



Running and its impact on quality of life and mental health through mindfulness

[spa] Correr y su impacto en la calidad de vida y la salud mental a través del mindfulness



Nubia Hernández-Flórez

Universidad Metropolitana de Barranquilla (Colombia)



Olena Klimenko

Institución Universitaria de Envigado (Colombia)



Andrea Liliana Ortiz-González

Universidad Metropolitana de Barranquilla (Colombia)



Andrea Garcia-Puello

Universidad Metropolitana de Barranquilla (Colombia)



Francis Araque-Barboza

Universidad Metropolitana de Barranquilla (Colombia)



Elisama Beltrán de la Rosa

Universidad Metropolitana de Barranquilla (Colombia)

Recibido: 2025/02/9

Aceptado para su publicación: 2025/04/21

Publicado: 2025/06/02

RESUMEN

Resumen: Correr es más que solo ejercicio físico; también es un medio para mejorar el bienestar psicológico. En este artículo, se describe los efectos terapéuticos de correr sobre el estrés, la ansiedad y la depresión. El placer del 'subidón del corredor', sentirse bien y el autoconcepto positivo también aumentan la autoestima. Además, se convierte en una forma de meditación activa enfocada desde el mindfulness en la que los corredores prestan atención a sus pensamientos, sentimientos y emociones. El autocontrol y la autodisciplina impuestos a una persona durante la carrera también sustentan y promueven la energía vital y la autonomía. Cuanto más se integre la carrera en la vida de una persona, mejor serán los beneficios psicológicos. Si bien correr es un componente del ejercicio, se enfatiza en este artículo como una práctica vital para el bienestar mental. Esta es una llamada a la acción para que el lector aprecie los beneficios de correr como una forma terapéutica y holística de autocuidado.

ABSTRACT

Abstract: Running is more than just physical exercise; it is also a means of improving psychological well-being. This article describes the therapeutic effects of running on stress, anxiety, and depression. The pleasure of the "runner's high," feeling good, and positive self-concept also increase self-esteem. In addition, it becomes a form of active meditation focused on mindfulness in which runners pay attention to their thoughts, feelings, and emotions. The self-control and self-discipline imposed on a person during running also sustain and promote vital energy and autonomy. The more running is integrated into a person's life, the greater the psychological benefits. While running is a component of exercise, this article emphasizes it as a vital practice for mental well-being. This is a call to action for readers to appreciate the benefits of running as a therapeutic and holistic form of self-care.

PALABRAS CLAVE

Running, Calidad de vida, Bienestar, Salud

KEYWORDS

Running, Quality of life, Wellness, Health, Well-being.

Como citar (APA 7ª Edición):

Hernández-Florez, N., Klimenko, O., Ortiz-González, A. L., Garcia-Puello, A., Araque-Barboza, F. y Beltrán, F. (2025). Running and its impact on quality of life and mental health through mindfulness. *Quadrata, estudios sobre educación, artes y humanidades*, 7(14), 93-105. <https://10.54167/quadrata.v7i14.2052>

Introduction

Running is now a global activity that involves constant movement within a set limit for a given distance and duration. Globally, individuals and teams participate in this activity, and within the framework of sport, this activity is gaining recognition due to the many physical benefits it provides, including strengthening the cardiovascular system, improving body endurance, and muscle development. It is clear that running provides both mental and physical benefits to the individual (Oswald et al., 2020).

Running offers unique benefits that contribute to mental and physical health by improving cardiovascular strength, which in turn increases mental health, moving towards a subjective sense of well-being and, therefore, a better quality of life for the population that practices this activity (Gil, 2020). In addition, it is important to consider the fact that the benefits of running have been shown to positively reflect on one's mood, with improved psychological attributes enhancing friendships and developing new social interactions that lead to increased self-esteem and motivation (Rodríguez-Feilberg, 2023).

In this way, running, rather than just retaining and releasing physical tension, allows the mind to reach a level of relaxed calm that is restorative and considered an important asset for the development and improvement of mental strength, mobility, and mental exercise, or rather, active mindfulness, as the science behind this supports the functioning of the mind (Waleriańczyk & Stolarski, 2021). It is important to note that, within human coping processes, sport and physical activity have factors that allude to positive psychological impact, and this practice helps in the development of a healthy mind and increases psychological and emotional well-being (Rojas-Sequeda & Rojas-Murillo, 2020).

In addition to being a popular exercise, running is also credited with having a profound impact on mental health and well-being. Numerous studies have shown that regular running can positively impact mental health in a variety of ways. This introductory essay will address the positive impacts that running has on mental health, focusing on its impact on mood, coping skills, and self-perception (Pedroso-Moreira et al., 2023).

When running, individuals experience a release of endorphins, the “feel-good” hormones that trigger positive and euphoric feelings. Endorphins, along with other neurotransmitters such as serotonin and dopamine, are powerful natural antidepressants and boost mood, as well as alleviate symptoms of depression and anxiety. In addition, running is one of the activities that can relieve stress, as it helps release accumulated tension and emotions in a controlled manner (Avello-Viveros et al., 2022).

