



The delicate balance between achieving greatness and respecting legends: LeBron James, Kareem Abdul-Jabbar, and the case of breaking records in sports

Roy David Samuel^{a,1}, Yair Galily^{b,*,2}

^a Reichman University, Baruch Ivcher School of Psychology, 8 Ha'universuta St., P.O. Box 167, Herzliya, 4610101, Israel

^b Reichman University, Baruch Ivcher School of Psychology & Sammy Ofer School of Communications, 8 Ha'universuta St., P.O. Box 167, Herzliya, 4610101, Israel

ARTICLE INFO

Keywords:

Achievement motivation
Olympic Games
Goal orientation
Social Media
Sports technology

ABSTRACT

LeBron James made NBA history on February 7, 2023, when he surpassed Kareem Abdul-Jabbar's 39-year-old record to become the all-time leading scorer. Abdul-Jabbar responded to James' achievement with grace and explained why he was not intimidated by it. In this article, we review several examples of athletes who accorded with or feuded against their records getting broken by other athletes. We relate such emotional and public responses to achievement motivation theory in sports as well as to athletes' adaptation to retirement. We further discuss social concepts and factors, such as personal rivalries, political collisions, generation differences, and technology. We believe that while actual responses from athletes might be unpredictable, there are several ideas that can be conceived concerning this phenomenon. We conclude by suggesting avenues for exploration in this under-researched area in sports.

Are sports records meant to be broken? Well, that depends on whom you are asking. Naturally, active high achievers in sports (i.e., athletes, coaches, managers) aspire to break records as part of their achievement motivation process (Roberts & Papaioannou, 2014). However, for those ex-participants who witness their records being broken, this is a much harder psycho-social task. These legendary sportspersons find themselves in a private and public conflict; do they accept or even support the new achievement or alternatively reject and even feud against it. The recent (February 7, 2023) breaking of the NBA all-time scoring record, by LeBron James, ignited questions concerning this topic in sports. In this case, the previous scoring record holder, Kareem Abdul-Jabbar, accepted and even publicly acknowledged the efforts and achievement of James when he honored him during the Los Angeles Lakers game against the Oklahoma City Thunder. Abdul-Jabbar, whose record held for 39 years, posted (Abdul-Jabbar, 2023):

LeBron James passed my scoring record and now is the leading scorer in NBA history. It takes unbelievable drive, dedication, and talent to survive in the NBA long enough to rack up that number of points when the average NBA career lasts only 4.5 years. It's not just about putting the ball through

the hoop, it's about staying healthy and skilled enough to climb the steep mountain in ever-thinning oxygen over many years when most other players have tapped out.

Concerning his emotional reaction to his record getting broken, Abdul-Jabbar further commented (Abdul-Jabbar, 2023):

In the months leading up to LeBron breaking my record, so much was written about how I would feel on the day he sank that record-breaking shot that I had to laugh. I'd already written several times stating exactly how I felt so there really wasn't much to speculate about. It's as if I won a billion dollars in a lottery and 39 years later someone won two billion dollars. How would I feel? Grateful that I won and happy that the next person also won. His winning in no way affects my winning.

The emotional reactions of legendary athletes (or coaches) seem to be influenced not only by their personal characteristics (e.g., achievement motivation) or values but also related to the micro and macro contexts of the unique sport discipline and society within which these individuals operate. Thus, while some athletes would support the breaking of their records others would get into a feud. In this article, we

* Corresponding author.

E-mail address: yg2@runi.ac.il (Y. Galily).

¹ ORCID: 0000-0001-9914-3754.

² ORCID: 0000-0001-5308-5675.

will provide several examples of such reactions and attempt to explain them within psychological and sociological contexts.

Sports records

A sports record is a performance, measured in specified mathematical-physical entities (meters, seconds, or kilograms) within a standardized spatiotemporal framework defined by sports rules, which is better than all previous performances measured similarly. Typical record sports are athletics, swimming, and weightlifting. Other sport disciplines have well-defined standardized spatial frameworks but do not measure performances in exact ways (Loland, 2001). Parry (2006) further described three dimensions of modern records in sports. The first is a static abstraction associated with measuring distances and times that becomes an objective marker – modern athletes compete not only against a tangible opponent but also against the abstract, timeless standard that is the record. Universal records are thought to be dependent on the development of communications networks to assist the harmonization of standards and the emergence of democracy and equality of opportunity. For example, that minorities can also participate in setting a record within a certain sport discipline. The second dimension refers to the differentiation between an athletic record where the actual performance is quantified in units and a sports record such as a perfect winning season. In soccer (association football) and tennis, for example, performances are measured in non-precise entities like goals, points, sets, and games. Moreover, performances are in a sense relative as they depend upon social interaction with other competitors (e.g., who scored the most goals in the FIFA World Cup). Such areas call for public discourse concerning who the greatest soccer or tennis player in history (Loland, 2001). Such public and media conversations were much of the focus of the 2022 FIFA World Cup when billions around the globe compared Lionel Messi with Diego Maradona (Sutheland, 2022). Yet characteristically, as Loland (2001) explained, such discussions are always diverse and full of opposing views, which again probably are their very entertaining *raison d'être* (i.e., "reason to be"). Soccer, tennis, handball, volleyball, basketball, and the like are not record sports, but games. Finally, Parry (2006) suggested that to become a record, a performance has to be recognized by some competent authority, such as a national or international federation.

According with or feuding against

Over the course of modern sports history, many great athletes decided to accord with their records getting broken. For example, Olympic swimming champion, Mark Spitz, whose seven gold medals record from Munich 1972 held until Michael Phelps achieved eight gold medals in the 2008 Beijing Games, acknowledged that this was "quite incredible achievements" (Oprah, 2016). For Spitz, Phelps breaking his record helped put his own greatness into context (Oprah, 2016):

I never realized my greatness until Michael Phelps broke my record. What I had done, I always believed was a matter of measure which somebody else would judge themselves by, and yet this person not even born who then discovered that that's what they wanted to do, and what greater accolade could I have left on my sport than to have somebody else break my record. I relish the fact that I was alive when that happened.

