

Rider University

Sports and Psychology

Uncovering Superstitions in Sports

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## **I. Introduction**

Sports have evolved from a pastime to a way of life for millions of people around the globe. Fans invest hours upon hours to dedicate themselves to the sport or sports they love so much. Athletes have dedicated more time to their respective sports as well, now that the level of competition across the board is greater than ever before. This has driven fans and athletes to find a little extra good luck where they can, even in the most ridiculous places. These are where superstitions come in.

Superstitious beliefs are not and were never uncommon. Most people believe that seeing a black cat, breaking a mirror, opening an umbrella indoors or picking up a penny tails-up will bring them bad luck. It isn't much different among sports fans, where some people believe wearing a certain jersey will bring their team the luck that's needed to win.

Why do fans and athletes believe in superstitions? This study below identifies what helps lead to superstitions, as well as what reinforces them. Those concepts will then be applied to the world of sports using both athletes and fans as examples to help explain what could be going on when they take part in superstitious activities.

## **II. Superstitions**

According to the Oxford English Dictionary, a superstitious belief or behavior is defined as "A widely held, but irrational, belief in supernatural influences, especially as leading to good or bad luck, or a practice based on such a belief," (Oxford). Yet, superstitions become personalized and unique. While it is believed by some that superstitious activities have an impact on an outcome, that thought is believed to be false.

So what makes humans superstitious? One of the keys we need to analyze to unlock this answer lies within ritual. Rituals are actions that we repeat because of a symbolic value (Whitbourne). Praying to a deity every night before dinner or working out every morning are rituals. A ritual, however, can become a superstitious action once you start taking that action and associating it with a certain outcome (Whitbourne). Another notable difference between superstitions and rituals is that ““superstitions emerge as a result of uncertainty to circumstances that are inherently random or uncontrollable,”” would imply that there is something subconscious that triggers these superstitions while rituals are conducted consciously and by choice (Maranise).

Oftentimes, the action doesn't even have an effect on the event a person is trying to influence. If you go to work out to the gym everyday and leave at exactly 2 p.m. because you think leaving at that time is somehow going to make you rich, it just makes no sense. If you break a mirror, you're probably going to get a few cuts, but it's impossible that the action of breaking a mirror actually causes bad luck of any kind.

There's more than what meets the eye with superstitious actions, however. Some scientists and psychologists, like Jane Risen, have used a concept known as the dual process model of cognition in order to help us understand what's going on in our minds when we take part in superstitious behavior (Medical News Today). Risen explains that humans have the ability to think “fast” and the ability to think “slow.” Fast thinking makes humans instinctive, impulsive, and concise, while slow thinking allows humans to make rational, thought-out decisions and plans (Risen). Risen describes the brain as having two systems. In the first system, which she calls the magical intuition or the superstitious activity, is engaged by the brain using fast

thinking. After that, should the brain continue to think fast (Risen refers to this as “does not engage” in her study), System Two of the brain will continue to rationalize the reasoning behind the superstitious activity. In the event System Two does engage and begins to think slow, the brain will override or correct the superstitious action (Risen.) System One can be influenced by factors like confirmation bias, which is “the tendency to search for and favor evidence that supports current beliefs and ignore or dismiss evidence that does not,” and causal intuition, which is making a prediction that a certain result will warrant a certain outcome (Risen). Both confirmation bias and causal intuition provoke fast thinking, and if System Two does not engage, that may only worsen the future effects of a person’s superstitions. Some factors which influence whether System Two engages include the ability to be rational, motivation to be rational, and contextual clues (Risen). Risen states the ability to be rational may correlate with how educated an individual is. In theory, the more educated a person is, the less likely they are to believe in “magical thinking.” With motivation to be rational, individuals can actually overcome their superstitious thoughts almost on their own. This “motivation” can vary from person to person, including the uses of instruction, incentives, moods and cognitive difficulties. Finally, reviewing the processes completed and using contextual clues to recognize errors can also override magical thinking. None of these, however, are guaranteed to occur, and if they do not, System Two will not engage and the individual will continue to support their superstitious thinking.

Using this information, we will analyze superstitions in sports, both through athletes and fans, to better understand what may be going on inside their brain that creates their superstitious thinking.