Running can be a useful coping strategy, especially in times of emotional low or stressful situations; running can serve as an escape, helping to clear the mind and gain a different perspective. It can provide a sense of control and achievement that improves our ability to face the challenges of daily life. In addition, running provides an opportunity for self-reflection and emotional processing, which can be helpful for those who need mental clarity and self-understanding (Lobato-Macho, 2022).

An additional key point is the impact that running has on our self-esteem and self-confidence. Self-efficacy theory states that running can boost one's confidence and self-efficacy if running goals are

set and achieved and efforts are made to reach the goals of running a longer distance and running faster (Gil, 2020). In addition, running can promote a positive body image due to improved physical condition and appearance. Participating in fun runs or running in teams can also develop a sense of belonging and social connections, which, in turn, improves self-image and psychological well-being (Lestari & Mardikaningsi, 2020).

The positive impacts of running on psychological well-being are numerous. Physical exercise in the form of running has the ability to improve mood, relieve stress, aid in coping, and develop a positive self-image, making it a powerful tool for maintaining and nurturing the mind (Cárdenas, 2022). For those looking for ways to improve and care for their psychological health, running is a great candidate to consider adding to their daily routine. The positive impacts of running on the mind are just as profound as the positive impacts on physical health and well-being (Leunda-Goni, 2023).

Running and mindfulness

Running, not only seen as a sport but as a complete lifestyle, has emerged in recent years as a preventive and therapeutic practice in the field of mental health. Aerobic exercise, especially running, has been shown to reduce stress and anxiety while increasing the release of stress-relieving hormones and neurotransmitters. It improves physical fitness while building psychological resilience and creating a necessary space for emotional self-regulation in conditions of high cognitive and social demand (Hill et al., 2025).

As a result of its discipline, mindfulness has been progressively incorporated into contemporary psychology as an intervention technique and, due to its systematic nature, has branched out into a scientific and clinical domain in its own right, deriving from the contemplative Buddhist goals of directing one's cognitive processes and cultivating the ability to direct attentional resources to mental processes (Cassar et al., 2022). Contemporary research overwhelmingly supports its effectiveness in the clinical management of symptoms of depression, rumination, and relapse prevention in affective disorders. Its therapeutic value, I propose, lies in providing periods of reflective silence, pause, re-engagement, and re-connection with oneself and the mental and emotional processes that rest in the self (Wang et al., 2021).

The convergence of running and mindfulness has created an innovation in therapeutic intervention where the fusion of the two is referred to as mindful running, or mind running. This particular framework aims to achieve the fusion of the practice of running and attention to the cognitive processes of mindfulness, which has the operational effect of restricting the field of attention to the body, breathing, and context in performance. The resulting synergistic effect is an amplification of the effectiveness of both interventions, where exercise facilitates physical-kinetic impulses and the release of tension, and mindfulness exercises facilitate the control and downregulation of all processes of overemphasis in the mind and head (Bulğay et al., 2022).

Within clinical and health psychology, mindful running is perceived as an interventional practice that improves body awareness and mind-body connection. This intervention allows individuals to recognize physiological signs of stress and adaptively manage their relationships with stress. It also encourages the development of positive coping strategies that aid in the self-regulation of emotions, which is crucial in preventing relapses in anxiety and depression disorders. As a result, a growing number of intervention programs incorporate mindful running as an auxiliary tool (Yu et al., 2022).

From a neuropsychological perspective, running and mindfulness simultaneously activate brain circuits associated with plasticity and emotional well-being. Aerobic exercise stimulates the hippocampus, which is involved in memory and stress modulation, and mindfulness meditation strengthens the dorsolateral prefrontal cortex, which is involved in executive and cognitive control functions. The integration of these practices produces an optimizing effect on brain functioning that improves sustained attention and decreases automated negative thought patterns (Zhang et al., 2023).

In the context of psychosocial intervention, running and mindfulness are gaining ground as low-cost methods with a profound impact that can be applied in both clinical and community settings. They are incorporated as steps toward promoting healthy lifestyles and, above all, social cohesion when practiced in groups. The community experience of mindful running not only enriches the mental health of each individual, but also strengthens the fabric of social support, one of the protectors against the risk of psychological vulnerability (Robin et al., 2022).

At the same time, it should be noted that not everything is simple, because it is easy to fall into the trap of underestimating the elasticity that mindful running can generate. Focusing on the experience generated in the present during a run is not something that can happen horizontally, that is, without learning. Motivation, order, and regularity are conditions that can determine the success of a proposal. There is no doubt that psychologists must work on developing protocols that regulate intensity levels, time, and the fusion of these with other aspects of individuality, such as movement needs, in order to minimize physical risks and emotional frustration (Chowdhury et al., 2024)

Running combined with mindfulness, both perceived as psychological intervention techniques, represent an integrated approach to health that unites the body and mind. Their joint integration into intervention programs is a major advance in applied psychology, as it provides effective techniques for improving well-being, preventing disorders, and amplifying resilience. Thus, rather than disparate activities, they offer a means for self-awareness, emotional balance, and sustained personal change (Altgassen et al., 2024).