In a similar vein, the legendary Ukrainian pole vaulter, Sergey Bubka, congratulated French pole vaulter Renaud Lavillenie, who broke his 30-years old (1984–2014) world record (European Olympic Committees, 2014):

Renaud Lavillenie's world record is a great success for the next generation of athletes. I have devoted all my life to sport, learning a lot both during my athlete's career and after. Now I serve as a sports administrator, to provide athletes with everything they need to perform and to break new records. I'm absolutely happy that a new pole vault world record was set

at the Pole Vault Stars' meeting in Donetsk. Bravo Renaud. He proved today that nothing is impossible. Athletes like Renaud are real role models for the young generation who establish new standards as to strength of mind and physical excellence.

Likewise, Formula 1 champion Michael Schumacher replied about the possibility that his seven titles F1 record would be broken by Lewis Hamilton (Fairman, 2020):

I would say, absolutely, yes. Because nobody thought, neither me, that I could beat the five [titles] of Fangio. Then I did, and I increased it to seven. Records are there to be beaten and I am quite relaxed that one day it will happen, whether it is Lewis, whether it is Massa or it is Sebastian Vettel or whoever. It might be somebody of the current, or the future, that could or will do it.

Upon witnessing Rafael Nadal and Novak Djokovic surpassing his 20 Grand Slams record, tennis champion, Roger Federer, said: "That is no problem. I'm the first guy to be happy for anybody who breaks any record because I know how hard it is to do so" (Mandal, 2022). Similarly, women's tennis champion, Steffi Graf gracefully supported Serena Williams' attempt to break her 22 Grand Slams record (Roy, 2022):

I'm happy for her, I'm excited for her. I think it's cool that records have been broken, that's what they are there for. She's been phenomenal to the sport of tennis, it's been great to watch and I hope she does break it.

When LeBron James surpassed Kobe Bryant on the NBA's all-time scoring list in 2020, Bryant congratulated James on his achievement, calling it a "great accomplishment" and expressing his admiration for James's skill and dedication (Marsh, 2010). Also, when Drew Brees broke Peyton Manning's record for career passing yards in the NFL, Manning recorded a video congratulating Brees on his achievement and expressing his respect and admiration for his fellow quarterback (Boehme, 2019).

Still, there are examples of legendary athletes who did not accord with their records being broken. Carl Lewis, one of the greatest track and field athletes of all time, was less than supportive of the emergence of the new track and field star, Jamaican Usain Bolt. Lewis was skeptical of Bolt's 2008 Beijing Games performance: "For someone to run 10.03 one year and 9.69 the next, if you don't question that in a sport that has the reputation it has right now, you're a fool. Period." (Jones, 2017). Lewis also attempted to distance himself from the Jamaican: "Well, we're different, Jesse Owens and I were obviously a lot more similar because of the events we competed in. We were long jumpers that sprinted. We're also Americans and when you're American there's a different scrutiny, a different level of expectations." (Jones, 2017). Lewis also explained that despite the attempts to compare between him and Bolt, he was satisfied with his career (Jones, 2017):

When I retired I felt like I completed everything I could. I left with no regrets. When I look back it's just I had a great time...My biggest accomplishment though isn't even a medal. It's the longevity. When I look back I think how did I do four in a row and win four in a row. First I was 22, in the last I was 35 around a lot of 22-year-olds. So that's what I'm really proud of, the longevity.

In a similar fashion, Olympic champion and previous 200-m sprint world record holder, the American Michael Johnson, said that he believes he would have even beaten the current 100 m and 200 m record holder Usain Bolt had they raced in the same generation: "I win that race every day. Every time we line up, I win that race, guaranteed" (Bradley, 2021).

Another example of a collision between two-star athletes could be found in women's gymnastics. After American gymnast, Simone Biles, broke her record of most medals at the women gymnastics World Championships, ex (Russian) gymnast Svetlana Khorkina commented on Biles's performance (Liubovb, 2019):

For me, the talks on whether our girls can reach the level of the US team are unacceptable. We've always strived to be the best, we've strived to dominate. I don't think our team has different goals now. Don't make the unbeatable queen out of Biles! Were I 15 years younger, I would absolutely challenge the American.

Khorkina even accused Biles of doping, upon finding out that she had been using medications for ADHD (Meyers, 2017):

In reality, experts understand that these drugs help the athlete control her psychological-emotional state; she's not worried, not upset, nothing is distracting her from executing her moves... And it means that her competitors have to be in a state of stress, be upset, be worries and because of that, make some slight flaws in executing moves and obviously lose to the American.

Therefore, we could find examples of both types of athletes' responses for their records getting broken by another athlete. Next, we discuss these emotional responses within the lenses of achievement motivation theory.

Achievement motivation and sports records

Achievement motivation was initially conceptualized by Murray (1938, p. 164) as the: (a) desires and effects to accomplish something difficult, (b) to master, manipulate or organize physical objects, human beings, or ideas, (c) to do this as rapidly, and as independently as possible, (d) to overcome obstacles and attain a high standard, (e) to excel one's self, (f) to rival and surpass others, and (g) to increase self-regard by the successful exercise of talent. Murray (1938) proposed a system of psychological needs to explain individual differences in behavior, including *achievement* (a need for efficiency and effectiveness) and *infavoidance* (a need to avoid humiliation and to refrain from action due to fear of failure).

McClelland (1961) and Atkinson (1964) further developed the construct of achievement motives to account for individual differences in people's achievement behavior under similar conditions. Within their theory of need for achievement, motives represent the strength of associations between environmental cues and learned affective responses to those cues (i.e., feeling pride or shame). The *motive to approach success* describes individual differences in the tendency to experience anticipatory pride while engaged in a competence pursuit. Anticipatory pride leads to persistence and heightened engagement in goal pursuit, promotes long-term achievement, stimulates interpersonal expressiveness, engages flexible social behavior, and contributes to the development of social capital over time. The *motive to avoid failure* describes individual differences in the tendency to experience anticipatory shame while engaged in a competence pursuit. Anticipatory shame motivates withdrawal and can promote appeasement or aggressive behaviors depending on how people regulate their shame. Shame will undermine persistence and create difficulties in achieving long-term goals. Over time, these motives have been referred to as "the need for achievement" and "the fear of failure," respectively (Conroy, 2014).

