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Creativity in BMX: What Is It, What Does It Look Like, and What Contributes to It?

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ABSTRACT

This study explores the multifaceted nature of creativity in BMX riding by examining how riders interact with their physical and social environments to produce innovative movements and trail designs. Grounded in Perspective-Affordance Theory and the principles of embodied cognition, the research highlights that creativity in BMX emerges from the interplay between an individual's shifting perspective and the environmental affordances available in urban and natural settings. Semi-structured interviews with 26 BMX riders reveal that creativity in BMX is embedded in physical action, community dynamics, and the negotiation of risk and failure. The findings underscore the importance of socio-cultural support and individual risk-taking in shaping creative practices, offering new insights into how embodied experiences and environmental interactions drive creativity in action sports.

1 | Introduction

Creativity has been studied across a wide range of domains (Kaufman et al. 2017); however, research on embodied creativity, particularly in action sports like Bicycle motocross (BMX), remains underexplored. While traditional cognitive approaches have long dominated the creativity literature, there is growing recognition of the importance of examining creativity through embodied and sociocultural lenses (Glăveanu et al. 2020; Malinin 2019).

Circus, dance, and BMX all exemplify embodied creativity yet show interesting patterns of similarity and difference when it comes to both context and process. For example, circus has recently been explored as a mode of embodied creativity (Richard et al. 2023), whereas dance has been examined through a choreographic lens that Allsopp and Lepecki (2008) describe as an intricate fusion of movement and writing. In dance, creative enactment¹ often occurs within controlled environments like studios or theaters, where the choreographic process emphasizes

predefined movement patterns and systematic documentation. This structured approach contrasts with the fluid nature of circus and BMX creativity.

Circus shares the embodied foundation of dance and typically blends structured and improvisational practices. This mode of creativity aligns more closely with BMX, where the creative process is grounded in the dynamic interaction between the rider, their bike, and a constantly changing environment (Camilleri 2024). BMX creativity thrives on situational affordances—urban landscapes, varied terrains, and unexpected obstacles—which necessitate immediate and adaptive responses with elements of risk-taking, technical skill, and socio-cultural interaction (Camilleri and Katz 2025). This underscores that although all three domains are embodied, their creative processes are distinctly shaped by their specific contexts and practices.

Drawing upon theories of embodied cognition (Nguyen and Larson 2015), Perspective-Affordance Theory (PAT) (Glăveanu 2020), and distributed creativity (Glăveanu

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et al. 2020; Richard et al. 2023), we investigate creativity within the context of BMX riding. These frameworks were selected for their ability to provide a nuanced understanding of creativity as a process that is situated in the body, the environment, and social interactions. Embodied cognition emphasizes that cognitive processes are integral to the body's interactions with the world (Varela et al. 1991). On the other hand, PAT builds on ecological psychology to explain how creativity arises from the interaction between individual perspectives and environmental affordances, suggesting that new creative possibilities emerge when riders shift their perspective on their surroundings (Gibson 1977; Glăveanu 2020). Distributed creativity further supports this by highlighting the collaborative and collective aspects of creativity, where ideas and innovations are shared and refined within a community (Glăveanu et al. 2020).

This study sought to add to the growing body of literature around embodied creativity by focusing on BMX, an understudied domain where creativity is embodied through interactions with the environment, thereby providing a unique context to explore creativity in action sports.

1.1 | Bicycle Motocross (BMX)

There is a growing body of research on BMX with a notable increase in studies since the inclusion of BMX racing in the 2008 Beijing Olympics (Wheaton and Thorpe 2018). Early research primarily focused on injuries sustained by BMX riders; however, more recent studies have looked into various aspects of the sport, including performance enhancement (Rylands and Roberts 2019), equipment design (Black et al. 2021), and risk-taking (Martinkova and Parry 2017).

BMX riding encompasses two main categories: Racing and Freestyle. Racing involves competitors sprinting on a purpose-built off-road track with obstacles like jumps and tight bends, aiming to cross the finish line first. Freestyle focuses on performing tricks and stylish (with ease) maneuvers on the bike, with or without a competitive element. Freestyle can be further divided into subcategories based on terrain:

- Dirt/Trails: Riding on purpose-built dirt jumps, often located in a defined and curated area, allowing for smooth, flowing trick performances.
- Street: Utilizing urban obstacles like stairs, railings, and walls not intended for BMX riding.
- Park: Performing tricks on ramps, rails, bowls, and other features within skateparks.
- Vert: Riding up and down large half-pipes exceeding 3 m, executing aerial tricks.
- Flatland: A technical discipline involving intricate tricks performed on flat ground, requiring exceptional balance and control.

Each Freestyle subcategory demands distinct skills, techniques, motivations, and creative approaches from riders, offering valuable insights into the multifaceted embodiment of creativity

within this action sport (Camilleri 2024). By applying this embodied and socio-cultural framework to BMX, we seek a deeper understanding of creativity within this unique subculture (Ellmer et al. 2020; Honea 2013).

1.2 | Embodiment, Affordances, and Creativity

Creativity is widely examined in the scientific literature and is often defined as the production of something both novel and useful (Runco and Jaeger 2012), as effective novelty (Cropley 2006), or as the capacity to generate novel and appropriate works (Sternberg and Lubart 1996). However, these definitions capture only the most basic dimensions of creativity, overlooking its broader, more complex nature (Amabile 1996). As noted in Richard et al. (2023), fluid interactions underpin distributed creativity where creative processes unfold between people, between people and places, and across time, through interactions and relations. Furthermore, 'the mind is not solely located in the brain but also involves the body and the body's situation in the environment' (Malinin 2019, 2).

The embodied perspective shifts creativity research from a traditional cognitive model. Rather than being solely a mental process, creativity is seen as a relational process distributed across individuals and specific contexts. As Sheets-Johnstone (2009) emphasizes, the body is not a physical vessel for the mind but an active participant in shaping perception and thought. Within this embodied framework, the creative process is not just a mental activity but is fundamentally shaped by the interplay between an individual's physical actions, cognitive capacities, and their environment (Forceville and Urios-Aparisi 2009). Creativity emerges from and reflects the mind-body-environment interdependence (Malinin 2019; Nguyen and Larson 2015), involving both embodied and mental mechanisms.