Methodology

This research highlights the impact of running and mindfulness separately and together on people's quality of life and mental health. It also highlights the reasons behind the health benefits. This work is qualitative in nature and focuses on understanding, explaining, and interpreting the relationship between running, mindfulness, and mental health and well-being. The research uses this approach to go beyond the superficial interpretation of numbers and seek the meanings and understandings associated with these practices by participants. As Calle-Mollo (2023) mentions, in qualitative research, it is important to capture the 'contextually dense' configuration of social and human phenomena by formulating richer interpretations within particular frameworks, and this is part of the work to be done in this dissertation (Hernández-Flórez & Klimenko, 2025).

The study combines the method of reflective argumentation with literature (Rana et al., 2023) defines this method as the rational construction of a consensus that results from the rational presentation and opposition of reasons. This method integrates a series of arguments based on one's own experiences and a discourse with different theoretical angles, including critical reflection and a hermeneutic approach. In this case, the research involves an interpretation of the literature in order to rationalize it in the formulation of the problem and the theoretical argumentation.

Steps

Establishment of the object of study: the central theme of the article was defined—the practice of running and mindfulness and their impact on mental health and quality of life—specifying its relevance within the framework of health psychology (Alfaro & Livin, 2025).

Conducting secondary research: databases such as Scopus, Web of Science, ScienceDirect, Redalyc, and ERIC were searched, focusing on articles published between 2018 and 2025, to construct a relevant and up-to-date bibliographic analysis

Creation of analysis categories: the following three categories were defined: a) the practice of running as a physical and psychosocial activity, b) the practice of mindfulness as a psychological intervention, and c) the intersection of both practices in quality of life and mental health (Acosta et al., 2021).

Construction of the argument: an analytical body was assembled in which theoretical findings, empirical evidence, and critical reasoning were interconnected, ensuring logical cohesion between the categories (Torres-Ruíz, 2021)

Contrast and triangulation of the argument: the argument was contrasted with various theoretical points of view, particularly within clinical psychology, cognitive neuroscience, and social psychology, to strengthen the interpretive validity of the argument (Jimenez-Chávez, 2020).

Stages of development

Exploratory stage: the researcher began by reviewing the scientific literature to determine the main themes and gaps to be investigated.

Analytical stage: the researcher sought to systematize the selected texts, constructing categorical matrices that aided comparative analysis and the search for underlying rules.

Reflective and argumentative stage: the researcher sought to integrate the findings into a critical discourse that linked the effects of running and mindfulness and their psychosocial impact, focusing on the pros and cons of their use.

Synthesis stage: the researcher sought to integrate the reflections into a structured and coherent framework that would allow him to write the article with an academic tone, theoretical background, and interpretive contributions.

Rigorousness and validity

The assurance of the validity of qualitative research through triangulation of sources (several databases, approaches from different disciplines, authors from different periods), and the coherent analytical critique of discourse, reflective merit, in the consideration of his mental records, framework of authenticity, and credibility of the study, are constituted by the author's reflexivity (Oberti & Bacci, 2023).

Results

Table 1. *Categories of analysis*

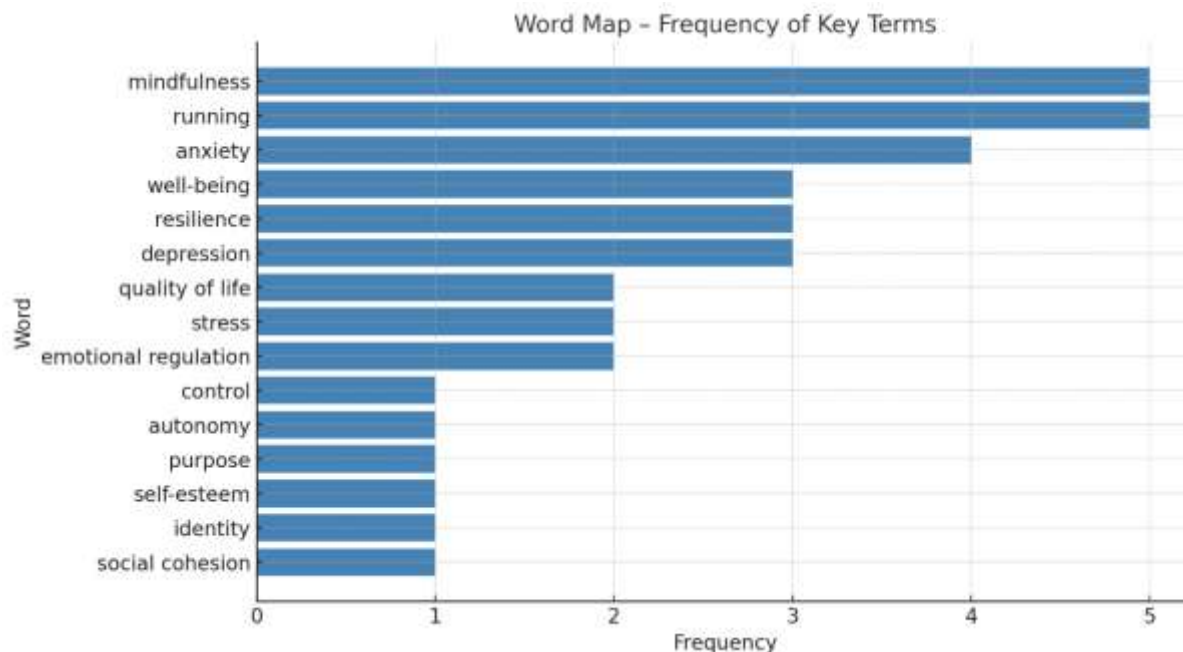
In the results section, the authors combine qualitative analyses by category with the main representation of the word map and the heat concept map. Reflective arguments revealed central thematic axes regarding career, mindfulness, mental health, and quality of life, which emerged as the central interpretive frameworks of the study. These results highlight the impact of these practices on clinical, preventive, and psychosocial dimensions, particularly in reducing anxiety and depression, as well as increasing resilience and subjective well-being. The maps generated support these results by illustrating the overall hierarchical and conceptual density of the most common terms, thus providing strong visual support for the textual analysis. Collectively, the results offer a deep understanding of the intersections of physical exercise, mindfulness, and mental health. The corresponding analyses are presented below:

