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RESEARCH NOTE

Banned Substances in Sport:

Public Perception of Performance-Enhancing Drugs and Marijuana Use by Athletes

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Introduction

In a 2020 poll of U.S. residents' public perspectives designed and analyzed by the Global Sport Institute at Arizona State University, we asked questions about banned substances, including performance-enhancing drugs (PEDs) and marijuana use in sports. Drug use among athletes has been a widely-discussed topic among sport enthusiasts, researchers, healthcare providers, and government agencies. When a beloved athlete is caught using PEDs, or "doping," it makes headlines, spurs discussion on social media, and generates policy from sport governing bodies. The topic spans different sports, includes a wide range of ages and playing levels, and supersedes race and country. American baseball players, such as Alex Rodriguez, have attracted national attention and governmental investigation. Internationally, we have witnessed systemic doping by countries, as in the case of East Germany's Olympic teams in the 1970s and '80s and Russia's Olympic teams in the past decade. Cyclist Lance Armstrong dominated the Tour de France for seven years before being caught in a doping conspiracy. Before cannabis was banned for Olympic athletes, in the late 1990s, Ross Rebagliati won a gold medal for snowboarding, lost it after testing positive for marijuana, and then regained it because the drug wasn't yet on the banned substances list. In addition to substantial news and social media coverage, researchers have investigated health-related consequences of doping (e.g., Chyka, 2003; Ostovar et al., 2017), issues that drive athletes to take banned substances (e.g., Nicholls et al., 2017), and people's perceptions of banned substances use (e.g., Landy et al., 2017). We have seen the media reports and read the scientific evidence, but we wanted your perspectives. So, we asked.

Aims

The purpose of the poll was to explore people's knowledge, opinions, and perspectives about athlete use of banned substances, including PEDs and marijuana. We specifically wanted to know if people's age, ethnicity, gender, and/or political affiliation corresponded with their perspectives on these topics.

Method

We analyzed data from 750 completed online surveys administered by Latino Decisions, an independent survey research firm, in 2020. The survey was available to both registered voters and an adult sample of non-registered voters, including non-citizens. All respondents were U.S.

residents. For respondent demographics, see Appendix A. For full methodology, see Appendix B.

Results

Note: AAPI = Asian Americans and Pacific Islanders; Age is reported in years; Dem = Democrats; GOP = Grand Old Party and represents Republicans. Percentages are rounded to nearest whole number and may not equal 100.

Question 1. How much do you know about performance-enhancing drugs (PEDs)?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18- 34	Age 35- 59	Age 60+	Dem	GOP
A lot	17%	15%	20%	27%	16%	9%	27%	24%	20%	4%	18%	21%
Some	46%	48%	47%	36%	50%	46%	46%	52%	47%	37%	43%	53%
Not very much	36%	37%	33%	37%	33%	46%	27%	24%	33%	59%	38%	26%

Question 2. Which of the following are considered PEDs by the World Anti-Doping Agency: Anabolic steroids?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18- 34	Age 35- 59	Age 60+	Dem	GOP
Yes	83%	86%	78%	75%	81%	81%	86%	80%	84%	86%	81%	87%
No	17%	14%	22%	25%	19%	19%	14%	20%	16%	14%	19%	13%

Question 3. Which of the following are considered PEDs by the World Anti-Doping Agency: Marijuana?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18- 34	Age 35- 59	Age 60+	Dem	GOP
Yes	46%	46%	48%	45%	44%	48%	44%	51%	40%	49%	44%	49%
No	54%	54%	52%	55%	56%	52%	56%	49%	60%	51%	56%	51%

Question 4. Which of the following are considered PEDs by the World Anti-Doping Agency: Caffeine pills?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18-34	Age 35-59	Age 60+	Dem	GOP
Yes	33%	33%	39%	33%	25%	31%	36%	37%	33%	29%	33%	35%
No	67%	67%	61%	67%	75%	69%	64%	63%	67%	71%	67%	65%

Question 5. Which of the following are considered PEDs by the World Anti-Doping Agency: Enhanced oxygen tanks?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18-34	Age 35-59	Age 60+	Dem	GOP
Yes	27%	26%	28%	28%	36%	27%	28%	33%	26%	21%	33%	23%
No	73%	74%	72%	72%	64%	73%	72%	67%	74%	79%	67%	77%

Question 6. Do you agree or disagree that these performance-enhancing drugs (PEDs) should be banned in: Professional sports?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18-34	Age 35-59	Age 60+	Dem	GOP
Agree	81%	83%	74%	76%	87%	82%	80%	77%	81%	86%	80%	88%
Neutral	12%	12%	15%	15%	9%	12%	13%	13%	12%	11%	10%	11%
Disagree	7%	5%	12%	9%	5%	6%	8%	10%	7%	3%	10%	2%

