

Clowning as a catalyst for creativity and expression in the sciences of human movement.

El payaso como catalizador de la creatividad y la expresión en las ciencias del movimiento humano.

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Abstract: Through bodily expression, clowning reveals the infinite potential of the body to communicate, express emotions, and connect with others. This approach challenges established conventions and encouraged us to explore the limits of our bodies, freeing ourselves from physical and mental constraints, including those imposed by society. Consequently, the study of movement in clowning can contribute to understanding various areas of human movement, revealing fundamental principles. Additionally, clowning promotes the importance of emotional and creative expression through movement, showing how our internal experiences manifest in the body and how they can awaken new areas of development. In this sense, the psychology of movement helps us understand how our emotions affect our performance and decision-making. Moreover, clowning has practical applications such as movement therapy and sports performance, where it fosters emotional expression, nonverbal communication, and stress management. Clowning and the human movement sciences complement each other, inspiring us to explore new forms of communication, authentic expression, and connection with others through the body.

Key Words: creativity; emotions; bodily communication; expression; movement therapy

Resumen: A través de la expresión corporal, el arte del clown revela el potencial infinito del cuerpo para comunicarse, expresar emociones y conectar con los demás. Este enfoque desafía las convenciones establecidas y nos anima a explorar los límites de nuestro cuerpo, liberándonos de las restricciones físicas y mentales, incluidas las impuestas por la sociedad. En consecuencia, el estudio del movimiento en el arte del clown puede contribuir a comprender diversas áreas del movimiento humano, revelando principios fundamentales. Además, el arte del payaso promueve la importancia de la expresión emocional y creativa a través del movimiento, mostrando cómo nuestras experiencias internas se manifiestan en el cuerpo y cómo pueden despertar nuevas áreas de desarrollo. En este sentido, la psicología del movimiento nos ayuda a comprender cómo nuestras emociones afectan nuestro rendimiento y nuestra toma de decisiones. Además, el arte del payaso tiene aplicaciones prácticas, como la terapia del movimiento y el rendimiento deportivo, donde fomenta la expresión emocional, la comunicación no verbal y el manejo del estrés. El clown y las ciencias del movimiento humano se complementan entre sí, inspirándonos a explorar nuevas formas de comunicación, expresión auténtica y conexión con los demás a través del cuerpo.

Palabras clave: creatividad; emociones; comunicación corporal; expresión; terapia de movimiento

Introduction

Clowning and the science of human movement are two seemingly distant fields of study, but they are deeply and fascinatingly connected. On one hand, clowning is an artistic expression based on comedy, improvisation, and interaction with the audience (Nuttman-Shwartz et al., 2010). On the other hand, human movement science focuses on studying and understanding how we move, from biomechanics to exercise psychology. At first glance, clowning and human movement science may appear on opposite ends: one centred on entertainment and creativity (Schoner, 1995). At the same time, the other is based on scientific research and understanding of the human body. However, upon closer inspection, we see that the potential role of clowning in the science of human movement goes beyond the surface (Gray et al., 2021; Rawson & Bryden, 2022). Clowning as a theatrical representation involves high body awareness and movement control. Clowns use their bodies expressively with exaggerated gestures, poses, and movements to convey emotions and elicit a reaction from the audience (Nuttman-Shwartz et al., 2010).

By exploring bodily expression, clowning shows us the infinite possibilities of human movement and how we communicate and connect through our bodies (Marshall, 2013). In the science of human movement, it is crucial to understand how we move and how our emotions and thoughts affect our movement. For example, biomechanics analyses the forces and mechanisms acting on our body during movement (Zheng & Barrentine, 2000). Sports psychology studies how our emotions, mental states, and cognitive processes influence our performance and movement experience (Anderson et al., 2014). This is where clowning can play an appropriate role. By focusing on emotional expression and interaction with the audience, clowning can serve as an area of research and experimentation to understand the relationship between emotions, body language, and human movement. Through clown practice, emotions can be explored and amplified, understanding how they affect how we move and how we can consciously use movement to communicate and express emotions effectively and reduce clinical symptoms such as pain (Pérez-Aranda et al., 2019).

