cognitive restructuring and modeling, to promote positive changes in thinking and behavior patterns.

Details: Based on the soul mapping carried out in step 1, the development of leadership skills is customized for each individual. The focus is on improving essential leadership skills, such as effective communication, conflict resolution, strategic thinking, decision-making, time management, delegation, feedback, negotiation and change management, according to each leader's profile and needs. In addition, CBT techniques such as cognitive restructuring and modeling are used to promote positive changes in thinking and behavior patterns.

Practical example: In a consultancy firm, a leader with a more visionary and strategic profilereceived training in project management and leadership of multidisciplinary teams. A leader with a more operational and results-oriented profile was encouraged to develop his communication and interpersonal skills in order to improve the management of his employees and clients.

MENTORING AND COACHING WITH CASE STUDIES:

- Provide individualized mentoring and coaching, using case studies of successful leaders in the sector as inspirational examples and role models.
- Present data and statistics that demonstrate the effectiveness of the techniques and approaches used, using visual aids such as graphs and images to make it easier to understand.

Breakdown: Mentoring and individualized coaching are powerful tools for developing leaders. At this stage, leaders receive personalized support from an experienced mentor or coach, who helps them apply the skills and techniques they have learned in practice, overcome challenges and achieve their goals. Case studies of successful leaders in the sector are used as inspirational examples and role models. The mentor or coach can use tools such as SWOT analysis (strengths, weaknesses, opportunities and threats) to help the leader identify their strengths and weaknesses, and develop an action plan to achieve their goals.

Practical example: A company in the healthcare sector implemented a mentoring program in which nurse leaders were accompanied by experienced nurse managers. The mentors shared their experiences, offered advice and guided the nurse leaders in their career development. The case studies of successful healthcare leaders, such as

Florence Nightingale, were used as a source of inspiration and learning, showing how they overcame challenges and implemented significant changes in their fields.

CREATING A POSITIVE AND STIMULATING ENVIRONMENT:

- Promoting human interaction through team building activities, workshops and social events.
- Stimulating contact with nature, encouraging outdoor activities and incorporating natural elements into the work environment.

Details: The work environment plays a fundamental role in the well-being and productivity of employees. At this stage, strategies are implemented to create a positive and stimulating environment that promotes human interaction, contact with nature, a sense of belonging and psychological well-being. This can include the organization of team building activities, workshops, social events, the creation of living spaces, the incorporation of natural elements into the work environment, such as plants and natural lighting, and the promotion of wellness programs, such as gymnastics, meditation and mindfulness.

Practical example: A technology company implemented a wellness program that included weekly yoga and meditation classes, as well as offering employees fruit and healthy snacks. The company also created a living space with sofas, pouffes and board games so that employees could relax and interact during breaks. These initiatives have resulted in increased employee satisfaction and engagement, as well as a reduction in stress and absenteeism.

INSPIRING AND FUTURE-FOCUSED COMMUNICATION:

- Use positive language focused on possibilities, encouraging the visualization of a successful future.
- Share inspiring stories of overcoming and success from figures in the sector to motivate and engage the team.

Breakdown: Communication is an essential tool for leadership. In this stage, leaders are encouraged to use positive, clear and concise language, focused on possibilities, which inspires and motivates their teams. Visualizing a successful future, sharing inspiring stories of overcoming and success from industry figures and using metaphors and analogies are effective strategies for creating a sense of purpose and engagement.

Practical example: The CEO of a renewable energy company uses inspirational communication to motivate his team. In his presentations, he shares his vision of a more sustainable future and the positive impact the company can have on the environment and society. He also uses metaphors and analogies to explain complex concepts in a clear and engaging way, making communication more effective and memorable.

DYNAMIC AND OBJECTIVE PROJECTS:

- Set clear and objective goals, with realistic deadlines and regular monitoring of progress.
- Use project management tools to ensure organization, efficiency and focus on results.

Breakdown: Setting clear and objective goals is fundamental to the success of any project. In this stage, leaders learn to set SMART goals (specific, measurable, attainable, relevant and time-bound) and use project management tools to ensure organization, efficiency and focus on results. Regularly monitoring

progress, celebrating achievements and learning from mistakes are important for keeping the team motivated and engaged.

Practical example: In a construction company, the project team uses the Scrum methodology to manage its projects. Goals are set in short cycles, with frequent deliveries and constant feedback. The team uses online collaboration tools to track project progress and communicate efficiently. At each completed stage, the team celebrates its achievements and holds a retrospective to identify lessons learned and opportunities for improvement.

PERSONAL BRAND DEVELOPMENT AND DIGITAL PRESENCE:

- Helping leaders to build a strong, authentic personal brand that conveys confidence and competence.
- Encourage participation in industry events, publications in magazines and social media to increase visibility and professional recognition.