Individuals who have a high need for achievement are focused on approaching success and feeling pride and thus are likely to approach success when the probabilities are about 50 %, and they ascribe high value to success. On the other hand, individuals with a low need for achievement, in similar situations, try to avoid failure and the negative emotions that follow (Roberts & Papaioannou, 2014).

Much of the theoretical and empirical work in the achievement motivation area continued to focus on how athletes set achievement goals to express their motivation. Achievement goals refer to the aim, purpose, or focus of a person's achievement behavior. These goals are dynamic cognitive entities that do not refer strictly to the level of aspired performance but rather represent future-based possibilities that respond to changes in the person as well as the situation. They reflect how people evaluate their competence or incompetence and orient their behavior

accordingly (Conroy & Hyde, 2014).

According to achievement goal theory (Duda, 2001; Nicholls, 1989) the individual is an intentional, goal-directed organism and achievement goals govern achievement beliefs and guide subsequent decision-making and behavior in sport achievement contexts (Roberts & Papaioannou, 2014). An individual will approach a task or activity with goals of action reflecting their perceptions and beliefs about the form of ability they wish to demonstrate. Athletes can focus their efforts on self-development and improvement from a previous performance or on mastering a task (i.e., task-involved motivation). Here the demonstration of ability is self-referenced and success is realized when mastery or improvement has been attained. Alternatively, athletes can focus on outperforming others and becoming the best in their sport discipline or category (i.e., ego-involved motivation). In this case, success is realized when the performance of others is exceeded, especially when expending less effort than others (Roberts & Papaioannou, 2014).

According to the achievement goal theory, athletes are inclined to be more task- or ego-involved as a result of their goal orientation and motivational climate. Goal orientations are relatively stable cognitive schemas that relate to how one's performance on the task is processed. Being mastery (i.e., task-orientation) or performance (i.e., ego-orientation) oriented refers to the inclination of the athlete to be task or ego involved respectively, in an achievement task (Weinsh & Lev, 2021). Athletes can be low, moderate, or high in each of these orientations, independently. Goal involvement also depends on the degree to which athletes perceive task and ego criteria as salient within the context, in terms of achieving success and/or avoiding failure. When mastery criteria are clearly evident, then the situation is seen as task-involving.

When performance criteria are evident, then the situation is seen as ego-involving (Roberts & Papaioannou, 2014).

Considering the research on achievement goal theory in relation to breaking records in sports, it is clearly a situation that calls for an ego-involved motivation (for review see Roberts & Papaioannou, 2014). Particularly, the achievement strivings of highly ego-oriented athletes reflect their beliefs that through success in sports they might become competitive person and achieve high social status in life (e.g., Duda, 1989; Papaioannou & MacDonald, 1993). Ego-involvement is linked to egocentric thinking, the perception of others as opponents, and interpersonal conflict (e.g., Smith, Balaguer & Duda, 2006). High ego-involved athletes are more likely to adopt any means leading to success, exhibit aggressiveness, lower sportspersonship values, potential doping, and immoral behavior (e.g., Hurst, Ring & Kavussanu, 2022; Sage & Kavussanu, 2007). It should be noted, however, that elite athletes tend to be higher in task orientation and lower in ego orientation compared with less elite athletes (Lochbaum et al., 2016) and that task involvement facilitates collaboration between peers and mutual support, and stronger sportspersonship (e.g., Sage & Kavussanu, 2007; Smith, Balaguer & Duda, 2006).

Interestingly, we could not find research that directly links the breaking of records in sports with athletes' achievement motivation. Still, it can be assumed that when a record is broken, two opposite motivational processes occur concurrently: the athlete who is breaking the record is feeling high achievement motivation that is related to feeling pride of succeeding in demonstrating his or her ability at the world's stage and completing a personal route to achieving a very high valued goal. Athletes whose records are getting broken, however, can potentially experience one of two different processes. Some might feel shame, resulting from being demoted (i.e., they are no longer the record holders), as if they had lost in a competitive situation. This can be relevant even if they are no longer active athletes. This can ultimately lead to feuding against the new situation, up to the level of disapproving of the new record and confronting the new record holder. Alternatively, they might feel in accord with the new achievement and even relieved to pass along the torch and the associated social focus to someone else. In the case of Abdul-Jabbar, the latter was true:

Whenever a sports record is broken—including mine—it's a time for celebration. It means someone has pushed the boundaries of what we thought was possible to a whole new level. And when one person climbs higher than the last person, we all feel like we are capable of being more... That is the magic of sports. To see something seemingly impossible, reminding us that if one person can do it, then we all somehow share in that achievement... Millions of children across the country pushing themselves toward excellence because they saw an athlete do something spectacular and they want to do it too. Or at least try. That same kind of drive is behind many of humankind's greatest achievements.

Athletes' perceptions of and reactions to their records getting broken may also be dependent on their goal orientations. Athletes who are high in task orientation tend to value improvement, hard work, and cooperation (Biddle et al., 2003), and thus could be assumed to perceive the break of a record as a natural occurrence in the ongoing development of sports achievements. As a result, they may not be intimidated by it, and even publicly accept it as a positive event in the general social context. These athletes can use this competition to increase their self-referenced motivation, and be inspired to improve themselves, thus investing high efforts. An interesting example is Michael Phelps in the Beijing 2008 Olympic Games. In at least two of his races, he and his coach had set a more demanding record time than the one he had eventually achieved, a good indication for him being highly task-oriented (Mihailovitch, 2008). This could be seen in many of the examples previously presented.

On the other hand, athletes who are high in ego orientation might be reluctant to lose their social status (i.e., being the best in history) and as a result experience strong emotional response. This might lead to the anxiety of feeling shame and the fear of failure as if their life enterprise is at risk. In such cases, athletes would either disregard the new achievement or potentially attempt to diminish it, by suggesting that they had accomplished it under more challenging conditions (e.g., tougher competition, more effort, less time, fewer medical or technological resources). They might also dismiss the new achievement by indicating it was not achieved fairly. We could find such an approach in the way Carl Lewis was addressing Usain Bolt's achievements or in Svetlana Khorkina's comments against Simone Biles.