Affordances, originally introduced by Gibson (1979), defined them as perceived properties of the environment that offer action opportunities relative to an organism's capabilities. A recent theoretical development in the sociocultural study of creativity is the Perspective-Affordance Theory (PAT) proposed by Glăveanu et al. (2020). Grounded in pragmatist, cultural-psychological, and ecological traditions, PAT offers an integrative framework for understanding the multidimensional nature of creative enactment. Central to this theory are the relational concepts of "perspectives" and "affordances." Perspectives refer to the action orientations individuals develop based on their unique positions within the physical, social, and symbolic realms. Affordances, derived from ecological psychology (Gibson 1977), represent the range of action possibilities perceived or obscured within one's environment.

According to PAT, creativity emerges from the continual interplay between exchanging perspectives and perceiving new affordances (Glăveanu 2020). The theory posits that shifts in perspective reveal previously unexploited affordances, and perceiving new affordances can catalyze changes in one's perspective, thereby driving the creative process forward. Aligning with Glăveanu, we use perspectives as semi-open orientations which are dynamic and contextually embedded stances that enable individuals to engage with the world in a flexible yet structured

manner. These orientations are instrumental in making ecological doables—action possibilities inherent in the environment—accessible to the actor. Furthermore, a shift in perspective does not generate new affordances; albeit, this change enhances the individual's ability to become aware of these pre-existing action possibilities.

Empirical work in combat sports has revealed that these affordances are not fixed, but instead emerge through dynamic, context-dependent interactions between athletes and their surroundings. For example, Hristovski et al. (2006) demonstrated how critical changes in relative distance can lead to nonlinear shifts—or bifurcations—in the patterns of striking actions in martial arts. Krabben et al. (2019) argue that skilled performance in combat sports emerges from the continuous and reciprocal adaptation between opponents. Similarly, Yearby et al. (2024) applied an ecological dynamics framework to mixed martial arts training, showing that coaches can better design training sessions when they consider the ever-changing interplay of constraints that shape athletes' movement.

Several studies have explored the embodied nature of creativity across various domains, such as dance, music, improvisation, and theater, highlighting the role of bodily experiences in shaping creative enactment (Burgoyne 2018; Coste et al. 2019; Reybrouck 2012; Schiavio et al. 2018; Torrents et al. 2021). For example, Torrents et al. (2021) demonstrated how dancers' creative processes are intricately tied to their physical movements, sensory feedback, and the interaction with their environment. Similarly, Reybrouck (2012) describes the embodied nature of musical creativity, where the physical act of playing an instrument and the resonance of the body with sound profoundly influence the creative process. Schiavio et al. (2018) extended this perspective by exploring how musical creativity and improvisation are deeply embedded in the performer's body, with sensory and motor experiences shaping musical expression. These studies underscore the importance of understanding creativity as an embodied practice, where physicality and perception are central to the creative act itself. Recent research on contact improvisation further supports this view by illustrating how embodied experiences drive innovation in movement and creativity (Schiavio et al. 2018). These studies assist our understanding of embodied creativity in action-based practices like BMX, where mind, body, and environment come together to shape creative enactment.

1.3 | The Present Study

Using the framework of embodied cognition, we explore how creativity manifests in BMX by examining its embedded, enactive, and extended aspects. Creativity in this context is not limited to the mind but arises from the dynamic interaction between the rider, their body, their bike, and the environment. Perspective-Affordance Theory (Glăveanu 2020) helps illuminate how riders perceive and enact creative possibilities by shifting their perspectives and responding to environmental affordances. Within BMX subcultures, individuals “carve out autonomous space for the development and maintenance of alternative forms of culture alongside, and in interaction with, dominant culture producers” (Honea 2013, 1272). This aligns with the idea of

extended cognition, where thinking extends beyond the brain to include tools, terrain, and cultural context. For example, in BMX biking, the rider's cognitive processes may extend to the bike itself and the surrounding environment—surfacing new affordances for action. Research into nature-based lifestyle sports supports this view, showing that lifelong participants become so immersed that they effectively merge with their equipment and performance (Humberstone 2019). BMX riding also demands constant adaptation—anticipating terrain changes, executing tricks, and maintaining balance—all of which are shaped by the rider's perspective and their ability to perceive and act upon emerging affordances.

2 | Methodology

This study forms part of a larger project investigating BMX, wellbeing, and creativity. For this stage of the research, we exclusively utilized qualitative interview data, adopting an exploratory descriptive approach rooted in naturalistic inquiry (Lambert and Lambert 2012). This pragmatic methodology enabled us to explore participants' lived experiences without imposing predefined theoretical frameworks or interpretive lenses. While the study is theoretically informed by concepts such as Perspective-Affordance Theory and embodied cognition, these were not used as analytical grids. Instead, they provided a broad conceptual orientation for understanding the context of creativity in BMX, rather than shaping the coding or theme development directly. This bottom-up approach aligns with the core principles of naturalistic and exploratory research, allowing themes to emerge inductively from the data. Moreover, the study meets established criteria for rigorous qualitative research (Yadav 2022), employing rich, semi-structured interviews and thematic analysis—a robust and widely recognized qualitative method.

2.1 | Participants

The project was promoted via social media, BMX clubs, shops, and organizations. Riders aged 18+ who completed a related survey had shared contact details to join interviews. Invitations included a link to a Plain Language Statement explaining participation was voluntary, anonymous, and confidential. The interviewees represent a diverse cross-section of the BMX community. Their ages range from 21 to 55 years, and they exhibit a variety of riding styles—including Race, Dirt, Freestyle, and blended styles like Freestyle/Dirt and Dirt/Trails. Skill levels span from beginner and intermediate to expert and pro, and their riding experience ranges from as few as 1 to 5 years up to 30+ years. It is important to note that only 2 out of the 26 participants were female, highlighting a gender imbalance in the sample that can be found in other studies in this area (Camilleri, Williams, Sallis, et al. 2024).