### III. Sports

#### *Superstitions in Athletes*

##### *Case Study - Dale Earnhardt's Lucky Penny*

By the late 1990s, Dale Earnhardt was a household name in sports. Earnhardt's reign in the NASCAR Winston Cup Series helped the sport grow in popularity, but the seven-time series champion just couldn't seem to find any luck in winning the first and biggest race of the NASCAR Winston Cup season, the Daytona 500. Earnhardt had accomplished everything else possible, but for 19 years, Earnhardt couldn't find his way to victory lane. In 1990, Earnhardt hit a seagull during the race and blew a tire going into the final corners of the race, handing the race lead and win to Derrick Cope. In 1993, Earnhardt had the dominant car, but was passed by Dale Jarrett with just a few laps remaining. In 1997, Earnhardt was running second, stalking race leader Bill Elliott with just a handful of laps remaining when contact with Jeff Gordon sent Earnhardt's black number 3 car airborne, and Earnhardt tumbled. Heading into his 20th attempt of the Daytona 500, Earnhardt was coming off of one of his worst seasons in his career. The 1997 season had ended a streak of 15 consecutive years with at least one win per season for Earnhardt ... so what made 1998 different?

Days before the 40th annual Daytona 500 kicked off the 1998 Winston Cup Series campaign, Earnhardt found himself in a Daytona International Speedway administration building, per the request of 6-year-old Wessa Miller (Crossman). Wessa was born with spina bifida, which is a birth defect that prevents the proper development of the spinal cord. Juanita, Wessa's mother, reached out to the Make-A-Wish Foundation, in hopes that her daughter would

be granted her one wish to meet racing's biggest star. When they met, Wessa gave Earnhardt a small but powerful gift: her lucky penny.

Earnhardt glued the penny to his car's dashboard, and that Sunday, Earnhardt led 107 of the race's 200 laps and captured his first and only Daytona 500 win (Crossman).

According to Jane Risen's study, Earnhardt would have had System One engaged when he received Wessa's penny. His fast-thinking would have engaged System One of the brain's two systems. Winning the Daytona 500 with the penny would have only worsened Earnhardt's superstitious belief that the penny helped him because winning the race served as the confirmation bias that blocked System Two from engaging and overriding Earnhardt's fast thinking.

After each Daytona 500, the winning car stays on display at Daytona International Speedway in the condition it leaves Victory Lane in. No reports are confirmed, but rumors among other NASCAR teams swarmed that after the Daytona 500, Earnhardt had asked NASCAR officials if he could take the penny with him, but NASCAR denied Earnhardt his wish. Clearly, the penny left a superstitious impression on Earnhardt, because he failed to win any of the 32 races following the Daytona 500 in the 1998 season, and he never won the Daytona 500 again.

After Earnhardt died in a wreck in the 2001 Daytona 500, the No. 3 car was not raced in the NASCAR Cup Series until 2014 when Austin Dillon began driving in the Cup Series. Dillon had been in Victory Lane with Earnhardt when he won the 1998 event, and is the grandson of the car owner of Earnhardt's car. In 2018 - 20 years after Earnhardt got his lucky penny - Austin Dillon got one of his own from a fan (Friedlander). Dillon won the 2018 Daytona 500 just days

later with that penny in his car, which left many people wondering what it was about the pennies that helped Earnhardt and Dillon win the Daytona 500 and proved how superstitious thinking can lead to both successes and failures.

Earnhardt's superstitious belief is one of many in sports. Before Michael Jordan was the owner of the NBA's Charlotte Hornets and NASCAR's 23XI Racing, before he became an NBA legend, and before he stepped foot onto a court for his first professional basketball game, "His Airness" was a Tar Heel. Jordan played as a member of the University of North Carolina Tar Heels from 1981 to 1984. He was a part of the 1982 NCAA championship-winning lineup for the Tar Heels, which was a moment that seemed to stick with Jordan. After being drafted to the Chicago Bulls in 1984, Jordan began to wear his practice shorts from the 1982 Tar Heels championship season underneath his Bulls shorts (Jones).

PGA Tour golfer Tiger Woods is known for his many achievements in the links. With 82 wins in the PGA Tour, he's tied for the most all-time on the Tour, which includes 15 major championships, second only to Jack Nicklaus with 18 majors. Very few things have stayed the same over the course of Woods' career, but one thing that has stayed consistent is his red polos.

Anytime you see Woods in a commercial or if you look him up online, he almost always has a red polo of some kind on. This is no coincidence, as Woods has been wearing red on Sundays since his junior golfing days (Jackson). The college he attended, Stanford University, wore red on their final days of events as well, and he kept the superstitious tradition alive as he entered the PGA Tour. Woods has also been known to keep three tees in his right front pocket and his yardage book in his right rear pocket at all times while playing (Weinman).