It should also be acknowledged that athletes can be high in both task and ego orientation. Going back to the Michael Phelps example, he had also expressed ego orientation when explaining that his workout ethics came from "not wanting to lose" and "wanting to do something that no one had ever done before" (Mihailovitch, 2008). Also, in 2012, Phelps was surpassed by fellow American swimmer Ryan Lochte in the 400-meter individual medley, a race that Phelps had won at the previous two Olympics. While Phelps congratulated Lochte on his achievement, he later admitted that he was disappointed to see his streak come to an end (Karst & Zipp, 2020).

Retired athletes and sport records

Retired athletes might perceive their records getting broken from two conflicting perspectives, depending on their current athletic identity (AI, Brewer et al., 2000) and connection to the sports. Ample research indicated that both a strong AI and a high tendency towards identity foreclosure were negatively associated with the quality of athletes' adaptation to the post-career transition and life satisfaction following retirement (Küttel et al., 2017; Torregrosa et al., 2015; Park et al., 2013). Also, the voluntariness of the retirement decision was found to be an important aspect that might influence athletes' well-being and identity following retirement (Lev et al., 2023). Studies with athletes who experienced forced retirement (i.e., due to injuries, deselection, age) found that participants experienced high levels of negative emotions, such as fear of a social death or dying, a sense of betrayal and social exclusion, a loss of identity, and lower life satisfaction (Martin et al., 2014; Park et al., 2013).

Therefore, we suggest that athletes' ability to support their records

getting broken by another competitor might be depending on whether they were able to effectively transition to the post-career. Athletes who retired voluntarily after achieving all they wished in their sports, might be more appreciative of those who challenge their records. Also, those who were able to construct new social identities, and find new life avenues outside of the sports world, would not be so intimidated when witnessing their career records getting broken. This could be easily seen in both Sergei Bubka's response as well as in Kareem Abdul-Jabbar's response. The latter commented on this issue (Abdul-Jabbar, 2023):

If someone had broken my record within ten years of me setting it... I might have hobbled out of retirement just to add a few more points on my record. But that ain't me today. I'm 75. The only time I ever think of the record is when someone brings it up. I retired from the NBA 34 years ago. For the past 20 years, I've occupied myself with social activism, my writing career, and my family – especially my three grandchildren. If I had a choice of having my scoring record remain intact for another hundred years or spend one afternoon with my grandchildren, I'd be on the floor in seconds stacking Legos and eating Un crustables.

On the other hand, for those athletes who are still very close to the sport, emotionally and socially, and perhaps did not develop other identities or new life pathways, seeing their records getting broken might be overwhelming. This event might bring them to a unique position where they are not the leaders of their sports discipline any longer, surpassed by their younger colleagues (Lev & Weinish, 2020). Certainly, emotions such as confusion, sadness, and guilt might be prevalent; confusion about their public status, sadness about losing their historical place and youth days, and guilt that perhaps they could have achieved a stronger record back when they still competed. Such emotions might explain why in certain cases athletes were very abusive towards the newcomer, as in the cases of Lewis and Johnson against Bolt, and Khornika against Biles. In such cases, the retired athlete was hypothetically willing to come back to compete (i.e., be young once more) to prove his or her superiority.

Social theories and sports records

In addition to the individualistic mindset, the social context of breaking sports records encompasses various societal, cultural, political, economic, and historical factors that influence the significance and interpretation of such accomplishments (Dillion, 2020). Sociological theories can help elucidate how these factors affect the breaking of records and the responses of athletes and fans.

Symbolic Interactionism proposes that the meaning of a record is not inherent in the achievement itself but rather emerges from social interactions among athletes, fans, and the media. The social context in which a record is broken can shape how it is perceived and celebrated. For instance, breaking a long-standing record in the Olympic Games may be more highly esteemed and celebrated than breaking a record in a less prominent or respected competition (Barker, Nyberg & Larsson, 2020).

Similarly, Structural Functionalism emphasizes the role of social context in shaping sports records. This theory views society as an interrelated system of components that collaborate to maintain stability and order. In sports, records function as a form of social control that regulates and structures athletic competition. The breaking of a record can disrupt the stability of the system by challenging established norms and expectations, leading to positive or negative reactions from athletes, fans, and the media (Loy & Booth, 2000).

Finally, Social Comparison Theory explains that people assess their abilities and achievements by comparing themselves to others. In sports, this theory can clarify why athletes seek to break records. When an athlete observes someone else achieve a record, they may perceive it as a challenge to their abilities and strive to exceed that achievement. This aspiration to outdo others can be a powerful motivator for athletes and can drive them to achieve their objectives (Bardel et al., 2010; Diel et al., 2021).

The social and political context of record-breaking

It can be difficult for athletes to cheer for someone who has just broken their record because sports records can be a source of personal pride and accomplishment. For many athletes, their records are a testament to the hard work, dedication, and talent that they possess, and breaking a record can represent a significant achievement for them. Seeing someone else break that record can be challenging because it may feel like their hard work and accomplishments have been overshadowed or invalidated. In addition, there may be feelings of loss and nostalgia associated with seeing a record broken. For many athletes, their records are a part of their legacy, and the breaking of that record can be seen as a passing of the torch to a new generation of athletes. This can be difficult for some athletes to accept, especially if they feel that their record represents a significant part of their identity or career. Finally, there may also be a sense of rivalry or competition between athletes, which can make it difficult for them to celebrate the success of someone else. In some cases, athletes may view their records as a way of establishing dominance over their peers, and seeing someone else break that record can be seen as a threat to their status and reputation within the sports community.

Another reason why it can be difficult for athletes to cheer for someone who has broken their record is that records can be seen as a way of measuring success and greatness in sports. Athletes who hold records are often revered and celebrated by fans, so breaking a record can be seen as a way of surpassing that athlete's legacy and achieving a higher level of greatness. This can create a sense of pressure and competition among athletes, where they feel that their records must be protected and defended at all costs. In some cases, this can lead to athletes becoming territorial or defensive about their records, which can make it difficult for them to embrace the success of others.