Categories	Analysis
Category 1. Running as a Physical and Psychosocial Activity	Documentary analysis suggests that running goes beyond the realm of physical activity to become a practice with psychosocial implications. The literature points to running's ability to reduce perceived stress, aid in sleep regulation, and increase the release of serotonin and endorphins. From a psychosocial perspective, running can be seen as a form of community interaction that reinforces group identity and social cohesion. The understanding of running as a protective factor against emotional disorders and as a coping strategy for anxiety and depression is the result of this duality between the physical and the social.

Category 2 Mindfulness as a Psychological Intervention Strategy	Argumentative reflection on mindfulness revealed that its effectiveness lies in the ability to train mindfulness to attend to thoughts, feelings, and bodily sensations without judgment. The studies reviewed agree that this practice helps to reduce levels of cognitive rumination, improves emotional regulation, and strengthens psychological resilience. In clinical settings, it has been used successfully to prevent relapses into depression and to treat anxiety disorders, thus establishing its position as a complement to traditional psychotherapeutic interventions. In short, mindfulness allows the person to inhabit the experience of the present in a more complete and adaptive way.
Category 3 Running mindfully	The intersection in this case offers a proposition that provides running with accentuated benefits that can only be attributed to mindfulness. This increase in benefit is corroborated in the experience of “subjective well-being.” It is also known that running with mindfulness helps with anxiety and positively impacts self-esteem due to increased body positivity. This note suggests a new model in psychological intervention by providing a justification where both the physical and mental can be sustained simultaneously. A. Body. Complete. By “diagonal” I mean the footprints of a body in the form of a contour. These represent a mixture of running and running with mindfulness in gentle curves and points that offer a differentiated aesthetic impression of wholeness.
Category 4 Quality of Life and Mental Well-being	The findings of the argumentative reflection allow us to affirm that running and mindfulness, individually or in combination, have an impact on quality of life and mental health. Research on the subject points to improvements in life satisfaction, emotional self-regulation, resilience, and purpose in life. These individuals experience increased self-control, personal autonomy, and structure in their lives. Consequently, the integration of these practices can be seen as preventive and therapeutic at different levels, from clinical and educational to community

Source: Own elaboration (2025)

