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How Much is a Post Worth? Evaluating the Equivalence Standard in NIL

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## **ABSTRACT**

The entire landscape of collegiate athletics was transformed with the implementation of the name, image, and likeness (NIL) rules in 2021. The permission for student-athletes to benefit and be compensated for their name, image, and likeness, has opened opportunities for endorsement deals, starting their own businesses, becoming brand ambassadors, etc. One of the most common ways that student-athletes are generating revenue from NIL is through the use of social media. Social media gives student-athletes the platform to create their own brand, become influencers, and showcase their NIL deals. The focus of this study is to identify how much Penn State student-athletes are profiting on a per post basis through posting on social media. The revenue is being evaluated on average based on four variables: gender, sport, social media follower count, and recognition status. The goal is to identify how much one TikTok video and one Instagram post is worth within these categories and assist in drawing conclusions about how these variables dictate commensurate compensation in relation to the student-athlete's market value.

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## **Introduction**

Since the National Collegiate Athletic Association's (NCAA) origination in 1906 (NCAA, 2021a June), student-athletes were strictly prohibited from receiving compensation in exchange for their personal value. The NCAA claimed that strict rules were necessary to maintain the amateurism of collegiate athletics despite their constant drive to commercialize college sports in every other way (Nocera & Strauss, 2018). The NCAA's ability to capitalize on student-athlete's name, image, and likeness without allowing the individuals to profit came crashing down during the summer of 2021. The landscape of collegiate athletics radically changed when name, image, and likeness (NIL) rules were officially implemented to allow for student-athlete compensation. This was arguably the largest and most impactful change in NCAA history for student-athletes, institutions, businesses, and fans.

Student-athletes are the backbone of a nearly \$1.3 billion industry (Berkowitz, 2024) and until 2021, they had not seen a dime of that revenue. Not only did student-athletes not profit at the time, but some also suffered from financial distress. Student-athletes dedicate countless hours to their sport and often put their education on the back burner to keep up with athletic demands. In most instances, student-athletes do not have the time to work a job which leads to an array of financial struggles. Prior to the enactment of NIL rules, there were limited opportunities for student-athletes to make money that fit into their athletic and academic schedules that would also

abide by NCAA policy. The NCAA's strict rule that says student-athletes cannot be compensated even included assisted living expenses, paid meals, or starting a business that might showcase their name, image, or likeness. The NCAA claimed they were trying to protect student-athletes from being exploited when they were simply trying to maintain authority (Nocera & Strauss, 2018).

For years, current and former student-athletes have been penalized for NCAA rule violations. At the same time the NCAA has reaped the benefits of all student-athletes' names, images, and likeness. It was time that student-athletes regain their rights, and the NCAA gave individuals the opportunity to profit from the recognition that they have earned. In turn, this helps relieve some financial burden and create monetary opportunities while still playing the sport that student-athletes love the most.

### **Review of Terms**

The following words and phrases will have a defined meaning throughout this paper unless otherwise stated.

#### ***Student-Athlete***

An individual enrolled at an institution of higher education who participated in intercollegiate athletics for the institution of higher education. The term does not include an individual whose participation is or was in a college intramural sport, club sport, or in a professional sport outside of collegiate athletics (Pennsylvania, 2021).

#### ***Influencer***

Internet users who accumulate a relatively large following on blogs and social media through the textual and visual narration of their personal lives and lifestyles, engage with their following in digital and physical spaces, and monetize their following by integrating “advertorials” into their blog or social media posts (Abidin, 2015, para. 1).

***Institution/School***

A Division I, II, or III college or university affiliated with the NCAA.

***Recognition Status***

The level at which a student-athlete has individually won an award, title, competition, been recognized, etc.

***Social Media***

An online media-sharing platform but will specifically refer to TikTok and Instagram.

***Power Five Conference***

“The Power 5 refers to the five athletic conferences that are considered the most prominent and influential in NCAA Division I college football. These conferences are the Atlantic Coast Conference (ACC), Big Ten Conference (Big Ten), The Big 12 Conference (Big12), The Pacific-12 Conference (Pac-12), and Southeastern Conference (SEC)” (Signing Day Sports, 2023).