This research was conducted in accordance with the ethical principles of the National Statement on Ethical Conduct in Human Research (National Health and Medical Research Council et al. 2023). Approval was obtained from the University of Melbourne Human Research Ethics Committee (Reference: 2022-24785-347796) prior to recruitment.

2.2 | Interviews

Twenty-two semi-structured interviews with 26 BMX riders were conducted between April and October 2023 (see Appendix A for questions). One session included two participants, and another included three due to scheduling constraints. Open-ended questions such as “What does creativity look like in BMX?” and “Where do you get creative inspiration to ride from?” supported a contextual understanding of factors like social connections, family support, and community engagement, offering a more holistic view of participants’ involvement. The informal, conversational format encouraged open, candid sharing, enhancing the depth and quality of the data.

Data were collected at one time point, via Zoom video calls. Interviews were audio-recorded and transcribed using Zoom’s built-in tools. Transcripts were reviewed by a team member for accuracy and sent to participants for comment; no changes were requested.

Three PhD-level, experienced qualitative researchers conducted the sessions. One researcher led all interviews, while another took detailed notes. The team met regularly for iterative debriefing and peer support. The lead interviewer, a lifelong BMX rider, brought insider knowledge that fostered rapport while maintaining reflexivity to minimize bias. This included ongoing critical reflection on assumptions and personal perspectives. The team’s collaborative approach ensured methodological rigor and captured authentic experiences from within the BMX community.

2.3 | Data Analysis

The interview transcripts were de-identified, coded, and analyzed using thematic analysis, a widely used method in qualitative research (Braun and Clarke 2006). This process followed six phases, as outlined by Braun and Clarke. In Phases 1 and 2, the transcripts were thoroughly read and re-read to ensure full immersion in the data, followed by initial coding. Phases 3 to 5 involved grouping the codes into meaningful categories that captured how participants discussed the topics, including contradictions and exceptions. These categories were then developed into themes, which were named and defined to provide clear interpretations of the data. In Phase 6, examples of the identified themes were selected to illustrate the findings and linked back to the research objectives. For example, one key theme identified was “riders’ self-expression,” which captured how participants described their creative engagement with the environment. The analysis was conducted by a member of the research team, and interpretations were discussed within the team until consensus was reached. NVivo software was used to manage and organize the data throughout the analysis process.

The lead researcher and interviewer is a lifelong BMX rider, providing a unique perspective on the sport and its community. Research undertaken by insider researchers can be particularly valuable, as it enables sensitivity to a group’s specific needs (Snellgrove and Punch 2022). However, insider status also necessitates a reflexive approach to minimize potential biases. In

our study, reactive collaboration—as described by Snellgrove and Punch—prompted continuous re-evaluation of research strategies and interactions, ensuring that our methods remained rigorous yet respected the nuances and complexities of the BMX subculture.

2.4 | Creativity From the Perspective of BMX Riders (Findings and Discussion)

The overarching objective of this study was to explore the multifaceted nature of creativity within the context of BMX riding from the first-hand perspectives of BMX riders themselves. Specifically, we aimed to answer the following questions:

1. What does creativity look like in BMX riding?
2. What individual, social, and environmental factors shape creativity in BMX?
3. How do shifts in perspective and perceived affordances influence creative enactment?

The qualitative data revealed several key themes regarding creativity among BMX riders. Through in-depth interviews, six major themes emerged (see Table 1). These themes collectively illustrate how BMX creativity is expressed not only through physical actions and interactions with the environment but also through socio-cultural dynamics, personal identity, and the iterative process of learning from failure.

2.5 | Embodied Creativity

Embodied creativity in BMX is evident in how riders engage with environmental affordances, adjusting their movements in response to terrain, obstacles, and riding conditions. This aligns with the Perspective-Affordance Theory (PAT) (Glăveanu 2020), which emphasizes how creative action emerges through interaction with the environment. Interviews with BMX riders highlight how their physical movements—responding fluidly to uneven surfaces, or modifying techniques based on terrain—are integral to creative riding. One rider described how they

look at different landscapes and figure out how to ride them in [their] own personal way (14)

TABLE 1 | Themes identified in the qualitative data.

Themes
Embodied creativity
Creative support
Creative inspiration
Creative person
Creative process
Opportunities to create

This illustrates how creative perception of affordances varies among individuals. Another emphasized the role of flow states, explaining that,

you can just go out and do your own thing... a lot of creativity comes from that

(19)

reinforcing the enactive perspective that cognition and motor action are intertwined (Sawyer and DeZutter 2009). Riders' backgrounds in different BMX disciplines (dirt, street, park) shape their creative engagement as evidenced by qualitative reports of how experience in one setting transfers to creative problem-solving in another (Olsen 2021).

Previous research has shown that creative acts like digging BMX trails involve dialoguing with the environment by integrating perspectives on socio-materiality and terrain affordances (Camilleri 2024). Riders embody an integration of perception, action, and cognition when navigating obstacles, aligning with PAT's view of embodied creativity linking mind and body. Riders describe how their physical engagement with the environment sparks creative breakthroughs. Their emphasis on "artistic expression" underscores that creative breakthroughs in BMX are as much about aesthetics as they are about technical execution.

...building the trails and thinking like in new shapes for the jumps...like curves or sharp edges, or around the edges...I guess that's creativity for me, like and everyone has your own style. Again, like different perspective too.

(17)

...there's all these different curves and it's and a very artistic expression of a form you can ride across I guess you could say.

(20)

Rather than simply following a predetermined path, the rider constructs unique courses that reflect personal style and an innovative engagement with physical space (Camilleri 2024). For instance, participants explained the transformative power of interacting with the terrain:

You know I can shape the jumps how I want. I can make them big as I want...I'm creating something... You want to make them look as perfect as possible.

(13)

This statement reveals how the rider perceives their own agency within the environment. The ability to "shape the jumps" reflects the concept of affordances—the idea that the physical structure of the environment offers multiple possibilities for action. Here, the participant's assertion that they can "make them big" suggests that creativity in BMX is not fixed; it is constructed through the interplay between the builder's digging and riding skills and the malleable nature of the terrain.