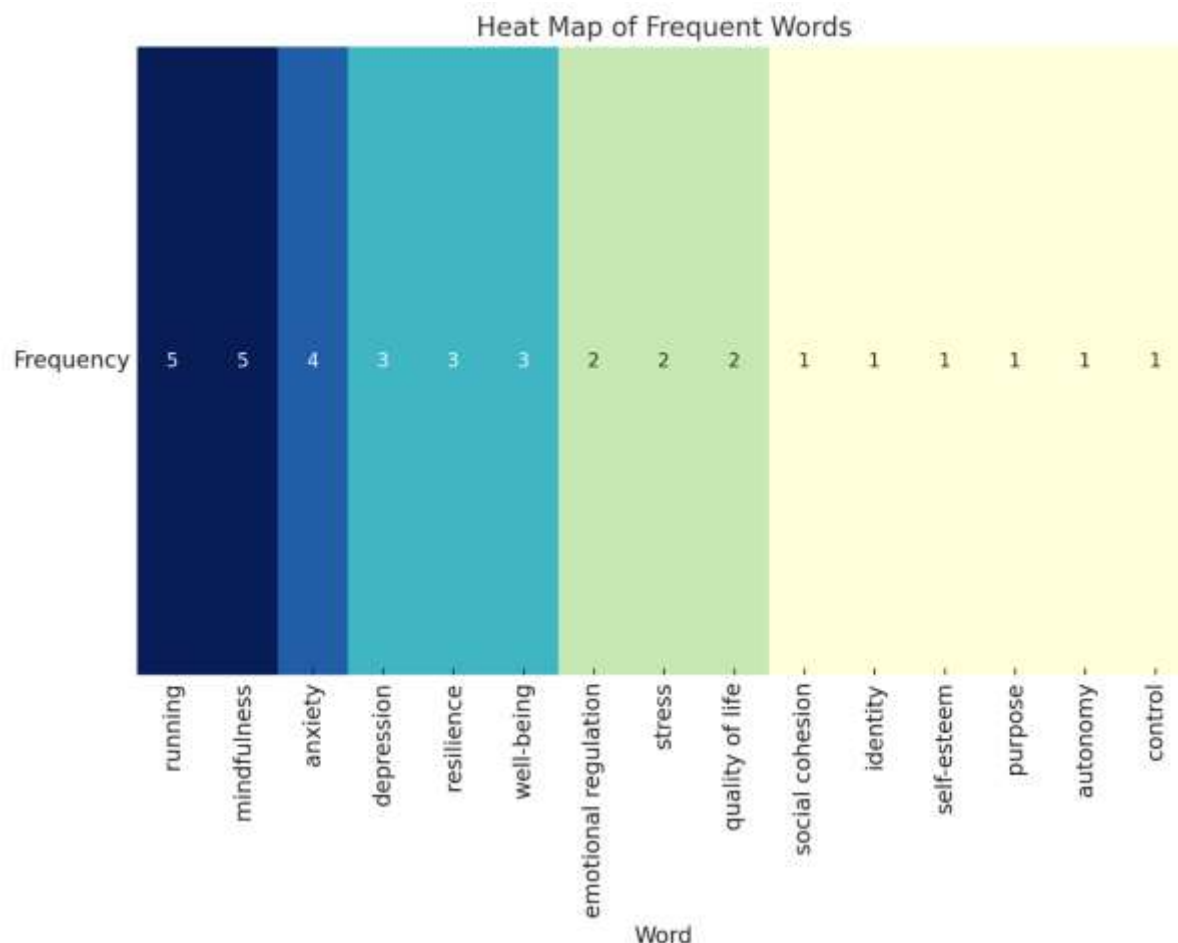
Figure 1. Word map



Source: Own elaboration (2025)

The word cloud analysis highlighted the most recurring words—running and mindfulness—which are the main focus of research in relation to discourse on the intersection of physical activity and psychological regulation. The prominence of concepts such as anxiety, depression, and even resilience illustrates the clinical and preventive importance of these practices in mental health issues. The recurrence of well-being and quality of life also documents the subjective appreciation and improvement of some psychosocial aspects. Self-esteem, autonomy, and control also suggest the empowering potential of the practices described. In relation to the map created, the underlying concepts between the body and the mind are, in fact, very dense, which supports the need to combine running and mindfulness in psychological interventions.

Figure 2. Heat map



Source: Own elaboration (2025)

The heat map facilitates more accurate visualizations of the intensity of recurrence of key concepts, highlighting running and mindfulness as the main dense semantic cores. Anxiety, depression, and resilience, along with the central concepts, show moderately lower frequencies, suggesting their anchoring role in explaining the psychological impact of these practices. Other terms, such as self-esteem, autonomy, and purpose, although showing low frequencies, play a fundamental role in extending the benefits beyond clinical settings to personal growth. Thus, the color gradient of the map demonstrates the existence of a conceptual hierarchy in which the most frequently mentioned constructs provide the main argumentative support, while the least mentioned act as peripheral and complementary categories that enrich the understanding of the discourse on running, mindfulness, and mental health.

Discussion

The results obtained confirm that running, in addition to being a form of physical exercise, is a means of psychological intervention with beneficial results for emotional regulation and stress and anxiety reduction. The frequency with which the terms anxiety and depression emerge in semantic maps supports the evidence that, according to Leunda-Goni (2023) aerobic exercise has a positive impact on the symptoms of these disorders. These findings are consistent with other research that identifies running as a protective factor for mental health due to the release of endorphins and the sense of mastery or control over oneself, thus contributing to individual resilience (Ceberio & Rodriguez, 2023).

Furthermore, the analysis determined that mindfulness stands out as an intervention technique that improves emotional self-regulation and resilience. Its frequent reappearance in the visual results corroborates that mindfulness not only alleviates cognitive rumination, but also increases the ability to cope with everyday stress. This result resonates with clinical studies where mindfulness has proven useful in preventing depressive relapses and treating anxiety disorders. Thus, the article provides conceptual evidence that mindfulness complements sports activities, supporting a multifaceted approach to intervention (Reynoso-Sánchez et al., 2025).

The results of integrating these practices highlight mindful running as an innovative approach that combines psychological and physiological aspects. Resilience, self-esteem, and quality of life emerge in the maps as categories that broaden the scope of the analysis to psychosocial dimensions. These findings indicate that mindful running not only provides clinical benefits but also improves identity and social cohesion. There is evidence that incorporating mindfulness into running practices improves concentration, body awareness, and a deeper level of subjective well-being (Pires et al., 2022)

The essence of the analysis focuses on the interrelationship of running, mindfulness, and quality of life. Purpose and autonomy, reflected in the visual analysis, suggest that the practices contribute to the expansive development of meaning in life, which is a valuable contribution to health psychology. These findings point to the value of preventive mental health interventions that combine mindful exercise (Jones & Drummond, 2023). The article argues, and indeed confirms, that the integration of body and mind provides new avenues for addressing mental health issues through therapeutic, educational, and health promotion engagement in the community (Ramteke, 2025).