Breakdown: Building a strong and authentic personal brand is essential for professional success. In this stage, leaders are helped to identify their values, passions and talents, and to communicate them clearly and consistently through different channels, such as LinkedIn, blogs, talks and events. The creation of relevant and valuable content for the target audience, the developing strategic networking and participating in online and offline communities are important strategies for increasing visibility and professional recognition.

Practical example: A human resources leader uses LinkedIn to share articles on leadership, talent management and team development. She also participates in online discussion groups and industry events, where she shares her experiences and knowledge. Her active digital presence and reputation as an HR expert have made her a reference in the market, opening doors to new career opportunities and partnerships.

CONTINUOUS EVALUATION AND IMPROVEMENT:

- Monitoring the progress of leaders and teams, using evaluation and feedback tools to identify areas for improvement.
- Conducting organizational climate surveys to measure employee satisfaction and engagement.

Breakdown: Continuous evaluation of progress and the search for improvement are essential to the long-term success of any leadership development program, including neuroleadership. At this stage, various tools and methods are used to monitor the performance of leaders and teams, identify areas for improvement and adjust the protocol as necessary. Some of the tools and methods used include:

- **360-degree evaluation tools:** Collect feedback from superiors, peers and subordinates to get a complete picture of the leader's performance.
- Individualized feedback: Regular meetings between the leader and their mentor or coach to discuss progress, challenges and opportunities for improvement.
- Organizational climate surveys: Assessment of employee satisfaction and engagement, identifying strengths and areas that need attention.
- **Performance metrics:** Analysis of key performance indicators (KPIs) to measure the impact of neuroleadership on team and organizational results.
- Data analysis: Use of data analysis tools to identify patterns and trends in the performance of leaders and teams, and to adjust the development program accordingly.

Practical example: In a retail company, continuous evaluation and the search for improvement are integral parts of the leadership culture. The company uses a 360-de-

gree feedback platform, where leaders receive evaluations from their superiors, peers and subordinates twice a year. In addition, annual organizational climate surveys are carried out to measure satisfaction and satisfaction employee engagement. Based on the results of these assessments, the company offers personalized development programs for leaders, focusing on the areas that need improvement. For example, if the organizational climate survey indicates that internal communication needs to be improved, the company can offer effective communication training for leaders. This proactive, data-driven approach has contributed to the continuous development of leaders and the creation of a more positive and productive working environment, resulting in a 15% increase in sales and a 10% reduction in turnover over the last year.

Expected results

The implementation of this enhanced neuroleadership protocol aims to develop more effective, authentic and inspiring leaders, capable of building high-performance teams, promoting a positive work environment and achieving exceptional business results.

Emotional intelligence to optimize and improve business: Emotional intelligence (EI) is a central component of Neuroleadership. According to Agrela Rodrigues et al. (2022), EI involves the ability to perceive, evaluate and manage one's own emotions and the emotions of others. In the organizational context, EI contributes to fairer and more balanced decision-making, benefiting the group and the organization as a whole. Effective emotional management is fundamental to the development of leaders who can create healthy and productive work environments.

The relationship between emotional intelligence and the decision-making process lies in the fact that individuals have control over their emotions in order to make fair decisions that

benefit the group and the organization as well as themselves; this combination demonstrates the importance of emotional intelligence. This emotional management allows leaders to deal with high-pressure situations and make thoughtful decisions that benefit the whole team.

In addition, the integration of NLP with neuroscience allows for the creation of scientifically validated leadership protocols. While NLP offers practical tools for communication and problem-solving, neuroscience provides the theoretical basis for validating and improving these techniques. Agrela Rodrigues (2022) observes that "the study of brain areas and how neurotransmitters act in the context of a company is of paramount importance in order to formulate new theories and take advantage of existing knowledge". This combined approach allows leaders to extract the best performance from their employees, promoting a more harmonious and productive working environment.

Therefore, Neuroleadership not only improves individual and collective performance, but also contributes to the creation of healthier and more innovative work environments. The age of technology and industry 4.0, moving towards industry 5.0, requires leaders who know how to use brain science to promote innovation and manage change effectively. Agrela Rodrigues (2022) concludes that "leaders who follow the principles of neuroleadership are managing to extract the best from each employee, the best from their companies".

The Female Contribution and its Impact on Business Decision-Making: Emotional intelligence (EI) transcends the concept of IQ, encompassing the ability to recognize, understand and manage one's own emotions and those of others. This ability is intrinsically linked to brain activity, with regions such as the limbic system and the prefrontal cortex playing crucial roles. The limbic system, responsible for emotions and instincts, acts as

an alert system, signaling when needs are not met (Agrela Rodrigues, 2022). The prefrontal cortex, associated with rational thinking and decision-making, allows us to modulate emotional responses and direct behavior strategically.