Moreover, the emphasis on aesthetic perfection implies that creativity is not solely a technical endeavor but also an expressive one. This aligns with embodied cognition, which posits that creative enactment emerges from the synergy between bodily action and environmental interaction. The rider's narrative illustrates a blending of technical skill with a sense of artistic vision, reinforcing the theoretical perspective that creative acts in BMX are both physically and emotionally driven.

Style is a key idea in understanding BMX creativity, particularly in how a rider moves their body and interacts with the environment. Style symbolizes mastery over their bike and the environment:

Yeah, with, with, with, with [sic] the dirt scene. It's it's not not [sic] just the the riding style, so to speak, or the way you hit jumps and do tricks and you know.

(21)

This quote illustrates that for this rider, the ability to manipulate the physical form of a jump directly fuels creativity. Another participant highlighted the importance of personal style emerging from diverse riding techniques:

If you take a look at like different people's riding styles, different people's expression, the way they express themselves on their bike...definitely gave me an out, an outlet of some kind of creative expression.

(16)

Here, the riders reflect on how varied approaches among peers inspire new ideas and techniques, demonstrating a shift in perspective that opens up new creative possibilities. This exemplifies PAT's premise that diverse perspectives reveal distinct affordances fostering creative enactment.

Participants consistently described riding as a powerful outlet for personal and individual expression. Embodied creativity was evident in how riders used their bodies to interact with and respond to their environment. Their physical movements, such as executing tricks or navigating challenging terrains, were shaped by their perceptions of the space and their ability to creatively engage with it. These actions were not only technical but also embodied expressions of creativity, with the rider's skill level, personal motivation, and environmental influences converging to shape their riding style.

2.6 | Creative Support

The BMX community cultivates a supportive and inspiring environment for creativity. Creativity is not seen as an isolated mental process but as a collective phenomenon that unfolds through active participation and support. Riders described a strong sense of camaraderie, rallying behind individuals attempting new tricks or pushing boundaries, offering cheers, high-fives, and encouragement regardless of skill level. This collective embodiment of progress and self-expression fosters an inclusive atmosphere conducive to creative exploration. Riders feel empowered to take risks and innovate, knowing that their peers will support them

regardless of the outcome, thereby exemplifying how cognition is both enacted and extended within a supportive community.

The socio-cultural environment plays a key role in nurturing creativity by providing a context conducive to perspective dialogues, as seen in domains like dance and circus performance (Richard et al. 2023). This aligns with PAT's emphasis on the role of differing perspectives in becoming aware of new affordances (Glăveanu 2020). Rather than directly creating affordances, community interactions, shared knowledge, and cultural practices highlight affordances that might otherwise remain unnoticed or underutilized, fostering creative engagement with the environment.

Communal support not only boosts individual confidence but also strengthens the overall creative culture within BMX. Several participants emphasized that the sense of community within BMX is a defining feature of the sport. One rider remarked on the social dimension of BMX:

I think the community building aspect is a lot stronger because it is more inclusive and it's more of a social activity... With mountain biking like constantly riding, which means you're not, like kind of just hanging out and talking all the time.

(14)

This quote underscores that, unlike sports where social interaction might be more sporadic, BMX fosters ongoing social engagement and support among its riders. Another participant captured the vibrant energy during riding sessions:

There's there's nothing better than that feeling, man. Like, no matter what skill level they're at. If you've been watching them and they've been trying something for half an hour and they they pull it off like, yeah, it's you're gonna give them a round of applause, you're gonna be up and up in their face congratulating them. It's all, its a great dynamic down at the skate park or wherever anyone's riding

(8)

This illustrates how the communal environment not only celebrates individual achievements but also creates a supportive atmosphere that motivates riders to keep pushing their boundaries. Additional comments reinforce this sense of collective encouragement:

There was plenty of cheering and carrying on. There's a couple of young fellas there that had a fair crack, did some new jumps they hadn't done

(24)

If you're trying something new or they're trying something new, there's there's a big support by everyone you know, trying to or wanting you to succeed and you wanting them to succeed.

(18)

These quotes reveal that support within the BMX community is not limited to individual recognition but is part of a broader culture where collective success (more success means less injuries) and mutual encouragement are paramount. Finally, one rider summed up the emotional impact of this community support:

...that's one of the things that I really love about it... there's nothing better than, being able to cheer someone else on and watching them being stoked on themselves.

(15)

...if they're trying something they've never done before, the whole place stops...if they're trying their absolute hardest, the whole community will come around and support this one individual, regardless of how good or bad they are.

(5)

These reflections illustrate how the communal response not only bolsters individual confidence but also reinforces a shared commitment to collective growth extending riders beyond themselves. Riders experience a unique bond where every success, no matter how small, is celebrated as a victory for the entire group. Creativity is nurtured both socially and individually within the sport.

The strong camaraderie and mutual support among riders, celebrating successes and encouraging innovation, align with PAT's premise that socio-cultural exchanges nurture creativity. As Hollett and Ehret (2019) note, this atmosphere influences the collective understanding of possibilities, reflecting PAT's view of perspective dialogues realizing new affordances. As one rider shared,

the community lifts each other up, wanting everyone to succeed

(18)

an ideal environment for perspective exchange and affordance perception driving creativity in PAT.

Riders characterized BMX personalities as adventurous, risk-taking, and rebellious, fueled by the inherent pleasure of riding. This aligns with PAT's proposition that embracing differences from conventional norms allows new perspectives to emerge. Scott and Austin (2016) support creativity stemming from fun, creating a conducive learning environment for exploring new affordances through the continual perspective exchanges occurring in BMX's socio-cultural milieu.

The participants gave the sense that the BMX community nurtures creativity by providing a socio-cultural context that facilitates perspective dialogues, celebrates difference, and allows riders to perceive and act upon the affordances revealed through the diverse perspectives present in this rich environment. While affordances exist as relational properties between the rider and the environment, socio-cultural exchanges influence which affordances are

noticed and acted upon. This suggests BMX riders' perspectives diverge from conventional views around the use of space, thereby increasing creative potential according to PAT's emphasis on difference resulting in new perspectives (Glăveanu 2020).