The results obtained confirm that running, in addition to being a form of physical exercise, is a means of psychological intervention with beneficial results for emotional regulation and stress and anxiety reduction. The frequency with which the terms anxiety and depression emerge in semantic maps supports the evidence that aerobic exercise has a positive impact on the symptoms of these disorders. These findings are consistent with other research that identifies running as a protective factor for mental health due to the release of endorphins and the sense of mastery or control over oneself, thus contributing to individual resilience (Johles et al., 2025).

In addition, the analysis determined that mindfulness stands out as an intervention technique that improves emotional self-regulation and resilience. Its frequent reappearance in the visual results corroborates that mindfulness not only alleviates cognitive rumination but also increases the ability to cope with everyday stress. This result resonates with clinical studies where mindfulness has proven useful in preventing depressive relapses and treating anxiety disorders. Thus, the article provides conceptual evidence that mindfulness is a complement to sports activity, supporting a multifaceted approach to intervention (Release, 2025).

The essence of the analysis focuses on the interrelationship between running, mindfulness, and quality of life. Purpose and autonomy, reflected in the visual analysis, suggest that the practices contribute to the expansive development of meaning in life, which is a valuable contribution to health psychology. These findings point to the value of preventive mental health interventions that combine mindful exercise. The article argues, and indeed confirms, that the integration of body and mind provides new avenues for addressing mental health issues through therapeutic, educational, and health promotion engagement in the community (Hahn et al., 2021).

Improved quality of life, among other indicators, represents the main benefit of integrating running and mindfulness, fully supported by the literature. Integrating running and mindfulness improves indicators of well-being, listener sleep, and listener vitality, with subjective perceptions of life satisfaction and well-being. Certain practices, especially those correlated with the extended running and mindfulness method, have demonstrated improved emotional balance and a life with purpose, which translates into stronger and more meaningful social and personal projects in development (Deb et al., 2023).

From a psychological perspective, running and mindfulness can be understood as preventive and therapeutic intervention methods. Their inclusion in clinical programs that alleviate symptoms of anxiety and depression while improving emotional self-regulation is a welcome addition. Furthermore, these practices foster resilience as a vital resource for coping with adversity. In this sense, the result corroborates studies that emphasize the effectiveness of mindfulness-based interventions in modulating stress response and reducing rumination. Thus, it creates avenues for their use in clinical and psychoeducational settings (Cassar et al., 2022).

A relevant aspect is that the combination of running and mindfulness transcends the individual to also affect the psychosocial dimension. When practiced in community settings, these activities improve social cohesion and create collective support networks. This is particularly important for marginalized groups with limited access to conventional therapeutic resources. The findings indicate that interventions rooted in these practices can help foster more resilient and healthy communities, thereby contributing to the promotion of collective mental health (Muñoz-Arroyave et al., 2023).

Finally, the results suggest that the increased quality of life associated with mindful running and mindfulness practice is articulated with positive psychology, which interdisciplinarily addresses mental health, not only as the absence of illness, but also as the development of potential. By cultivating self-control, autonomy, and self-esteem, these practices impact people's overall well-being (García-Alvarez et al., 2021). This empowers running and mindfulness as concomitant interventions that, in addition to alleviating discomfort, strengthen personal resources that support self-realization and human flourishing, thus offering a coherent framework for intervention. The principles of contemporary psychology are fully embraced in these findings.

Conclusions

The results show how running and mindfulness have positive impacts on the mental health and quality of life of those who practice them. The results also show how practicing these activities reduces symptoms of anxiety and depression, while improving emotional resilience and self-regulation. This approach is further supported by the use of qualitative reflection based on argumentation aided by semantic maps. This approach confirms that running and mindfulness together have positive impacts beyond the physiological, providing holistic well-being.

As far as we understand, applying mindfulness to running enhances the benefits of both, developing an intervention model known as “mindful running.” This model not only strengthens the body and mind but also improves certain cognitive skills, such as attention and concentration. Integration fosters a deeper sense of purpose, autonomy, and self-efficacy, which is positively correlated with subjective well-being. The mindful career approach is useful and novel, as described in health psychology; therefore, the study further confirms its value.

With regard to the psychosocial impact, the results highlight the cohesion and support systems that these practices foster, especially when implemented in community settings. The social aspects of running and mindful jogging offer opportunities for socialisation that enhance individual and collective well-being, sustaining and supporting collaborative efforts. This approach is important for understanding quality of life from a holistic perspective, in which life is not measured solely by physical or emotional indicators.

Finally, the report underscores the importance of conducting future research to empirically evaluate the effects of running and mindfulness in various areas of clinical, educational, and community practice. Although this study provides a solid conceptual foundation, grounded in argumentative reflection, it is also imperative to design frameworks aimed at systematically capturing alterations in mental health and quality of life. In this way, the present research lays the groundwork for further inquiry into the unification of body and mind as integral components of human well-being, and provides sustainable and widely available options for contemporary psychology.