Clowning can also have practical applications in the science of human movement. For example, in exercise therapy, clowning can be a therapeutic tool to help individuals explore and express repressed emotions, increase body awareness, and promote nonverbal communication (Dionigi & Canestrari, 2016; Kurudirek et al., 2021; Ofer & Keisari, 2022; Samoilov & Goldfried, 2000). In sports and athletic performance, clowning can assist athletes in stress management, improving physical expression and communication, and enhancing overall performance (Anderson et al., 2014).

Clowning and its relationship with human movement.

Clowning and its relationship with human movement is a fascinating connection beyond fun and artistic expression. Human movement is a form of nonverbal communication that includes gestures, posture, and body language. As a form of dramatic expression, clowning uses the body as the main tool to express emotions, evoke laughter, and communicate with the masses (Holland et al., 2023; Linge, 2008; Shefer et al., 2019). In a clowning show, it is created comic characters of tremendous humanity through unusual and unconventional movements to capture the viewer's attention and elicit an emotional response from the audience. The clown explores various operational possibilities outside traditional models through exaggeration and theatricality. This study of the clowning movement has interesting implications for human movement science.

For example, in biomechanics, which studies the forces and mechanisms that affect human movement, clowning can provide a unique perspective on flexibility, coordination, and movement efficiency. Clown body language breaks the rules and allow for the exploration of the limits of

flexibility and adaptability of the human body (Gordon, 1974). Additionally, clowning could influence studies of dynamics and kinematics, which focus on analysing human movement from a quantitative perspective. Clowns are masters at controlling their bodies and creating fluid and precise movements. Observing and analysing the movements of clowning can lead to a better understanding of basic biomechanical principles such as stability, balance, coordination, and the relationship between force and movement (Kashuba, 2018).

Another interesting aspect is the connection between clowning and the expression of emotions through movement. Clowning can explore and amplify emotions through gestures and body movements, which can be significant for studies in sports psychology. Body expressions in clowning performances can help release repressed emotions and promote authenticity in nonverbal communication. It can impact emotional well-being and the quality of interpersonal interactions in different settings (Auerbach et al., 2016; Dionigi & Canestrari, 2016). In addition to its relevance to human movement science, clowning has applications in fields such as exercise therapy and physical education. In exercise therapy, clowning is used as a therapeutic tool to help individuals explore and express emotions through movement, stimulate creativity, and promote the development of physical and social skills. In physical education, clowning can be used as a teaching strategy to encourage active participation, fun, and physical expression in children.

Clowning and corporal expression

Clown can make a tiny gesture huge and have the ability to convey emotions through movement. Clowns use their bodies as vehicles to communicate and interact with the audience. Using unusual gestures and movements, they can evoke emotions and reactions from the audience. This ability to convey emotions through physical expression is of great interest to the science of human movement (Farneti & Palloni, 2010; Mireault et al., 2012). Disciplines such as biomechanics and kinesiology focus on the study of human movement and its relationship to performance and health. Considering the role of clowning in these disciplines opens the door to a more comprehensive understanding of how emotional and physical expression affects human performance. For example, analysing the gestures and movements of a clown can provide insights into how to improve the efficiency and quality of movements in various sports and physical activities. In addition to its connection to biomechanics and kinesiology, clowning also influences sports psychology. Sports psychology deals with the cognitive, emotional, and motivational aspects of human movement. It examines how experiences, emotions, and thoughts influence our actions and how these influences, in turn, impact our sense of well-being.

Clowning and body expression are intimately linked. In the world of clowning, the body is the most important tool clowns must convey emotions, tell a story, and create an emotional response. Through the body, clowning creates a character and conveys a message without words. Body expression in clowning goes beyond simply performing movements. It is a form of nonverbal communication that involves the conscious and expressive use of the entire body. Clowns make the most of every muscle and joint to convey emotions and tell stories in a vivid and dynamic way (Kontos et al., 2020). Body expression in clowning requires a high level of body awareness and control. Clowns train their ability to move with precision and fluidity, adapting their body language to each character and situation. Every gesture, every movement, has a purpose and intention behind it and is carefully designed to convey a specific emotion or message. One of the distinctive features of clowning is exaggeration. Clowns amplify and emphasize gestures and movements to achieve comedic effects and provoke emotional responses from the audience. This exaggeration involves the use of big and flashy movements and the exploration of more subtle and delicate movements that can convey a wide range of emotions and nuances (Hendriks, 2012; Mitchell, 1992).