2.7 | Creative Inspiration

Inspiration for BMX riders stems from observing others both in person and through digital media, reflecting this enactive process where creative expression emerges through active engagement with one's surroundings. While older riders drew inspiration from VHS, DVDs, and magazines in their youth, current riders predominantly find inspiration on social media platforms like YouTube and Instagram. This aligns with how "digital media has allowed consumers to become producers" (Nelson 2010, 1163), enabling an exchange where riders not only draw inspiration from others but also share their own creativity. The physicality and the mental processes of BMX riding are intertwined, with digital platforms extending the reach of this embodied creativity.

Several participants highlighted the significant role that digital platforms play in shaping their creative vision to see beyond themselves. One rider explained how the constant stream of BMX content on Instagram fuels their inspiration:

Now that we have Instagram, you know, it's like I can just open my phone and seeing as I follow so many BMXers, it's just all all BMX, its like all I see. But you know, take away that and like even just being at a skate park watching how someone else rides...

(15)

This quote illustrates that social media not only provides a continuous feed of creative content but also influences riders' perceptions by immersing them in a culture of innovative riding styles. Another participant reinforced the idea that digital platforms serve as a catalyst for trying new things:

Honestly, it's either going to be my mates or I'll see someone on Instagram or YouTube doing something like wow, that looks fun, I wanna try.

(19)

Here, the exposure to diverse BMX content on digital platforms directly fuels riders' motivation to experiment with new tricks and techniques. The constant stream of creative displays not only blurs the line between passive observation and active engagement but also transforms how riders perceive possibilities. When a rider witnesses another perform a seemingly impossible maneuver, it opens up new ways of seeing the world—with opportunities and innovative approaches they previously thought unattainable.

Reflecting on the evolution of media consumption, another participant contrasted current experiences with those of the past:

Instagram, Facebook, Twitter. And then back then, it's just video tapes and magazines

(18)

This observation highlights the transformative impact of digital media on creative inspiration. The shift from traditional media to interactive platforms not only broadens the scope of accessible content but also enhances the immediacy and diversity of creative inputs, reinforcing how digital tools have become integral to the creative process in BMX riding.

This exchange facilitates a sense of belonging within the transnational BMX community, fuelled by "the desires and intensities driving their activity" and fusing "idioculture with microculture" (Hollett and Ehret 2019, 135). Social media transcends geographical boundaries, fostering a shared culture driven by the riders' collective experiences and creative intensities. Alongside these socio-cultural influences shaping inspiration, personal characteristics and mindsets emerge as integral drivers of the creative process for BMX riders.

2.8 | Creative Person

Despite there being acknowledged differences, many described having common personality traits. When asked how they would describe personality characteristics of BMX riders, many descriptions were centred around an attraction to 'risk', 'adrenaline', 'adventure', and sometimes being 'rebellious' and 'outliers'. For many riders, failure was not seen as a setback but as an integral part of the creative process. Embracing failure allowed riders to overcome their limitations, fostering resilience and fuelling further innovation. This acceptance of failure aligns with risk-taking behaviors observed in other bodily practices, where confronting challenges head-on is a catalyst for creative enactment. In BMX, as in other action-based sports, risk-taking and the willingness to fail are not only mechanisms of physical growth but also vital to the rider's creative development. These descriptions align with previous research indicating that risk-takers exhibit a distinct personality profile compared to those engaging in safer sports (Cogan and Brown 1999).

Participants consistently highlighted that BMX riders possess a distinct personality characterized by a strong appetite for risk, determination, and a rebellious spirit. One rider noted:

[BMXers] are like adventurous...an appetite for risk. Not, definitely not like risk averse and I think a lot of the time, quite like high energy people.

(23)

This remark underscores that the inherent risk-taking and energetic nature of BMX riders sets them apart from individuals in less extreme sports. Another participant reinforced this idea by explaining:

Mostly I'd say it's for the thrill seekers... They're very determined and very driven.

(12)

The determination and drive described here suggest that BMX riding is not just about physical activity, but also about cultivating a mindset that embraces challenges and continually pushes

boundaries. A further reflection on the risk factor was provided by another rider:

...sucked me in straight away, really just...the risk factor...when it comes to things, not not very cautious... not too worried about the risk...very, very open to, to things.

(18)

This openness to risk appears integral to the BMX ethos, where taking chances is seen as a natural part of the creative process. One participant even elaborated on the necessity of experimentation:

Yeah, definitely. You gotta try. You gotta give it a try. You know, sometimes you have some crazy ideas, like crazy creative, creative ideas. And you, you gotta try... Sometimes people will will tell you that, it won't, That will will not work from their perspective, but then you gotta try.

(17)

This willingness to experiment—even in the face of skepticism—demonstrates that creative innovation in BMX is driven by a proactive, risk-embracing attitude. Finally, the counter-cultural aspect of BMX riding was captured by one rider who summarized the communal sentiment:

The first word that came to mind just then was determined...BMXer's do such hard, dangerous shit all the time...rebellious counterculture thing, in terms of a personality trait...BMXers tend to question, well like, why can't I?

(22)

Together, these narratives illustrate that BMX riders are not only risk-takers but also innovators driven by a blend of determination, creativity, and a counter-cultural mindset that challenges conventional norms. This personality profile is central to understanding how BMX riders engage with and transform their environment into a canvas for creative enactment.

In BMX, creativity thus emerges from two dimensions: first, the counter-cultural nature of the sport, which encourages riders to think outside conventional norms, fostering the development of critical thinking, ego strength, and mental resilience. BMX riders, by engaging in a subculture that often challenges societal expectations, build the capacity to think differently, take risks, and question established boundaries. This counter-cultural stance, by its very nature, cultivates the ability to innovate and adapt. The second dimension of creativity within BMX is the creativity directly related to the sport itself. Riders engage in creative enactment through their riding styles, tricks, and innovations in trail and track design. BMX, as a sport, provides a platform for creativity through embodied action, where riders can push their own limits and express individuality in a physical and socially supportive environment.

For many riders, this risk-taking tendency manifested as an acceptance of failure when pushing their boundaries, aligning with findings that skill acquisition in BMX is largely informal and self-regulated (Ellmer et al. 2020). As Amabile (1996) posits, creativity often involves appreciating and accepting that norms have shifted or boundaries have moved. This willingness to embrace failure as part of the creative process was observed among the BMX riders.