Furthermore, there may be external factors that influence an athlete's reaction to someone breaking their record. For example, if the athlete has a history of conflict or rivalry with the person who broke their record, they may be less inclined to support or acknowledge their achievement. Additionally, if the athlete feels that their record has been broken unfairly or through questionable means, they may be more likely to view the new record with skepticism or resentment. For example, in 1961, baseball player Roger Maris broke Babe Ruth's longstanding record for most home runs in a single season, hitting 61 home runs over the course of the year. While Maris's achievement was celebrated by many fans and teammates, he also faced significant backlash from those who felt that he had not earned the record in the same way that Ruth had. Maris later admitted that he felt pressure to live up to Ruth's legacy and that the criticism he faced had taken a toll on him emotionally (Carvalho & Ankney, 2008).

A similar scenario occurred when Kareem Abdul-Jabbar became the NBA's all-time leading scorer in 1979, surpassing Wilt Chamberlain's record. While Abdul-Jabbar's achievement was celebrated by many fans and peers, Chamberlain initially refused to acknowledge the accomplishment, calling it "unworthy" and stating that he had not played long enough to break his record (Christopher, 2009). Likewise, in 1994, figure skater Tonya Harding broke Nancy Kerrigan's record for the highest score in a U.S. Figure Skating Championship. While Harding's achievement was impressive, it was later discovered that she had conspired to have Kerrigan injured to improve her own chances of winning the championship. As a result, Harding's record was tainted by controversy and many fans and peers viewed her accomplishment with suspicion and criticism (Bolt & Carlson, 2019).

In addition to personal rivalries, the breaking of sports records is also a fertile ground for political disputes among nations and global perspectives. Athletes' record-breaking achievements were historically scrutinized for being unworthy or for being achieved unethically (i.e., under doping or through violation of the rules). For example, in 1956, Hungarian athlete Laszlo Papp broke the world record for the most consecutive wins in professional boxing. While Papp's accomplishment

was impressive, it was not widely praised in his home country due to the political tensions of the time. Papp was also criticized by some boxing experts who felt that his opponents were not of the same caliber as those of other champions (Fodor, 2017). In a similar vein, Soviet athlete, Tamara Press, broke the world record in the shot put at the 1960 Rome Olympic Games. While Press's accomplishment was impressive, she was not widely praised in the United States due to political tensions between the U.S. and the Soviet Union. Some people also questioned whether Press had used performance-enhancing drugs (Beamish & Ritchie, 2006). Likewise, in 1962, American swimmer Donna de Varona broke six world records in two days at the National AAU Swimming Championships in Indianapolis. Her accomplishments were widely praised in the US, but Soviet media criticized her achievements and accused the US of doping their athletes (Gonzales, 2019).

In 1983, American distance runner Mary Decker broke the world record in the 1500 m race at the World Championships in Helsinki. However, during the race, she collided with another athlete and fell to the ground, resulting in her disqualification. Some Americans accused the Soviet athlete she collided with, Zola Budd, of intentionally causing the collision and criticized her for representing South Africa, which was still under apartheid at the time (Keiderling, 2016). Finally, in 1986, American figure skater Debi Thomas became the first Black athlete to win a world figure skating championship. While her accomplishment was widely praised in the US, Soviet media criticized her achievements and accused the US of promoting a false image of racial harmony in sports (Beamish & Ritchie, 2006).

Generations, technology, and record-breaking

There may be also some differences in how various generations perceive record-breaking achievements and their reception. For example, older generations (Baby-boomers to generation X) may value tradition and history and may be more reluctant to see records broken or changed. They may also be more likely to view record-breaking achievements as personal accomplishments rather than team efforts. On the other hand, younger generations (Generation Z onwards) may be more open to change and may view record-breaking achievements as a shared accomplishment that reflects progress and evolution in the sport (Snyder, 1991; Slavich & Hungenberg, 2023).

Additionally, the way record-breaking achievements are received may be influenced by the cultural and political context of the time. During the Cold War era, for example, sports were often used as a proxy for political and ideological conflicts between the US and the USSR, and achievements by athletes from one country were often seen as a threat or a challenge by the other, as could be seen in the above examples. In more recent times, issues such as doping, gender and racial equality, and athlete activism have also influenced how record-breaking achievements are perceived by different generations and audiences (Galily, 2019).

Another factor that may influence how different generations perceive record-breaking achievements is the rise of technology and its impact on sports. With advances in technology, athletes today have access to better training methods, equipment, and nutrition, which may give them an advantage over athletes from previous generations. This can make it easier for current athletes to break records and achieve feats that were once thought impossible, but it can also lead to skepticism and criticism from older generations who may view these achievements as less impressive or less legitimate. Within this context, Rosenberg and Sailors (2022) criticized the "INEOS 1:59 Challenge" in which Kenyan runner, Eliud Kipchoge, became the first person to run a 'marathon' in <2 h. Specifically, they suggested that while elite runners tend to employ various sports technologies to enhance performance, in Kipchoge's time trial spectacle nonconventional technologies were utilized to improve his running performance, including the course, fueling, pacing, and footwear. These allowed an unfair advantage, especially as running tended to be perceived as a basic, simple, and natural skill

(Rosenberg & Sailors, 2022).

Furthermore, the rise of social media and digital media has made it easier for athletes to connect with their fans and build their personal brands, which may also influence how record-breaking achievements can be received (e.g., Geurin, 2017; Hayes et al., 2019). Younger generations may be more likely to follow and support athletes who are active on social media and who use their platform to advocate for social and political causes, while older generations may place more emphasis on an athlete's on-field performance and traditional measures of success such as wins and records.

Still, social media can be a double-edged sword when it comes to record-breaking achievements. On one hand, social media can be a powerful tool for athletes to promote themselves and their accomplishments and to build a loyal fan base that will support them through thick and thin. This can help to generate excitement and interest around record-breaking achievements and can help to cement their place in sports history. On the other hand, social media can also expose athletes to greater scrutiny and criticism, particularly if they are seen as overly self-promoting or if their on-field performance doesn't live up to the hype. In addition, social media can sometimes lead to a "cancel culture" mentality, where athletes who make mistakes or who are perceived as not living up to certain standards are quickly called out and criticized. A good example is the case of American gymnast superstar Simone Biles at the 2020 Tokyo Olympic Games. Biles, who has a major social media influence (Rao, 2022) came to reestablish her GOAT (greatest of all times) status, yet eventually had to withdraw from several of her scheduled events mid-competition, referring to some mental health issues she had experienced. A study that examined 87,714 user comments on her withdrawal found a polarizing narrative, with many users supporting Biles, engaging in the wider discussion surrounding athlete mental health, while others condemned her action, suggesting she quit on the biggest sporting stage (Doehler, 2023). Therefore, the rise of social has given athletes more power and influence than ever before, but it has also exposed them to new challenges and pressures that can impact how record-breaking achievements are received by different generations and audiences.