In Jordan and Woods' cases, their superstitious beliefs and actions were different from Earnhardt's in that their actions lasted over the entirety of their careers. Where Earnhardt's one-time superstition did seem to have some type of impact, Woods and Jordan still lost while taking part in their superstitious actions, which raises the question as to why their fast, impulsive thinking continued to occur even when their superstitious acts were disproven. Jane Risen's study suggests that in theory, because their superstitions did not work, System Two should have engaged and slowed the thinking of both superstars. However, it is possible that Jordan and Woods lacked the motivation to be rational. If they wanted to be rational, they would have realized that, by losing any number of games or matches, that their superstitions were disproven and they wouldn't continue to put the effort into executing their rituals. It's possible that both athletes felt that they needed some type of extra good-luck charm to keep their high levels of overall success. This would rationalize the athletes' lack of motivation to be rational, which would in turn explain why Woods and Jordan never gave up their rituals.

Another possible explanation for these elite athletes not giving up their superstitious rituals is that it made the athletes feel more in control of their event's outcome. A study conducted by Universite Libre de Bruxelles found that athletes' "ritual commitment was found to be greater when uncertainty and importance were greater," (Brevers et al). The study also found that the feeling of having control over the outcome of an event acts as a placebo, which helps ease mental tension within the athlete (Brevers et al). There was no mention about how these rituals did or did not actually affect the in-game performance of the athlete, but because athletes have direct effects in their sport, it is possible that their superstitious rituals could actually impact the outcome of a game. This would require a new sector of research that has yet to be conducted.



### ***Superstitions in Sports Fans***

Athletes aren't the only superstitious figures in sports. In fact, many sports fans are superstitious. A survey was conducted in conjunction with the execution of this paper in an effort to understand sports fans' superstitions. The survey was conducted during the COVID-19 lockdown in which sporting events were not being held. This eight-question survey was issued to participants online through platforms such as Twitter, Facebook and Reddit. Respondents were asked about their age, gender, area of residence, what sports they regularly follow, and how much time they spent consuming sports media per week. These questions were asked not only to accumulate information, but to find correlations between demographic factors and fans' superstitions.

Altogether, 197 people between the ages of 18 and 85 participated in the survey from the United States, Canada, France, England, and other countries. Of the participants, 94 stated that they are not superstitious under any circumstances. 52 participants stated they consider themselves to be superstitious under most or all circumstances, and an additional 41 people said they consider themselves superstitious only pertaining to sports. The final 10 respondents said that while they do have superstitious beliefs, that does not pertain to the sports they follow (A full list of questions can be found in the appendix).

Participants were then asked to identify which sports they followed on a regular basis, which could include multiple sports. Motorsports was the most followed with a total of 77.7% of respondents keeping regularly up-to-date with various sports like NASCAR, IndyCar, Formula 1,

IMSA and motorcycle racing. Professional American football was the next most watched sport at 71.6% (Passero). The remainder of followed sports by respondents is as follows:

- Professional baseball (55.8%)
- College football (42.6%)
- Ice hockey (41.6%)
- College basketball (31.5%)
- Professional basketball (29.9%)
- Soccer (20.3%)
- Golf (18.3%)
- College baseball (10.7%)
- High school sports (10.2%)
- Other college sports (4.6%)
- Volleyball (4.1%)
- Bowling (4.1%)
- Softball (3.6%)
- Esports (1.0%)
- Field hockey (0.5%)
- UFC (0.5%)
- No sports at all (0.5%)

Of the respondents who stated that they have superstitions, the most superstitious group were those who follow motorsports with 57 respondents having some type of superstition related

to it. The next largest group was professional American football fans, with 52 respondents being superstitious (Passero).

Fans were then asked to provide their superstitious routines. Many people had between one to three rituals which they performed before, during, or after a sporting event, which included the following: sitting in the same seat for each event, wearing a specific jersey, shirt, hat, or other piece of team-related clothing, swapping out those clothes if something bad happens to their team, using a special mug for coffee, watching less than the full-game broadcast on television, repeating certain chants and phrases, not speaking about something they foresee as a positive thing while it's in progress (i.e. no-hitters, perfect race, etc.), listening to certain music before the game, praying, and eating specific meals (Passero).