Personal goals are a driving force that shape BMX riders' creative endeavors and fuel their pursuit of meaningful experiences within the sport. Whether striving for technical mastery, personal expression, or competitive excellence, these self-directed objectives provide a sense of purpose and direction. As Scott and Austin's (2016) research revealed, riders often articulate their motivations in terms of personal enjoyment and self-expression rather than rational or competitive goals, emphasizing that this intrinsic motivation to pursue personal goals aligns with the inherent creativity of BMX riding.

Prior research found BMX racers exhibited higher risk-taking, anxiety, and desire to share experiences (Cogan and Brown 1999).

2.9 | Creative Process

According to Varela et al. (1991), cognition is enacted, embedded, and extended—meaning we actively bring forth our world through embodied sensorimotor activity, our mental processes are deeply rooted in the biological, psychological, and cultural contexts in which we live, and these processes extend beyond the brain to include our body and environment. In BMX, creativity is driven by physical actions and the mental processes involved in overcoming personal barriers and embracing failure. These mental aspects are instrumental in shaping the embodied creative process as riders, embedded within their context, actively engage with the environment—taking risks and navigating challenges that require both psychological resilience and physical adaptability. This mental dimension of creativity is deeply intertwined with the physicality of BMX, where failure is seen not as a setback but as an opportunity for growth and improvement (Camilleri and Katz 2025).

Failure and fear are common experiences in BMX riding that shape both skill development and creative enactment. Riders consistently described failure not as a setback but as an essential part of the learning process. One participant explained how failing to land a trick is far less consequential than physical injury:

I think failing, failing to do something on the day or whatever doesn't impact you as much as getting hurt. Like if you get hurt, well, then you know, that sucks, but failing, you can always come back and try again. It's no big deal

(18)

This perspective highlights how BMX riders differentiate between physical risk and creative perseverance, seeing failure

as a necessary and recoverable step toward progress. Another participant elaborated on the dual fear BMX riders face—both of injury and failure:

So I guess it kind of helps you prepare like the fear, the fear, well with BMX there's that fear of getting hurt. There's that fear of failure

(16)

Fear is not just an obstacle but a force that riders learn to navigate. Fear management is seen as an integral part of the creative and physical process. For some, BMX is not just about performing tricks but about overcoming mental and psychological barriers:

You know, it's sometimes it's not about doing the trick. It's about overcoming that that barrier in another barrier, but it's about overcoming that barrier, like your own mental battle

(15)

This mental battle reflects the deeper psychological resilience developed through BMX, where confronting personal limitations goes hand in hand with mastering technical skills (Camilleri and Katz 2025). Finally, one rider articulated the role of failure in refining creativity and technique:

Yeah, it's definitely part of. It's part of the learning because I feel like you have to fail to actually get closer to what you want. You figure it out by failing, basically

(19)

Here, failure is positioned as a natural and essential element of progress—one that riders actively embrace rather than avoid. These narratives collectively illustrate that in BMX, failure is not just an inevitable part of the sport but a key driver of creativity, persistence, and self-improvement. It is through trial, error, and the willingness to push past fear that riders expand their creative potential and redefine what is possible.

Bailes (2011) contends that failure in the context of the performing arts can lead artists to find innovative and creative solutions. Similarly, through the lens of the Perspective-Affordance Theory (PAT) (Glăveanu 2020), failure in BMX represents an opportunity for riders to develop new perspectives and perceive previously unexploited affordances (action possibilities) within their environment. Many riders embrace failures like falling or missing a trick as transformative experiences that foster personal growth and creativity. This willingness to attempt new tricks and embrace failure as part of the learning process aligns with PAT's premise that creative enactment emerges from exchanging perspectives and exploring new affordances.

The challenge of overcoming failure encourages perseverance and determination, fostering personal growth by motivating riders to develop new perspectives on their abilities and the

affordances within their environment. This iterative process of failing, developing new perspectives, and perceiving previously unseen affordances can lead to creative breakthroughs and innovative techniques. As found previously by Camilleri, Williams, Hyde, et al. (2024), failure in BMX is embraced as a transformative stepping stone toward mastery and a catalyst for growth and creativity, facilitating the continual exchange of perspectives and exploration of affordances central to PAT's account of the creative process.

Participant accounts suggesting an embrace of failure may mask underlying motivations that warrant critical examination. Smith (2019) argues that some BMX riders' acceptance of pain or injury could stem from a need to embody hypermasculine ideals and “appear tough” in front of male peers (p. 22). These observations resonate with literature highlighting how action sports sometimes arose from rebellious, anti-establishment cultures celebrating risk-taking as a means of constructing masculine identities (Thorpe 2014).

2.10 | Opportunities to Create

In BMX, creativity is embodied through the interaction between the rider, their bike, and the environment around them, embedding the rider in the world. The term ‘creativity’ in the context of this study should be understood as the ability to perceive, adapt to, and innovate within the physical and socio-cultural environment of BMX. This involves the rider's ability to engage with and exploit environmental affordances, a process that emerges through continuous interactions with the landscape, bike, and community. Creative “spot hunting” in urban spaces involves reshaping environments based on perceived affordances, echoing PAT (Hollett and Ehret 2019). Thus, BMX creativity is an embodied and socially situated phenomenon that transcends mental strategies alone.