Conclusions

Humans have always been intrigued about breaking records, in all aspects of existence. The sports domain is a setting that naturally allows opportunities for individuals and teams to break records in various ways, being absolute measurable records or more relative ones (Loland, 2001; Parry, 2006). The event in which a record is getting broken, especially a major record in a global sport, is unique in two aspects. First, it creates a professional and psychosocial influence on the careers and lives of the athletes involved; those who break the record and those whose record is getting broken. Secondly, this event must be understood within a particular social and political context (Parry, 2006).

In this article, we presented various examples of athletes who either accorded with or feuded against their records getting broken by another athlete. We believe that athletes' emotional and public responses to their records getting broken are related to both their achievement motivation, their activity status and retirement adaptation, as well as to a mixture of social, cultural, and sport-related factors. It is difficult to anticipate upfront how athletes would respond, but certain ideas can be suggested.

Firstly, it seems that athletes who are highly task oriented would perceive the breaking of their records more favorably than athletes who are highly ego-oriented. As elite athletes tend to be higher in task orientation and lower in ego orientation (Lochbaum et al., 2016), perhaps athletes are more inclined to accord with their records getting broken. Still, the actual event calls for ego involvement and thus may initially be associated with a strong emotional response and only later athletes may reconcile with the new situation.

Secondly, we believe that the activity status of the athletes involved is of importance. Active athletes might be more competitive about re-

breaking the record and their emotions might indicate ego involvement. Retired athletes who have adapted successfully to the post-career and developed new social identities might be more supportive than those who are still highly related to their sports and could not transition well to the post-career.

Thirdly, athletes may develop professional, yet personal, rivalries within their sports that are enflamed by social and political forces. As records reflect the pinnacle of human achievement within a unique sport context, social comparisons are made not only about the quality of the record but also about how it was achieved. Therefore, people ask under which particular circumstances the record was achieved; if it was achieved ethically, how much effort were involved, and whether a special advantage was involved (e.g., a new technology). This goes back to the idea of goal involvement as ego-oriented athletes would inspire to achieve a record with minimal effort thereby inflating its meaning. Task-oriented athletes would be highly concentrated on the efforts involved and whether "the way" was appropriate and demonstrated good sportspersonship. A good example of the latter is how Roger Federer decided to respond to Rafael Nadal's achievements. This is further related to political agendas, as different nations aspire to base their dominance through sports. Particularly, this was the case during the cold war and the attempts of the US and the USSR to dominate the global sports arena and the Olympic Games.

Finally, athletes' responses to record-breaking are influenced by global factors such as generations, technology, and social media. As generations pass, social views change, according to the periodical, political, economic, and religious occurrences. When Jesse Owens, an Afro-American athlete, won four gold medals in the 1936 Berlin Olympic Games, in front of the NAZI party leaders, the political and social circumstances for black athletes were very different in both Germany and the US, compared with Carl Lewis's era, and of course when Usain Bolt achieved his glory. Likewise, Olympic athletes were not allowed a professional status until the 1990s, so committing to their sports was different from today's athletes who are typically professional.

Current scientific and technological advantages in sportswear, training, and medicine also allow modern athletes to achieve greatness and break records, either through higher training loads and competition intensities that enable them to reach records faster or by longevity as active competitors. Past athletes might perceive this as an unfair advantage. However, we believe that this is ultimately dependent on the athlete's philosophy. If we consider that sports reflect a human collective effort to reach and surpass physiological and mental boundaries, then sports technologies have a place as they reflect an aspect of such efforts. However, if one believes that sports should remain as much as possible a natural and authentic human endeavor, then technologies reflect a disruption (Loland, 2002). Therefore, athletes would react differently to their records being broken also in relation to their philosophies on the role of technology and scientific progress in sports.

Moreover, social media allows nowadays athletes to directly communicate with their fans, thereby disengaging from any potential filters or even censors, which heavily influenced media coverage of sports events in previous generations. Still, social media is a double-edged sword, and current athletes who do not achieve records, or even show some negative attitudes on social media, might get piercing, unfiltered, scrutiny from fans.

As a final note, we were surprised to find hardly any articles about this topic. As breaking records reflect an important aspect (and a main goal) of sports, at both the individual and the organizational levels, more studies should be devoted to exploring this area. There are important questions to be asked within this context. For example, what are the achievement motivation characteristics of athletes who break records? Do they change as they get older and then retire? What external factors might influence these characteristics and their change over time? Are there distinct cultural differences in athletes' perceptions of and responses to the breaking of records? Do athletes from different sports disciplines react in similarly or not? We believe that answering these