In the context of leadership, EI is fundamental to creating a positive and productive working environment. Emotionally intelligent leaders are able to recognize and respond to the emotions of their employees, motivating them and inspiring confidence. EI also helps with conflict resolution, effective communication and building healthy interpersonal relationships. A practical example of the application of EI in leadership is a manager's ability to identify signs of stress in an employee and offer support, whether through conversations, flexible working hours or wellness resources. Another example is a leader's ability to recognize and value the different perspectives and emotions of their team during a decision--making process, promoting a more inclusive and collaborative work environment.

Neuromarketing: A Tool to Optimize and Improve Business: Neuromarketing, an interdisciplinary field that combines neuroscience, psychology and marketing, seeks to analyze and understand consumer behavior based on their brain responses to stimuli (de Abreu Agrela Rodrigues & Sanches, 2022). Using neuroimaging techniques such as magnetic resonance imaging and electroencephalography, neuromarketing investigates consumers' unconscious perceptions and responses, providing valuable information for developing more effective marketing and communication strategies (de Abreu Agrela Rodrigues & Sanches, 2022). By understanding the desires, impulses and motivations that lead individuals to choose certain products or services, companies can optimize their sales processes, personalize their offers and strengthen relationships with their customers.

The application of neuromarketing is not just limited to traditional marketing, but can also be used to improve leadership and interpersonal communication. By understanding the brain mechanisms that influence decision--making and the perception of value, leaders can develop more persuasive and effective communication skills, inspiring and motivating their teams. Neurolinguistic Programming (NLP), in turn, offers practical tools to improve communication and interpersonal relationships, complementing the findings of neuromarketing. The combination of these approaches can help leaders build stronger relationships with their employees, clients and partners, boosting the success of the organization.

Neuroleadership in Times of Crisis: Neuroleadership, based on neuroscience, offers effective tools for leaders to deal with business crises (Scodelario & Rodrigues, 2023). Understanding the impact of crises on the brain, neuroleadership seeks to balance reason and emotion, using techniques such as emotional dialog and strategic dialog (Scodelario & Rodrigues, 2023). Emotional dialog aims to manage the impact of the crisis on the well--being of employees, encouraging emotional intelligence and transparent communication (Scodelario & Rodrigues, 2023). Strategic dialog, based on facts and data, seeks to activate the prefrontal cortex, responsible for rational thinking, in order to make assertive and effective decisions (Scodelario & Rodrigues, 2023).

A practical example of the application of neuroleadership in crises is the case of a technology company facing a drop in sales due to an economic crisis. The leader, using emotional dialog, holds meetings to listen to employees' concerns, offering support and encouraging collaboration. At the same time, the leader uses strategic dialog to present an action plan based on data and projections, seeking innovative and efficient solutions to

overcome the crisis. The combination of these strategies allows the company to face the crisis in a more resilient way, motivating employees and seeking creative solutions to overcome the challenges. The use of emotional intelligence with coherent arguments and a position of leadership and trust are crucial for a project to excite employees so that they can find better solutions for managing the crisis.

A Neuroscientific Approach to Optimizing Sales: Neurosales, a branch of neuroscience applied to marketing, seeks to improve sales strategies by understanding the consumer's brain function (Sanches et al., 2018). By investigating the brain processes involved in making purchasing decisions, neurosales seeks to identify the mental triggers that influence consumer choices (Sanches et al., 2018). This approach allows companies to develop more effective, personalized and persuasive sales techniques, increasing the chances of business success.

A practical example of the application of neuro-sales is the use of mental triggers such as scarcity, which exploit fear of loss and urgency to stimulate purchase (Sanches et al., 2018). Another example is the use of color psychology, which associates specific colors with emotions and sensations, influencing the consumer's perception of products and services (Sanches et al., 2018). Neuro-sales can also help create more effective marketing messages, using visual and linguistic resources that activate brain areas related to pleasure and reward.

NLP and Neuroleadership: Neuroleadership, based on neuroscience, explores brain function to develop more effective leaders. NLP complements this approach, offering practical techniques to improve skills such as:

Persuasive communication: NLP teaches how to use language strategically to influence and motivate others. Through techniques such as rapport (creating harmony with the

interlocutor) and anchoring (associating positive emotional states with specific triggers), leaders can communicate more effectively, inspiring trust and engagement in their teams.

Problem solving: NLP offers tools for identifying and overcoming obstacles, both on an individual and collective level. Through modeling (replicating other people's successful patterns) and creative visualization (imagining the desired outcome), leaders can find innovative solutions to everyday challenges.