Question 7. Do you agree or disagree that these performance-enhancing drugs (PEDs) should be banned in: Collegiate sports?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18-34	Age 35-59	Age 60+	Dem	GOP
Agree	86%	88%	78%	80%	86%	85%	86%	77%	90%	88%	89%	89%
Neutral	10%	10%	13%	12%	7%	10%	11%	15%	7%	11%	7%	9%
Disagree	4%	2%	9%	8%	6%	5%	3%	8%	3%	1%	4%	2%

Question 8. Do you agree or disagree that these performance-enhancing drugs (PEDs) should be banned in: Olympic sports?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18-34	Age 35-59	Age 60+	Dem	GOP
Agree	86%	89%	76%	80%	89%	86%	86%	81%	88%	87%	85%	90%
Neutral	10%	8%	15%	13%	6%	11%	9%	11%	8%	10%	9%	8%
Disagree	5%	3%	9%	6%	5%	3%	6%	8%	4%	2%	6%	2%

Question 9. Do you agree or disagree that these performance-enhancing drugs (PEDs) should be banned in: High school?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18-34	Age 35-59	Age 60+	Dem	GOP
Agree	86%	88%	83%	79%	86%	87%	85%	82%	89%	86%	87%	88%
Neutral	10%	9%	9%	14%	6%	8%	11%	10%	7%	13%	8%	10%
Disagree	4%	2%	8%	7%	7%	5%	3%	8%	4%	1%	5%	2%

Question 10. What statement most closely matches your perceptions of the number of professional athletes using illegal performance-enhancing drugs?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18-34	Age 35-59	Age 60+	Dem	GOP
Most use	22%	19%	29%	23%	27%	18%	25%	29%	23%	8%	24%	23%
Some use	60%	63%	55%	52%	59%	64%	55%	59%	56%	67%	58%	60%
Very Few use	19%	18%	16%	25%	14%	17%	20%	12%	21%	25%	19%	16%

Question 11. Do you think the use of steroids and other performance-enhancing drugs is a major problem for professional sports, is a minor problem, or is not a problem?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18- 34	Age 35- 59	Age 60+	Dem	GOP
Major	54%	53%	58%	55%	60%	58%	50%	53%	56%	54%	53%	62%
Minor	40%	41%	37%	40%	36%	38%	42%	46%	36%	40%	42%	32%
No problem	6%	6%	5%	6%	4%	4%	8%	1%	8%	6%	5%	6%

Question 12. Should athletes be allowed entry into their respective halls of fame if they have been caught using steroids or performance-enhancing drugs?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18- 34	Age 35- 59	Age 60+	Dem	GOP
Yes	24%	21%	32%	32%	22%	16%	33%	34%	23%	14%	29%	18%
No	76%	79%	68%	68%	78%	84%	67%	66%	77%	86%	71%	82%

Question 13. Should athletes be allowed entry into their respective halls of fame if they have been accused of using steroids or performance-enhancing drugs but have never been suspended for using performance-enhancing drugs?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18- 34	Age 35- 59	Age 60+	Dem	GOP
Yes	55%	55%	51%	59%	48%	46%	64%	63%	51%	50%	54%	54%
No	45%	45%	49%	41%	52%	54%	36%	37%	49%	50%	46%	46%

Question 14. Professional athletes are currently banned from any form of marijuana use even if they live in a state that has legalized recreational or medical marijuana. Should professional athletes be allowed to use marijuana?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18-34	Age 35-59	Age 60+	Dem	GOP
If medical & legal	45%	46%	44%	42%	36%	45%	44%	52%	51%	23%	52%	38%
If medical even if illegal	24%	23%	24%	28%	23%	22%	25%	28%	24%	17%	26%	20%
Not at all	32%	31%	32%	31%	42%	33%	31%	20%	25%	60%	22%	43%

Question 15. Think about your favorite athlete: If you found out they used marijuana to treat the challenges with pain they experience, would you have more or less respect for this athlete?

	Total	White	Latino	Black	AAPI	Female	Male	Age 18-34	Age 35-59	Age 60+	Dem	GOP
More	16%	14%	20%	24%	12%	14%	19%	29%	15%	0%	15%	15%
Less	26%	25%	28%	25%	36%	25%	27%	17%	21%	48%	17%	40%
Doesn't matter	58%	62%	52%	52%	52%	62%	54%	53%	64%	52%	68%	45%

Discussion

On the whole, respondents were not forgiving of suspected PED use in athletes on any level, with the slight majority supporting banning confirmed use of PEDs from their sports' halls of fame. In contrast, far more lenient opinions were expressed regarding marijuana, a substance most did not identify as a PED. The majority reported that marijuana use should be allowed for medical purposes and that such use would not influence their opinion of that athlete, even if it is illegal in their respective state. Respondents age 60 and older were the lone standout group, stating that athletes should not be allowed to use marijuana whether legal or not. However, that same older group of respondents equivocated regarding whether it would change the level of respect they had for an athlete.