questions, potentially through qualitative as well as explorative designs, can further our understanding of this phenomenon, and perhaps advance our approach to the next generation of athletes who would aspire to surpass the athletes of our days.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Abdual-Jabbar, K. (2023). What I think about LeBron breaking my NBA scoring record. *Kareem Abdul-Jabbar*. <https://kareem.substack.com/p/what-i-think-about-lebron-breaking>.
- Atkinson, J. (1964). *An introduction to motivation*. Van Nostrand Bardel, M. H., Fontayne, P., Colombel, F., & Schiphof, L. (2010). Effects of match result and social comparison on sport state self-esteem fluctuations. *Psychology of Sport and Exercise*, 11(3), 171–176. <https://doi.org/10.1016/j.psychsport.2010.01.005>
- Barker, D., Nyberg, G., & Larsson, H. (2020). Joy, fear and resignation: Investigating emotions in physical education using a symbolic interactionist approach. *Sport, Education and Society*, 25(8), 872–888. <https://doi.org/10.1080/13573322.2019.1672148>
- Beamish, R., & Ritchie, I. (2006). *Fastest, highest, strongest: A critique of high performance sport*. Routledge.
- Biddle, S., Wang, C. K. J., Kavussanu, M., & Spray, C. (2003). Correlates of achievement goal orientations in physical activity: A systematic review of research. *European Journal of Sport Science*, 3(5), 1–20. <https://doi.org/10.1080/17461390300073504>
- Boehme, G. (2019). *Drew brees: Record-breaking quarterback*. Cavendish Square Publishing, LLC.
- Bolt, B.R., & Carlson, C. (2019). Sport, envy, and the conundrum of comparison. In N. J. Watson (Ed.), *Sport and christianity: Practices for the twenty-first century*, (pp. 133–144). doi: 10.5040/9780567678638.ch-012.
- Bradley, C. (2021). Michael Johnson claimed he'd beat Usain Bolt: 'I win every day. *Express*. <https://www.express.co.uk/sport/othersport/1472928/michael-johnson-n-ews-beat-usain-bolt-win-tokyo-2020-olympic-games-spt>.
- Brewer, B. W., Van Raalte, J. L., & Petitpas, A. (2000). Self-identity issues in sport career transitions. In D. Lavallee & P. Wylleman (Eds.), *Career transition in sport: International perspectives* (pp. 29–48). Fitness Information Technology.
- Carvalho, J., & Ankney, R. (2008). Haunted by the Babe: Baseball commissioner Ford Frick's clumns about Babe Ruth. *American Journalism*, 25(4), 65–82. <https://doi.org/10.1080/08821127.2008.10678136>
- Christopher, M. (2009). *Great moments in basketball history*. UK: Hachette.
- Conroy, D. E. (2014). Achievement motive theory. In R. C. Eklund, & G. Tenenbaum (Eds.), *Encyclopedia of sport and exercise psychology* (pp. 6–9). London: Sage.
- Conroy, D. E., & Hyde, A. L. (2014). Achievement goal theory. In R. C. Eklund, & G. Tenenbaum (Eds.), *Encyclopedia of sport and exercise psychology* (pp. 1–6). London: Sage.
- Diel, K., Broeker, L., Raab, M., & Hofmann, W. (2021). Motivational and emotional effects of social comparison in sports. *Psychology of Sport and Exercise*, 57, Article 102048. <https://doi.org/10.1016/j.psychsport.2021.102048>. Article.
- Dillon, M. (2020). *Introduction to sociological theory: Theorists, concepts, and their applicability to the twenty-first century*. John Wiley & Sons.
- Doehler, S. (2023). Role model or quitter? Social media's response to Simone Biles at Tokyo 2020. *International Journal of Sport Communication*, 16(1), 64–79. <https://doi.org/10.1123/ijsc.2022-0143>
- Duda, J. L. (1989). Relationship between task and ego orientation and the perceived purpose of sport among high school athletes. *Journal of Sport & Exercise Psychology*, 11(3), 318–335.
- Duda, J. L. (2001). Achievement goal research in sport: Pushing the boundaries and clarifying some misunderstandings. In G. C. Roberts (Ed.), *Advances in motivation in sport and exercise* (pp. 129–182). Human Kinetics.
- European Olympic Committees. (2014, February 14). *Sergey Bubka congratulates French pole vault star Renaud Lavillenie*. <https://www.eurolympic.org/sergey-bubka-congratulates-french-pole-vault-star-renaud-lavillenie/>.
- Fairman, K. (2020). Watch Schumacher being asked about Hamilton beating his record back in 2008. *WTF1*. <https://wtf1.com/post/schumacher-hamilton-absolutely-beat-title-record/>.
- Fodor, P. (2017). Erasing, rewriting, and propaganda in the Hungarian sports films of the 1950s. *The Hungarian historical review: New series of Acta Historica Academiae Scientiarum Hungaricae*, 6(2), 328–354.
- Galily, Y. (2019). "Shut up and dribble!"? Athletes activism in the age of twittersphere: The case of LeBron James. *Technology in Society*, 58, Article 101109. Article.
- Geurin, A. N. (2017). Elite female athletes' perceptions of new media use relating to their 15 careers: A qualitative analysis. *Journal of Sport Management*, 31(4), 345–359. <https://doi.org/10.1123/jsm.2016-0157>
- Gonzales, D. (2019). *Girls with guts!: The road to breaking barriers and bashing records*. Charlesbridge Publishing.
- Hayes, M., Filo, K., Riot, C., & Geurin, A. (2019). Athlete perceptions of social media benefits and challenges during major sport events. *International Journal of Sport Communication*, 12(4), 449–481. <https://doi.org/10.1123/ijsc.2019-0026>
- Hurst, P., Ring, C., & Kavussanu, M. (2022). Ego orientation is related to doping likelihood via sport supplement use and sport supplement beliefs. *European Journal of Sport Science*, 22(11), 1734–1742. <https://doi.org/10.1080/17461391.2021.1995509>
- Jones, M. (2017). Carl Lewis claims that while Usain Bolt has won individual awards, sprinting has deteriorated in his shadow. *Sport360*. <https://sport360.com/article/other/athletics/242246/carl-lewis-claims-that-while-usain-bolt-has-won-individual-awards-sprinting-has-deteriorated-in-his-shadow>.
- Karst, M., & Zipp, S. (2020). Swimming and diving. In M. Karst, & S Zipp (Eds.), *Routledge handbook of global sport* (pp. 343–354). Routledge.
- Keiderling, K. (2016). *Olympic collision: The story of mary decker and zola budd*. U of Nebraska Press.