Street riders frequently describe an opportunistic approach to creativity that goes beyond simply riding—it involves actively reshaping and reinterpreting the urban landscape. One rider observed:

... when it comes to street riders, it'll be like using the spot creatively, but also capturing it like I I don't really know of any street riders that go out to ride street and and not also have in mind that they're gonna like shoot photos or film

(23)

This quote highlights that street riding is as much about visual storytelling as it is about technical execution. Riders are not only innovating in their riding but also documenting and sharing their creative encounters with the environment. Another participant emphasized the proactive nature of this creativity:

Yeah, well, I mean...If if you want to ride jumps, you know, I mean, realistically, there's not much that

the councils and stuff are doing for us in the way of that. So we got to do it ourselves

(15)

Here, the lack of formal support transforms into an opportunity: riders take matters into their own hands by constructing their own jumps and trails, effectively reimagining and reclaiming urban spaces. The process of innovation is often spontaneous. One rider explained:

We're like, alright, we're thinking about this and then something go, oh, this is cool, but maybe we could try this and you kind of draw that in the plan and it's just like, oh, yeah, that, that, that makes sense

(21)

This moment of sudden insight, where an idea quickly translates into a tangible plan, captures the essence of opportunistic creativity—taking a perceived possibility and turning it into a practical, innovative solution. Riders also discuss how their trails and jumps are continuously evolving:

Yeah, man. Like, it's good positive, you know. Like like my set of trails man, I'm trying to always work something like make something new there, you know, or this winter, I'm going to change this. Or, you know, my trials is always changing. Yeah, yeah

(13)

This constant reinvention is seen as a core component of BMX culture. Creativity here is not a one-time event but an ongoing process of adaptation and improvement. One rider compared BMX creativity favorably to other sports:

There's a lot more creativity to it than other like, you know, for instance, football.

(23)

The contrast drawn here underscores that BMX allows for a unique form of self-expression where individual innovation is not only welcomed but necessary. Another participant added:

Like. Yeah, you can kind of just go out and you don't have to be Uh, you don't have to be R Willy or Scotty Cranmer² or anything, you can just kind of go out and do your own thing and then I feel like a lot of creativity comes from that

(19)

This sentiment speaks to the inclusive nature of BMX culture, where personal style and creativity are valued over conformity to established norms. The idea of seizing opportunities is further echoed in the following reflections:

You don't put limits on what you know, if an opportunity comes you don't sit on the sideline type of thing

(11)

Ohh yeah, just, it was just an opportunity. So you could travel and ride and you always had something to motivate you to go film or go get photos

(7)

...it allowed me to learn a lot of, a lot of valuable skills that I could take that I didn't know at the time, but I could that were transferable into my, the next chapters of my life

(16)

These quotes illustrate that BMX creativity is not limited to technical riding; it also involves a willingness to embrace new opportunities—whether that means documenting rides, exploring different terrains, or acquiring skills that extend beyond the sport itself. This adaptive, opportunistic mindset is at the heart of BMX culture, driving riders to continually innovate and expand their creative horizons.

Freestyle riders report finding their environment more supportive for expressing and refining creative BMX skills, consistent with Smith's (2019) observation of street riding's limitless evolution as new locations affording creativity are discovered. From a PAT perspective, this unregulated and spontaneous engagement allows freestyle riders to explore and exploit environmental affordances through enacting their diverse perspectives of the world (Glăveanu 2020).

Riders perceive creative potential and opportunities in locations by developing perspectives that reveal affordances, fostering a shared vision (Hollett and Ehret 2019)—a process central to PAT's account of creativity. As participant 14 recalls

Or yeah, jump that or or [sic] grind on that thing that's not designed to be, you know you're not meant to grind on that, but I'm going to figure out how to or like whatever it is, just get a bit more technical, but you can just look at different landscapes and figure out how to ride them in your own personal way

(14)

From the perspective of the Perspective-Affordance Theory (PAT) (Glăveanu 2020), BMX riders interpret and navigate urban landscapes in ways that reveal affordances (action possibilities) for creative riding. Their skills and creativity allow them to develop perspectives that shape how urban spaces can be ridden, underscoring the playful perspectives with which they view the city environment's affordances. As Smith (2019) elaborates, "Riders do not move linearly...but react impulsively and opportunistically to prioritise fun" (p. 52), highlighting how their subjective perspectives allow perceiving affordances for creative engagement. This subjective landscape interpretation reflects the lack of consensus on how spaces should be used with street riders creatively discovering spots affording unique trick combinations (Hollett and Ehret 2019).

Trail building, constructing jumps blending function and aesthetics (Camilleri 2024), exemplifies creative enactment through actively shaping environments. As Smith notes, riders

“write themselves” into “spaces of opportunity” like vacant lots for DIY dirt tracks (p. 48), modifying the environment and creating opportunities for enactment. PAT’s premise that creative enactment emerges through perspective dialogues is illustrated by the way trail builders negotiate external constraints and reimagine urban spaces. For instance, Participant 15 noted:

Yeah, well...if you want to ride jumps...there's not much the councils are doing for us...So we got to do it ourselves

(15)

The fluid and flowing designs allow continuously modifying geometry (Olsen 2021), reflecting PAT’s view of creativity as an ongoing dialogue between perspectives and perceived affordances, refining intentions and expanding possibilities, as described by Healy (2024). Creativity in BMX involves navigating environments with playful, opportunistic perspectives that reveal, exploit and reshape the affordances available and continually expanding the boundaries of what is possible. As Smith (2019) aptly notes, “Using spaces to ride is another way that BMX riders view and experience space in a childlike, opportunistic way because these spaces are inherently ephemeral and only found through luck and exploration” (p. 24). This observation captures the enactivist notion of cognition being grounded in embodied action and exploration. BMX riders actively engage with and co-create their experiences through their physical interactions with urban spaces, perceiving and exploiting affordances that may be overlooked by others.

Creativity in BMX involves corporeal connections with the environment, as is the case with domains like music and performing arts (Richard et al. 2023; Torrents et al. 2021). Smith’s (2019) research on how BMX street riders subvert and challenge the dominant social and spatial order of urban spaces through their riding practices argues ‘creativity and playful engagement are key components to a street riders’ imaginary of the city’ (p. 30). Riders actively ‘enact’ their experience of space by moving through it, interpreting it, and transforming it into a platform for creative expression. This enactive process illustrates how cognition is co-constructed through bodily movement and real-time exploration of affordances that might otherwise be missed.