By and large, people did not identify caffeine pills or enhanced oxygen tanks as PEDs, either. Older adults and women reported knowing less about PEDs, but the majority of respondents in

all groups identified anabolic steroids¹ as being classified by the World Anti-Doping Agency as PEDs. Within banned substances, the majority of people across groups agreed that PEDs should be banned at all levels of sport but that marijuana should not. This opinion was somewhat mitigated by age and political affiliation; greater percentages of older people and Republicans believed that marijuana should be banned in sport. In terms of the prevalence of PED use in sport, the vast majority of people believe that some athletes are using them, but only a slight majority state that they see PED use as a “major problem.”

Future Directions

These poll data provide an overview of how the public views banned substance use by athletes. What it doesn't do is explain *why*. It raises questions about the public's harsh view of banned substances use overall—excluding one: marijuana. Future research should dive deeper into athlete marijuana use and public perception, including distinguishing between Cannabidiol (CBD) and Tetrahydrocannabinol (THC). The data also suggest that people's knowledge of PEDs is limited to steroids. This lack of information may be dangerous, especially for athletes who unknowingly take a PED, such as a caffeine pill, and face health, legal, financial, and/or career consequences. Would perceptions about prevalence and consequences change if people were more informed about the substances that are considered PEDs?

Future research should explore the “why” behind the themes identified in this poll and include respondents in other countries. Further, it should examine methods for improving messaging to all athletes about which substances are banned by the World Anti-Doping Agency.

¹ Anabolic steroids are synthetic, or human-made, variations of the male sex hormone testosterone. The proper term for these compounds is *anabolic-androgenic steroids*. "Anabolic" refers to muscle building, and "androgenic" refers to increased male sex characteristics. Some common names for anabolic steroids are Gear, Juice, Roids, and Stackers (National Institute of Health, n.d.)

References

- Chyka, P. (2003). Health risks of selected performance-enhancing drugs. *Journal of Pharmacy Practice, 16*(1), 37-44.
- Landy, J., Walco, D., & Bartels, D. (2017). What's wrong with using steroids? Exploring whether and why people oppose the use of performance enhancing drugs. *Journal of Personality and Social Psychology, 113*(3), 377-392.
- National Institute of Health. (n.d.). *Anabolic steroids drug facts*.
<https://www.drugabuse.gov/publications/drugfacts/anabolic-steroids>
- Nicholls, A., Madigan, D., Backhouse, S., & Levy, A. (2017). Personality traits and performance enhancing drugs: The dark triad and doping attitudes among competitive athletes. *Personality and Individual Differences, 112*, 113-116.
- Ostovar, A., Haerinejad, M., Farzaneh, M., & Keshavarz, M. (2017). Adverse effects of performance-enhancing drugs on the kidney in the male bodybuilders. *Science & Sports, 32*(2), 91-98.

Appendix A

Weighted Respondent Demographic Data

	Total	White	Latino	Black	AAPI	Female	Male	Age 18- 34	Age 35- 59	Age 60+	HS or <	Dem	GOP
White, not Hispanic	65%	100%	5%	0%	3%	64%	66%	59%	60%	83%	59%	54%	80%
Hispanic or Latino	16%	0%	100%	0%	0%	16%	15%	19%	18%	7%	21%	16%	14%
Black or African American	15%	0%	4%	100%	0%	16%	15%	20%	17%	7%	17%	26%	3%
Asian American	6%	0%	2%	1%	100%	6%	5%	5%	7%	4%	4%	6%	4%
American Indian/Native American	2%	1%	5%	1%	0%	2%	1%	4%	1%	0%	2%	1%	1%

Note: AAPI = Asian Americans & Pacific Islanders; Age is reported in years; Dem = Democrat; GOP = Grand Old Party and represents Republicans.

Appendix B

We analyzed data from 750 completed online surveys administered by Latino Decisions, an independent survey research firm, in a respondent self-administered format from January 8, 2020, to January 18, 2020. The survey (and invitation) was available to both registered voters and an adult sample of non-registered voters, including non-citizens. All respondents were U.S. residents.

The full data are weighted within each racial group to match the adult population in the 2017 Census American Community Survey (ACS) one-year data file for age, gender, education, nativity, ancestry, and voter registration status. A post-stratification ranking algorithm was used to balance each category within +/- one percent of the ACS estimates. Overall, the survey contains 86 questions and has a median completion time of 13 minutes.

Data for registered voters comes from the national voter registration database email sample, and respondents were randomly selected to participate in the study and confirmed to be registered to vote before starting the survey. Among the 1,510 people who started the survey, 20 potential respondents were terminated due to their being screened out or quotas being full, for a cooperation rate of 84% and measurement of error of +/- 3.58. Non-registered voters were randomly selected from Pure Spectrum, a research automation platform, and it was confirmed that they were not registered to vote before starting the survey. Programming and data collection for the full project were overseen by Pacific Market Research in Renton, Washington.