Through body expression in clowning, different emotional states can be represented and explored, from joy and happiness to sadness and melancholy. Clowning can create characters with clumsy and uncoordinated movements to provoke laughter, or more delicate and graceful characters to generate subtle and touching emotions (Farneti & Palloni, 2010; Mireault et al., 2012). Body expression in clowning also involves close interaction with the audience. Clowns use their bodies as a tool for direct communication, establishing an emotional connection with spectators through gestures, looks, and postures. This interaction can generate empathy, complicity, and active participation from the audience, making them an integral part of the clowning experience (Finlay et al., 2014). In addition to its impact on theatrical performance, body expression in clowning also has applications in other fields. For example, in movement therapy, clowning is a therapeutic tool to encourage emotional expression and nonverbal communication in individuals with emotional or developmental difficulties. Using body expression in a therapeutic context can help people explore and express emotions safely and creatively (Linge, 2011).

Clowning and movement psychology

In addition to its connection with biomechanics and kinesiology, clowning also impacts sports psychology. Sports psychology deals with human movement's cognitive, emotional, and motivational aspects. It examines how experiences, emotions, and thoughts influence our actions and how these influences, in turn, affect our sense of well-being (Caci et al., 2023; Lopes-Júnior et al., 2020; van Rens & Filho, 2021). Clowning and sports psychology are closely related, focusing on the connection between emotions, body language, and human movement. As a form of artistic expression, clowning can significantly influence people's emotional state, affecting their actions. Sports psychology studies how experience, emotional states, and cognitive processes influence our performance and movement experience. It has been shown that emotions play a crucial role in motivation, decision-making, and human movement quality (Ross & Shapiro, 2017). Clowning can be a powerful tool for exploring and understanding these relationships by emphasising emotional expression and interaction with the audience. Clowns use facial expressions, gestures, and exaggerated body movements to express specific emotions (Linge, 2008).

These emotional expressions can directly impact the viewer's emotional state, whether they evoke laughter, surprise, sympathy, or any other emotional response (Morris & Keltner, 2000). These emotions affect how a person moves, interacts, and experiences the world around them. In sports psychology, clowning can be a therapeutic or intervention tool to explore and change people's emotional responses and movement patterns. For example, in exercise therapy, clowns can help individuals explore and express repressed emotions or develop greater physical and emotional awareness. Since the inclusion of laughter as a therapeutic form is an aspect that has been worked on since ancient times (Plaza & Martinez, 2015). In this sense, it is important to mention the work carried out by The non-governmental organization Clown Without Border in all those armed conflicts where civilian population is threatened. Laughing is beneficial for both physical and mental health as it can help improve self-esteem, self-confidence, and the quality of your workouts. Additionally, clowning has applications in sports and athletic performance. Athletes often face many emotional and mental challenges, such as stress, pressure, and anxiety. Incorporating an element of clowning in sports preparation and practice can help athletes manage these emotions, foster greater physical expression and communication, and enhance their overall performance.

Clowning, body expression, and creativity in the current context

Currently, clown performances, physical expression, and creativity play a vital role in our society (Hendriks, 2023; Lewis, 2004). As we face constant challenges and changes, the ability to express ourselves and authentically connect with others becomes even more important. By focusing on physical expression and creativity, clowning can provide space for exploration and release in an increasingly complex world. Clowning as an artistic expression invites us to embrace our individuality and explore the diversity we can express through our bodies. Through gestures, movements, and postures, we can convey emotions, transmit information, and uniquely communicate with others. In a world where spoken words are often valued more, clowning reminds us of the importance of nonverbal communication and how the body can be a powerful means of expression. The physical manifestation of clowning allows us to explore and expand our physical and emotional boundaries. By using our bodies creatively and freely, we can discover new ways of communicating, feel emotions more deeply, and connect with our inner selves. The physical expression of the clown is an act of authenticity and courage, where we allow ourselves to be vulnerable and free ourselves from imposed social and cultural limitations (Henriksen et al., 2018; Leavy, 2002; Lewis, 2004).