- Küttel, A., Boyle, E., & Schmid, J. (2017). Factors contributing to the quality of the transition out of elite sports in Swiss, Danish, and Polish athletes. *Psychology of Sport and Exercise*, 29, 27–39.
- Lev, A., & Weinish, S. (2020). Lost in transition: Analyzing the lifecycle of Israeli football stars in becoming coaches. *Israel Affairs*, 26(4), 555–572. <https://doi.org/10.1080/13537121.2020.1775940>
- Lev, A., Levental, O., & Tamir, I. (2023). From legends to legacy: The impact of fan influence on retiring athletes in premier league basketball. *Frontiers in Psychology*, 14, Article 1295487. <https://doi.org/10.3389/fpsyg.2023.1295487>
- Liubovb. (2019). Khorkina: Don't make the unbeatable out of Biles. *Gymnovosti*. <https://eng.gymnovosti.com/khorkina-dont-make-the-unbeatable-queen-out-of-biles/>.
- Lochbaum, M., Çetinkalp, Z. K., Graham, K.-A., Wright, T., & Zazo, R. (2016). Task and ego goal orientations in competitive sport: A quantitative review of the literature from 1989 to 2016. *Kinesiology*, 48(1), 3–29.
- Loland, S. (2001). Record sports: An ecological critique and a reconstruction. *Journal of the Philosophy of Sport*, 28(2), 127–139. <https://doi.org/10.1080/00948705.2001.9714608>
- Loland, S. (2002). Technology in sport: Three ideal-typical views and their implications. *European Journal of Sport Science*, 2(1), 1–11. <https://doi.org/10.1080/17461390200072105>
- Loy, J. W., & Booth, D. (2000). Functionalism, sport and society. In J. Coakley, & E. Dunning (Eds.), *Handbook of sports studies* (pp. 8–27). Sage. <https://doi.org/10.4135/9781848608382>.
- Mandal, A. (2022, February 2). 'No problem if my records are broken!' Gentleman Roger Federer reflects on the Australian Open final and his records being broken. First Sportz. <https://firstsportz.com/tennis-no-problem-if-my-records-are-broken-gentleman-roger-federer-reflects-on-australian-open-final-and-his-records-being-broken/>.
- Martin, L., Fogarty, G., & Albion, M. (2014). Changes in athletic identity and life satisfaction of elite athletes as a function of retirement status. *Journal of Applied Sport Psychology*, 26(1), 96–110. <https://doi.org/10.1080/10413200.2013.798371>
- Marsh, B. E. (2010). *The emperor and the little king: The narrative construction of lebron james and kobe bryant*. Boston College: College of Arts and Sciences. Doctoral dissertation.
- McClelland, D. (1961). *The achieving society*. Free Press.
- Meyers, D. (2017). Russian gymnastics legend accuses Simone Biles of doping, compares WADA to Nazis. *Deadspin*. <https://deadspin.com/russian-gymnastics-legend-accuses-simone-biles-of-doping-1803138294>.
- Mihailovitch, D. (2008). *60 min: The golden boy (Television broadcast)*. December 1. CBS News.
- Murray, H. (1938). *Explorations in personality*. Oxford University Press.
- Nicholls, J. G. (1989). *The competitive ethos and democratic education*. Harvard University Press.
- Oprah, W. (producer). (2016). *Oprah: Where are they now? —Season 6 Episode 616 Olympic swimmer Mark Spitz on Michael Phelps' "quite incredible" accomplishments* (Television broadcast). OWN.
- Papaioannou, A., & Macdonald, A. (1993). Goal perspectives and purposes of physical education as perceived by Greek adolescents. *Physical Education Review*, 16, 41–48.
- Park, S., Lavallee, D., & Tod, D. (2013). Athletes' career transition out of sport: A systematic review. *International Review of Sport and Exercise Psychology*, 6, 22–53.
- Parry, J. (2006). The idea of the record. *Sport in History*, 26(2), 197–214. <https://doi.org/10.1080/17460260600786864>
- Rao, K. (2022). *They listen to us" - Simone Biles on using social media for positive influencing*. Sportskeeda. <https://www.sportskeeda.com/gymnastics/they-listen-us-simone-biles-using-social-media-positive-influencing>.
- Roberts, G. C., & Papaioannou, A. G. (2014). Achievement motivation in sport settings. In A. G. Papaioannou, & D. Hackfort (Eds.), *Routledge companion to sport and exercise psychology: Global perspectives and fundamental concepts* (pp. 49–66). Routledge/Taylor & Francis Group.
- Rosenberg, D., & Sailors, P. R. (2022). What money can buy: Technology and breaking the two-hour 'marathon' record. *Journal of the Philosophy of Sport*, 49(1), 1–18. <https://doi.org/10.1080/00948705.2021.1976194>
- Roy, N. (2022). She's been around for over 20 years, I hope she does break it" - When Steffi Graf said she hoped Serena Williams broke her Grand Slam record. *Sportskeeda*. <https://www.sportskeeda.com/tennis/news-i-m-happy-her-i-m-excited-her-when-s-teffi-graf-said-hoped-serena-williams-broke-grand-slam-record>.
- Sage, L., & Kavussanu, M. (2007). The effects of goal involvement on moral behavior in an experimentally manipulated competitive setting. *Journal of Sport and Exercise Psychology*, 29(2), 190–207. <https://doi.org/10.1123/jsep.29.2.190>
- Slavich, M. A., & Hungenberg, E. (2023). That's classic: The effect of nostalgic media on sports consumers. *Journal of Sport Behavior*, 46(1).
- Smith, A. L., Balaguer, I., & Duda, J. L. (2006). Goal orientation profile differences on perceived motivational climate, perceived peer relationships, and motivation-related responses of youth athletes. *Journal of Sports Sciences*, 24(12), 1315–1327. <https://doi.org/10.1080/02640410500502427>

- Snyder, E. E. (1991). Sociology of nostalgia: Sport halls of fame and museums in America. *Sociology of Sport Journal*, 8(3), 228–238.
- Sutherland, N. (2022). Lionel Messi vs Diego Maradona: Which Argentine icon is the GOAT? *Givemesport*. <https://www.givemesport.com/88096630-lionel-messi-vs-diego-maradona-which-argentine-icon-is-the-goat/>.
- Torregrosa, M., Ramis, Y., Pallarés, S., Azócar, F., & Selva, C. (2015). Olympic athletes back to retirement: A qualitative longitudinal study. *Psychology of Sport and Exercise*, 21, 50–56. <https://doi.org/10.1016/j.psychsport.2015.03.003>
- Weinisch, S., & Lev, A. (2021). Who leads The Last Dance? *International Review for the Sociology of Sport*, 56(3), 436–441. <https://doi.org/10.1177/1012690220969345>