Managing emotions: NLP helps leaders develop emotional intelligence by recognizing and managing their own emotions and those of others. This enables them to deal with stress and pressure situations more effectively, making more assertive decisions and building healthier relationships.

Practical Examples of the Application of NLP in Neuroleadership

Communication: A leader who uses rapport can subtly mirror an employee's body language and tone of voice, creating a deeper connection and facilitating communication.

Motivation: A leader who uses anchoring can create a specific trigger, such as a gesture or a word, to evoke a positive emotional state in their team, increasing motivation and engagement.

Conflict resolution: A leader who uses the reframing technique can help the parties involved in a conflict to see the situation from a new perspective, facilitating the search for solutions.

Decision-making: A leader who uses creative visualization can imagine different scenarios and outcomes before making a decision, increasing the chances of success.

Applying Neuroscience to Business: Neurobusiness uses the knowledge of neuroscience to optimize various areas of business, such as: **Neuromarketing:** Understanding consumers' brain responses to marketing stimuli, such as colors, sounds and images, in order to create more effective campaigns.

Neuro-sales: Using persuasion techniques and mental triggers to influence customers' buying behavior.

Neuromanagement: Applying knowledge of brain function to improve people management, decision-making and problemsolving.

Practical examples of applying Neurobusiness

Neuromarketing: A company can use appetite-stimulating colors in its logo and marketing materials to attract customers to its restaurant.

Neuro-sales: A salesperson can use the reciprocity technique, offering a gift or a discount, to increase the chances of closing a sale.

Neuro-management: A manager can use mindfulness techniques to reduce stress and increase the concentration of their team, improving performance and productivity.

CONCLUSION

The combination of NLP and neuroscience offers a powerful set of tools for developing high-performance leaders and teams in the business world. By applying the knowledge of neurobusiness, companies can optimize their marketing, sales and people management strategies, achieving exceptional results and building a better future more prosperous. Neuroleadership, as an emerging field, demonstrates transformative potential for leadership and team management in today's business environment. By integrating knowledge from neuroscience, cognitive-behavioral psychology and Neurolinguistic Programming (NLP), it offers complete theoretical and practical elements for developing more effective leaders and high-performance teams. The application of techniques such as mindfulness, visualization, anchoring and reframing, combined with an understanding of how the brain works, allows leaders to optimize decision-making, people management and communication, resulting in healthier, more productive and innovative work environments.

The evidence presented in the article reinforces the importance of neuroleadership for the success of organizations. The application of neuroscience in areas such as neuromarketing and neuro-sales demonstrates the potential of this approach to optimize various areas of business, from understanding

consumer behaviour to creating more effective sales strategies. It is essential that more studies are carried out to deepen knowledge about the relationship between the brain and leadership, and to develop new tools and techniques based on scientific evidence. Neuroleadership is not just a passing trend, but a new way of thinking and practicing leadership, with the potential to revolutionize the business world and drive the success of organizations in the future.

Statement of contributions: Rodrigues, F. A. A. was the idealizer, owner and creator of the concept, wrote and revised the manuscript. Guided the team in data collection and revised the manuscript.

REFERENCES

- SANTIAGO, Patrícia Rosany de Sales et al. Neurobusiness: O Diferencial da Mulher no Mundo Empresarial. Revista de Administração e Inovação, v. 6, n. 2, p. 609-619, 2023.
- AGRELA RODRIGUES, F. A.; DE SOUZA CAMPOS, E. A.; SILVA DE PAULA, J. A. El neurobusiness y su aplicación como medio para optimizar el negocio. Ciencia Latina Revista Científica Multidisciplinar, Ciudad de México, v. 6, n.3, p. 1699-1715, 2022.
- AGRELA RODRIGUES, F. A. Inteligência emocional é crucial para otimizar e melhorar os negócios. Ciencia Latina Revista Científica Multidisciplinar, v. 6, n. 4, p. 2783-2799, 2022.
- de Abreu Agrela Rodrigues, F., & Sanches, F. (2022). Neuromarketing e sua aplicação como meio de otimizar e melhorar os negócios. Ciencia Latina Revista Científica Multidisciplinar, 6(6), 1792-1806.
- Scodelario, R., & Rodrigues, F. A. A. (2023). Neurobusiness e a sua aplicação nas empresas em crise. *Ciencia Latina Revista Científica Multidisciplinar*, 7(5), 2938–2950.
- Sanches, F., Cruz, L. N., Medeiros, G. G., & Vieira, S. (2018). Neurosales and its application as a means to optimize and improve business. *CPAH Science Journal of Health*, 1(1), 139-145.