One respondent elaborated on his superstitions. Erik Johnsen, a 20-year-old male from northern New Jersey, follows motorsports, professional American football, professional baseball, and ice hockey. Johnsen said he didn't have any superstitions regarding three of those sports, but he listed a number of them when it came to football and his favorite team, the Minnesota Vikings (Johnsen).

"There was a stretch of games that our team kept losing," Johnsen said. "There was a day that my dad and I just said 'We need to do something different.' We switched where we were sitting and the Vikings won. We wore the same stuff and sat in the same spot and they won for three straight weeks."

Johnsen also explained that his and his father's superstitions go even further. They watch the same pregame show every week, they turn on the radio broadcast of the game, they aren't

allowed to miss a game, and they don't get out of their seats until the game is over. Johnsen said that this has been a trend for the last decade in his house (Johnsen).

Probably like many superstitious fans, Johnsen's fast thinking was given the confirmation bias he had been hoping for, being that his team won the next three straight games. But Johnsen's and every other fan's superstitions all have one thing in common: none of them impact any sporting event in any way, shape, or form.

#### **IV. Conclusion**

Sports-specific superstitions are a psychological phenomenon that should be studied more over time. As sports continue to be a very profitable business as well as a platform for messages of justice for the world in a politically heated time, the world will continue to try to fully understand just how sports psychology, including superstitions, come to be.

Despite the persistence of fans and athletes, there is no evidence that superstitious rituals have direct effects on performance and event outcomes, even as these rituals continue to be practiced. However, there appears to be a desire by some fans and athletes alike to have any existing competitive edge in their or their team's favor to influence the outcome that is wanted. It could explain why athletes like Tiger Woods and Michael Jordan, as well as fans like Erik Johnsen, continue to practice superstitious rituals even after losing and disproving the effectiveness of the rituals. Superstitious beliefs and rituals will continue to be a part of people's lives no matter what it pertains to or where they are located around the world so long as there is a desire to take part in the activity and to have a competitive advantage.

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## Appendix

*Passero, Joseph. "Sports Superstitions." Google Forms, June 5 2020. Google Forms, June 24*

*2020.* This survey included the following questions:

1. What sports do you watch? Check all that Apply
  - a. American Football (NFL, XFL, etc.)
  - b. Soccer
  - c. Baseball
  - d. Ice hockey
  - e. Motorsports (NASCAR, IMSA, IndyCar, etc.)
  - f. Field Hockey
  - g. Professional Basketball
  - h. Softball
  - i. Volleyball
  - j. Bowling
  - k. Golf
  - l. College Football
  - m. College Basketball
  - n. College Baseball
  - o. Other College Sports

- p. High School Sports
  - q. None
  - r. Other [answer here]
2. Do you consider yourself a superstitious person?
- a. Yes
  - b. No
  - c. Yes, but not with sports
  - d. Yes, but only with sports
3. Of the sports you watch, which sports do you have superstitions with?
- a. American Football (NFL, XFL, etc.)
  - b. Soccer
  - c. Baseball
  - d. Ice hockey
  - e. Motorsports (NASCAR, IMSA, IndyCar, etc.)
  - f. Field Hockey
  - g. Professional Basketball
  - h. Softball
  - i. Volleyball
  - j. Bowling
  - k. Golf
  - l. College Football
  - m. College Basketball



- n. College Baseball
  - o. Other College Sports
  - p. High School Sports
  - q. None
  - r. Other [answer here]
4. What are some of your superstitious traditions? (i.e. wearing a certain hat on gameday, eating a certain meal before a game, etc.)
- a. [Answer here]
5. What is your gender?
- a. Female
  - b. Male
  - c. Prefer not to say
  - d. Other [answer here]
6. What is your age?
- a. 18-25 years old
  - b. 26-34 years old
  - c. 35-45 years old
  - d. 45-55 years old
  - e. 56-70 years old
  - f. 70-85 years old
  - g. 86 years old or older
7. What region do currently reside? (i.e. Southwestern USA, Northeastern Canada, etc.)

- a. [Answer here]
8. How much sports media (TV, radio, podcasts, reading articles, etc.) did you consume per day, on average, before sports paused due to COVID-19?
- a. Less than 1 hour
  - b. 1 to 2 hours
  - c. 2 to 3 hours
  - d. 3 to 4 hours
  - e. 4 to 6 hours
  - f. more than 6 hours