References

- Acosta-Luis, D., Rodríguez-López, W., Peñaherrera-Larenas, M., García-Hevia, S., & Mendoza, Y. (2021). Metodología de la investigación en la educación superior. *Revista Universidad y Sociedad*, 283–293.
- Alfaro, Q., & Livin, G. (2025). La Síntesis Reflexiva : Arte y Método para la Discusión , Conclusión y La Síntesis Reflexiva : Arte y Método para la Discusión , Conclusión y Recomendaciones en la Investigación Social Reflective Synthesis : Art and Method for Discussion , Conclusion and . *Researchgate*.
- Altgassen, E., Geiger, M., & Wilhelm, O. (2024). Do you mind a closer look ? A jingle-jangle fallacy perspective on mindfulness. *European Journal of Personality*, 38(2), 365–387. <https://doi.org/10.1177/08902070231174575>
- Avello-Viveros, C., Ulloa-Mendoza, R., Durán-Aguero, S., Carrasco-Castro, R., & Pizarro-Mena, R. (2022). Asociación entre nivel de Actividad Física, y Motivación en personas mayores que practican Running. *Retos: Nuevas Perspectivas de Educación Física, Deporte y Recreación*, 46, 431–441. <https://ezproxy.rgu.ac.uk/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=s3h&AN=164234918&site=ehost-live&scope=site>
- Bulğay, C., Ozan, E., Bayraktar, I., & Çetin, E. (2022). Athletic performance and mindfulness in track and field athletes. *Current Psychology*, 41, 4482–4489.
- Calle-Mollo, S. (2023). Diseños de investigación cualitativa y cuantitativa. *Ciencia Latina*, 7(4), 1865–1879.
- Cárdenas, A. (2022). Mindfulness y running. *Memoria Académica*, 1–19.
- Cassar, L., Fisher, M., & Valero, V. (2022). Keep Calm and Carry On : The Short- vs . Long-Run Effects of Mindfulness Meditation on (Academic) Performance Keep Calm and Carry On : The Short- vs . Long-Run Effects of Mindfulness Meditation on (Academic) Performance. *Discussion Paper Series*, 15723.
- Ceberio, M. R., & Rodríguez, S. T. (2023). El mindfulness y el estrés en el corredor de ultra trail. *Persona*, 26(2), 75–95.
- Chowdhury, A., Lutterveld, R. Van, Laukkonen, R. E., Slagter, H. A., Ingram, D. M., & Sacchet, M. D. (2024). Neuropsychologia Corrigendum : Investigation of advanced mindfulness meditation cessation experiences using EEG spectral analysis in an intensively sampled case study. *Neuropsychologia*, 203(August), 108972. <https://doi.org/10.1016/j.neuropsychologia.2024.108972>
- Deb, M., Sharma, V. K., & Panchapakesan, P. (2023). Sustainable practices , mindfulness , tranquility , and well-being : A mixed- method approach. *Journal of Destination Marketing & Management*, 30(December).
- García-Alvarez, A., Suarez-Jimenez, R., & Rebollo.Meza, J. (2021). The mindfulness in athletes and athletes. *Revista de Investigaciones Universidad Del Quindío*, 33(1), 97–103.
- Gil, G. J. (2020). Morality, virtue and emotions in running. Ethnographic approaches to a lifestyle in contemporary Argentina. *Sociologia e Antropologia*, 10(2), 537–559. <https://doi.org/10.1590/2238-38752020V1029>
- Hahn, E., Hahne, I., & Zierhut, M. (2021). The Relationship Between Mindfulness , Depression , Anxiety , and Quality of Life in Individuals With Schizophrenia Spectrum Disorders. *Frontiers in Psychology*, 12(August). <https://doi.org/10.3389/fpsyg.2021.708808>