In the current environment, where we are often immersed in demanding and fast-paced daily life, clowning and body language provide us with a space to explore creativity. Creating and performing through movement and physical expression allows us to step out of our comfort zone, experience new ways of being, and discover new perspectives. The clown's creativity is manifested in their ability to improvise, think outside the box, and embrace spontaneity. Clowning, physical expression, and creativity can make a significant difference in today's diverse environment (Henriksen et al., 2018; Leavy, 2002; Lewis, 2004). For example, in the field of education, promoting physical activity and creativity in students can foster critical thinking, problem-solving, and social skills development (Henriksen et al., 2018). Similarly, in business, fostering physical expression and creativity can stimulate innovation, cooperation, and adaptability in a changing environment. Additionally, clowning, physical expression, and creativity can play an important role in mental health and well-being (Linge, 2008). Through physical expression, we can release tense emotions, reduce stress, and strengthen the mind-body connection. By focusing on fun and laughter, clowning shows can be therapeutic and promote positive emotions.

Conclusions

In conclusion, clowning and its relationship with the science of human movement provide us with a unique and rich perspective. Through physical expression, clowning shows the limitless possibilities of our bodies to communicate, express emotions, and connect with others. On the other hand, the science of human movement provides us with a scientific framework to understand how we move and how emotions affect our movement. Clowning invites us to explore the limits of our bodies and challenge accepted conventions. Through exaggeration, improvisation, and creativity, clowning shows us new possibilities of movement and encourages us to free ourselves from physical and mental limitations. This study of clown movement contributes to the study of biomechanics, dynamics, and kinematics, allowing us to better understand the foundations of human movement.

Furthermore, clowning also shows us the importance of expressing emotions through action. The connection between emotions, body expressions, and human movements is crucial for understanding how our internal experiences manifest in our bodies. The study of clown body expressions can inform research in sports psychology and help us understand how our emotions affect performance, decision-making, and the quality of movement. The potential role of clowning

in human movement science is not limited to theory and research; it also has practical applications. Clowning can be used in exercise therapy to promote emotional expression, nonverbal communication, and increased body awareness. Additionally, in sports and athletic performance, clowning can assist with stress management, the development of physical communication skills, and overall performance improvement.

After all, clowning and the science of human movement complement and enhance each other. Clowning inspires us to explore, be authentic, and use our bodies as tools for expression and communication. The science of human movement provides us with a scientific and theoretical framework to better understand the principles and processes of human movement. Together, clowning and the science of human movement invite us to explore new ways of communicating, authentically expressing emotions, and discovering the extraordinary capacity of our bodies to connect with others.

Future Research Lines

Future directions for research in the science of human movement and clowning offer a broad and promising field for research and knowledge development. Several areas emerge that could benefit from further research and analysis. One interesting direction of research could be the use of clowning in physical and emotional rehabilitation. By focusing on physical expression, nonverbal communication, and emotional connection, clowning can be an effective therapeutic tool to help people recover from injury, overcome trauma, and improve their overall well-being. Investigating the effects of clowning on healing could provide new perspectives and approaches to addressing individuals' physical and mental challenges. Another promising area of research could be the use of clowning in education. Research on how clown performances enhance student learning, and foster creativity, and empathy can significantly affect education. Understanding how clowning performances stimulate the development of critical thinking, collaboration, and social skills can help develop more effective student-centred educational strategies.

Studying how clowning affects sports performance and elite sports would also be interesting. Investigating how the principles and techniques of clowning improve athletes' nonverbal communication, body language, and stress management can significantly impact sports performance. Understanding how clowning can help athletes enhance their performance, strengthen their connection with the audience, and develop a more resilient mindset could be a valuable area of research. Lastly, it is also important to explore how clowning is used as a tool to promote social inclusion and diversity. In an increasingly global and diverse world, exploring how clowning promotes acceptance, breaks cultural barriers, and fosters intercultural dialogue can be highly interesting. Exploring the impact of clowning on promoting values such as respect, tolerance, and peace can help develop more inclusive and harmonious societies.

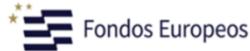
Institutional Review Board Statement

The study was conducted in accordance with the Declaration of Helsinki and approved by the Institutional Review Board (79/2022) of the University of Extremadura for studies involving humans.

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