Despite their distinct manifestations of creativity, the various BMX riding disciplines appear unified by the fundamentally embodied nature of the sport, the overarching socio-cultural influences, certain common personal characteristics, attitudes toward failure and problem-solving, and the necessity of creatively engaging with one’s surroundings. Our qualitative analysis of BMX riders’ semi-structured interviews revealed distinct quotes that either support, challenge, or remain neutral toward Perspective-Affordance Theory (PAT). Embodied creativity and the dynamic exchange of perspectives that PAT emphasizes. For instance, one rider noted,

you can just look at different landscapes and figure out how to ride them in your own personal way

(14)

which supports PAT by underlining how shifting perspectives reveal previously unseen affordances. Similarly, another rider stated,

if you want to ride jumps, there's not much that councils do for us... so we got to do it ourselves

(15)

emphasizing proactive engagement with environmental affordances—a core tenet of PAT. In contrast, neutral quotes simply describe BMX creativity without explicitly referencing the mechanisms of embodied perception; for example, a comment like

there’s a lot more creativity to it than other sports

(23)

reflects an appreciation for BMX’s creative potential but does not directly address the interplay of perspectives and affordances.

3 | Conclusion

This novel study makes significant contributions to our understanding of how creativity in BMX riding is an embodied, socio-cultural process that arises from interactions between riders and their environments (summarized in Table 2). It demonstrates that creative enactment in BMX is not solely a cognitive exercise but is also deeply influenced by physical action, risk-taking, and community support. These findings contribute to the broader literature on embodied creativity by applying and extending theories such as Perspective-Affordance Theory and embodied cognition within an action sports context.

The themes that emerged from the data around embodied action, achieving flow states, and individual self-expression through style and trick innovation appear relevant to all riding styles, despite their distinct aspects. The BMX community and its culture of collaboration, inspiration, and camaraderie seem to significantly influence riders across disciplines. The insights around peer support, shared vision, and the collective understanding of possibilities also transcend riding disciplines. Certain personality traits were commonly described across riding disciplines, such as a propensity for risk-taking, thrill-seeking, determination, and a rebellious/adventurous spirit. Although the extent of these traits may vary, they appear to be part of the BMX rider identity that cuts across disciplines. The findings suggest a consistent acceptance of failure as part of the learning process and a recognition of the problem-solving benefits derived from BMX riding. The willingness to attempt new tricks despite potential failure and the importance of sharing tricks as integral to the sport were common views. While the specifics may differ, all riding disciplines involve some form of creatively engaging with and shaping the environment, whether through strategically navigating racetracks, interpreting urban landscapes, or constructing dirt jump and trails and riding these creations with style. This opportunistic outlook and perception of environmental affordances seem to be shared aspects of the different BMX disciplines.

TABLE 2 | Summary of research questions and key findings.

Research question	Key findings	Description
What does creativity look like in BMX riding?	Embodied	Expressed through fluid interaction with terrain, tricks, and physical movement
	Stylistic	Emphasis on personal expression, aesthetics, and individuality in riding style
	Material and Spatial	Creativity involves shaping and interacting with the environment (e.g., trail-building, spot selection)
	Processual	Iterative process involving trial-and-error, learning through failure, and refining skills over time
What individual, social, and environmental factors shape creativity in BMX?	Individual Traits	Risk tolerance, determination, resilience, rebelliousness, and counter-cultural mindset
	Community Support	Encouragement, peer support, and shared stoke foster risk-taking and experimentation
	Environment	Terrain, urban spaces, and built features provide affordances for creative action
	Digital Inspiration	Social media provides exposure to diverse styles, techniques, and creative possibilities
How do shifts in perspective and perceived affordances influence creative enactment?	Perspective Shifts	Changing perspectives reveal new affordances (e.g., walls, rails, dirt as rideable or malleable)
	Embodied Interaction	Affordances become visible through bodily engagement with the environment
	Socio-cultural Context	Community practices (e.g., trail-building, spot-hunting) help riders see creative possibilities others might miss
	Perspective-Affordance Dialogue	Creativity emerges from the dynamic interplay between shifting perspectives and perceived affordances, consistent with Perspective-Affordance Theory (PAT)

4 | Limitations of the Study

The study has several limitations that should be acknowledged. Firstly, the research was conducted at a single time point, limiting the ability to capture potential changes or trends over time. Additionally, the sample size may be a constraint, potentially affecting the generalisability of the findings. Moreover, the significant gender bias in the sample, with only 2 out of 26 participants (5%) being female, represents the small but growing group of women in BMX and may limit the applicability of the findings to the broader BMX community. However, it is worth noting that female participants who did take part generally agreed regardless of gender, offering some insight into their perspectives. This study provides valuable insights but further research with larger and more diverse samples is warranted to validate and expand upon these findings. Looking ahead, future work could benefit from a longitudinal approach to capture how creative practices evolve over time, as well as a more diverse sample to examine gender and cultural variations in creative enactment. Additionally, exploring the impact of digital media on creative inspiration and the interplay between virtual and physical environments presents promising avenues for further investigation.

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

Data available on request due to privacy/ethical restrictions.

Endnotes

¹“Enaction is the process by which a living system, through its embodied activity, brings forth a world of meaning. In this view, cognition is not simply a matter of representing a pre-given world inside the head, but it is constituted by the ongoing, dynamic interactions between an organism and its environment” (Varela et al. 1991, 144).

²Both riders are known for pushing the limits of BMX in different ways—R-Willy with his extreme innovation and Scotty with his technical precision and skill.

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Appendix A

The following questions were discussed in the interviews:

Question 1: "How did you get into BMX, and what is one thing you really like about it?"

Question 2: "Why do you think people ride BMX?"

Question 3: "Can you describe for us, what the BMX riders are like that you ride with?"

Question 4: "How has BMX influenced the relationships between you and your mates?"

Question 5: "How important is family/carer support for BMX riding to you?"

Sub-question 5.1: "How do you feel about your family supporting your BMX riding?"

Sub-question 5.2: "What impact does family support (or lack of) have on your BMX riding?"

Question 6: "Do you feel connected to the BMX community?"

Question 7: "How does your experience within the BMX community differ from other experiences that you have: at school, home, or other groups/places that you have associated with?"

Question 8: "How do you know you've had a good riding session?"

Question 9: "What does creativity look like in BMX?"

Sub-question 9.1: "Where do you get creative inspiration to ride from? Sources? Local community, international community, Peers, vids, pros, magazines, tik tok/social media." This sub-question aims to identify the sources of creative inspiration that influence the individual's riding style.

Question 10: "What advice would you give the government about supporting BMX riders?"