- Hernández-Flórez, N., & Klimenko, O. (2025). Research methodology , qualitative , quantitative , and mixed approaches. *Nexus: Multidisciplinary Research Journal (MIR)*, 2(3), 1–19.
- Hill, A., Schücker, L., Wiese, M., Hagemann, N., & Strauß, B. (2025). running economy and perceived flow under different attentional focus conditions – an intervention study. *International Journal of Sport and Exercise Psychology*, 4(1).
- Jimenez-Chávez, V. (2020). Triangulación metodológica cualitativa y cuantitativa. *Revista Sobre Estudios e Investigaciones Del Saber Académico*, 14, 76–81.
- Johles, L., Molander, P., & Lundqvist, C. (2025). The role of mindfulness in improving quality of life among student-athletes : a pilot mediation study. *Frontiers in Psychology*, April, 1–8. <https://doi.org/10.3389/fpsyg.2025.1479584>
- Jones, P., & Drummond, P. (2023). Construction and evaluation of a mindfulness-based quality of life and well-being program (MQW) in a randomized trial. *Current Psychology*, 42(17), 14782–14803. <https://doi.org/10.1007/s12144-021-02672-w>
- Lestari, U., & Mardikaningsi, R. (2020). Effect of leadership behavior and work climate on employee performance. *Journal of Science*, 1(1), 5–12. <https://ejournalsico.com/index.php/sico/article/view/15/14>
- Leunda-Goni, I. (2023). Exercise Dependence in Endurance Sports: Relationship to Sport Motivation and Exercise Identity. *Retos*, 51, 455–469. <https://doi.org/10.47197/retos.v51.99218>
- Lobato-Macho, E. (2022). Propuesta de intervención hacia la promoción de hábitos de vida saludables a través del running y el ciclismo. *Trabajo d Egrado Universidad de Sevilla*, 1–117.
- Muñoz-Arroyave, V., Lavega-Burgués, P., Serna, J., & March-Llanes, J. (2023). Incidence of mindfulness practices , sporting trajectory and gender on mood states of future trainers. *Cultura Ciencia y Deporte*, 18(57), 57–66.
- Oberti, A., & Bacci, C. (2023). Metodología De La Investigación. *Facultad de Humanidades y Ciencias de La Educación Universidad Nacional de La Plata*, 49–78. <https://doi.org/10.22533/at.ed.6962318094>
- Oswald, F., Campbell, J., Williamson, C., Richards, J., & Kelly, P. (2020). A scoping review of the relationship between running and mental health. *International Journal of Environmental Research and Public Health*, 17(21), 1–39. <https://doi.org/10.3390/ijerph17218059>
- Pedroso-Moreira, D., Schneider, V., & Ferrari, R. (2023). Quality of Life and Association with Running Habits in Middle-Aged Street Runners: A Cross-Sectional Study. *International Journal of Physical Education, Fitness and Sports*, 12(4), 16–22. <https://doi.org/10.54392/ijpefs2342>
- Pires, R. N., Mentz, W., Granemann, R., Rossi, E. R., Marques, C. M., Cristina, I., Coelho, M., & Mello, R. G. (2022). Evaluation of interventions that promote the quality of life of medical students : a systematic review. *Revista Española de Educación Médica*, 2, 65–79. <https://doi.org/10.6018/edumed.514541>
- Ramteke, S. U. (2025). Effect of mindfulness training in adjunct to conventional physiotherapy on pain , function , and mindfulness attention awareness score in recreational long distance runners with patellofemoral pain syndrome : A randomized controlled trial. *F1000research*, 13(626), 1–13.
- Rana, K., Poudel, P., & Chimoriya, R. (2023). Qualitative Methodology in Translational Health Research: Current Practices and Future Directions. *Healthcare (Switzerland)*, 11(19), 1–16. <https://doi.org/10.3390/healthcare11192665>
- Release, P. (2025). Making Mindfulness Matter © May Improve Quality of Life in Young Children With

- Epilepsy : Pilot RCT. *Pediatrics Open Science*. <https://doi.org/10.1542/pedsos.2025-000585>
- Reynoso-Sánchez, L. F., Sepúlveda-Soto, N. A., Flores-Moreno, P. J., & Lagunes-Carrasco, J. O. (2025). Predictores de estrés , recuperación y dolor asociado al running en corredores amateur. *Bioc Scientia*, 1(1), 1–14.
- Robin, N., Remskar, M., Western, M. J., Maynard, O. M., & Ainsworth, B. (2022). Exercising body but not mind : A qualitative exploration of attitudes to combining physical activity and mindfulness practice for mental health promotion. *Frontiers in Psychology*, 1–13. <https://doi.org/10.3389/fpsyg.2022.984232>
- Rodríguez-Feilberg, N. (2023). Los días más felices son en movimiento. El running como estilo de vida. *Memoria Académica*, 1–303. www.memoria.fahce.unlp.edu.ar
- Rojas-Sequeda, L. A., & Rojas-Murillo, F. A. (2020). Ansiedad Precompetitiva en Atletas Recreativos del Club Running Machines de San José de Cúcuta. *Academia*. http://repositoriodspace.unipamplona.edu.co/jspui/bitstream/20.500.12744/5105/1/Rojas_Rojas_2020_TG.pdf
- Torres-Ruíz, A. (2021). El transitar en la investigación cualitativa: un acercamiento a la triangulación. *Revista Científica*, 275–295.
- Waleriańczyk, W., & Stolarski, M. (2021). Personality and sport performance: The role of perfectionism, Big Five traits, and anticipated performance in predicting the results of distance running competitions. *Personality and Individual Differences*, 169(March), 109993. <https://doi.org/10.1016/j.paid.2020.109993>
- Wang, Y., Tian, J., & Yang, Q. (2021). On Mindfulness Training for Promoting Mental Toughness of Female College Students in Endurance Exercise. *Hindawi Evidence-Based Complementary and Alternative Medicine*, 21, 1–12.
- Yu, X., Cohen, Z. P., Tsuchiyagaito, A., Cochran, G., Aupperle, R. L., Stewart, J. L., Singh, M. K., Misaki, M., Bodurka, J., Paulus, M. P., & Kirlic, N. (2022). Neurofeedback-Augmented Mindfulness Training Elicits Distinct Responses in the Subregions of the Insular Cortex in Healthy Adolescents. *Brain Sciences*, 12(363). <https://doi.org/https://doi.org/10.3390/brainsci12030363>
- Zhang, J., Raya, J., Mor, F., Urban, Z., Pagliaccio, D., Auerbach, R. P., Bauer, C. C. C., & Whit, S. (2023). Reducing default mode network connectivity with mindfulness- based fMRI neurofeedback : a pilot study among adolescents with affective disorder history. *Molecular Psychiatry*, 28, 2540–2548. <https://doi.org/10.1038/s41380-023-02032-z>