## Legislation

As the history of NIL is evaluated it is crucial to look at the legislation that both precedes and follows the implementation of these new rules. Throughout the years of student-athletes being penalized for NCAA violations, many took their issues to court. The NCAA won most of those cases and even when they lost, the rulings were never substantial enough to revoke their authority. It wasn't until 2009 that the student-athletes' battle against the NCAA started to gain traction with the case *O'Bannon v. NCAA*. Ed O'Bannon, former UCLA basketball player, and others similarly situated, sued the NCAA and Electronic Arts (EA) for the use of their image and likeness in a popular video game. The court ruled that the NCAA violated antitrust laws and thus their "amateurism rules were an unlawful restraint of trade in violation of Section 1 of the Sherman Antitrust Act" (*O'Bannon v. NCAA*, 2015). Despite O'Bannon winning the case in the Ninth Circuit, the court's resolution was not very impactful. While the court offered compensatory damages to the plaintiffs, it simply was not enough. The court reasoned that by the NCAA allowing institutions to cover the cost of attendance for some student-athletes through scholarship essentially balances out the antitrust harm. O'Bannon filed a writ of certiorari to the Supreme Court in hopes of receiving a more substantial remedy, however, it was denied (McCann, 2016). Regardless of the final ruling, this case has been used as the foundation of the fight for student-athlete compensation and has played an integral part in stopping the NCAA from exploiting the name, image, and likeness of collegiate athletes across the nation. It was a critical preceding case which led to newer, more beneficial legislation.

In 2019, California became the first state to pass name, image, and likeness (NIL) legislation to allow student-athletes to be compensated (Kian & Zimmerman, 2023). Governor

Gavin Newsom signed Senate Bill 206, which is known as the Fair Pay to Play Act, (Lauletta, 2019) which caused a ripple effect across the nation. As more states began implementing similar compensation statutes, it seemed inevitable the NCAA would need to act. In the case *NCAA v. Alston* (2021), a group of Division I student-athletes, led by Shawne Alston, took the NCAA to court, saying that the restriction of “non-cash education-related benefits” is violating antitrust laws under the Sherman Act. The case was a unanimous decision by the Supreme Court and the court advocated for an overall rebuke of traditional NCAA amateurism (McCann, 2022).

While this case was only related to education-related benefits, it was the biggest step for the topple of the NCAA and amateurism as we knew it. The NCAA saw it necessary to vote on their own to allow NIL compensation of student-athletes, while still restricting what the institution can directly provide (Harvard Law Review, 2023). The NCAA proceeded to create an interim policy for institutions, student-athletes, and businesses to abide by until a uniform federal policy could be enacted. By implementing a uniform federal policy, institutions and programs will have equal opportunity to use NIL rules for their benefit. The current interim NIL rules state that pay-for-play and recruiting inducements are still impermissible and institutions must abide by the NIL laws in their respective state (NCAA, 2021b July).

## **Pennsylvania NIL**

This research will focus on the per post profit of 31 varsity athletic teams and roughly 800 student-athletes at The Pennsylvania State University (Haggerty, 2024). Penn State is a member of the Big Ten conference which generates the most revenue of the Power Five conferences breaking

\$845 million in 2022 (Straka, 2023). The Big Ten was also the top conference for total NIL activity and compensation after the first year of the rule's existence (Wogenrich, 2022).

Penn State abides by Pennsylvania legislation, specifically Senate Bill 381 Article XX-K for NIL purposes. Pennsylvania was the 25<sup>th</sup> state to pass NIL legislation when Governor Tom Wolf signed the bill on June 30, 2021 (Icon Source, 2022). This bill was passed to allow for the compensation of all student-athletes across Pennsylvania, no matter their school's affiliation with the NCAA (Gurwin, 2022). In Section 2003-K, under the heading *Athlete's Name, Image, and Likeness Rights*, the bill states:

Compensation allowed. --A college student athlete may earn compensation for the use of the college student athlete's name, image, or likeness under this article. The compensation shall be commensurate with the market value of the student athlete's name, image, or likeness. The compensation may not be provided in exchange, in whole or in part, for a current or prospective student athlete to attend, participate or perform at a particular institution or higher education. (Pennsylvania, 2021)

The bill states "compensation shall be commensurate with the market value of the student athlete's name, image, or likeness," (Pennsylvania, 2021) however, this equivalence standard is not clearly defined. This specific phrase in the bill is the foundation for quantifying the average market value for student-athletes based on a series of variables.

Senate Bill 381 includes specifications about prohibitions, restrictions, and requirements for NIL actions. The Pennsylvania law first specifies that student-athletes are protected from athletic-entities infringing upon their new NIL rights, the bill states:

(C) Prohibitions regarding intercollegiate athletic entities. An athletic association, conference or other group or organization with authority over intercollegiate

athletics, including the NCAA, may not: (1) Prevent a college student athlete from earning compensation through the use or license of the college student athlete's name, image or likeness rights. (2) Prevent an institution of higher education from fully participating in intercollegiate athletics as a result of a college student athlete's use of the college student athlete's name, image or likeness rights to seek compensation. (Pennsylvania, 2021)

The above section within the bill protects Penn State, and all Pennsylvania student-athletes from entities, such as the Big Ten or NCAA restricting their NIL activities. This grants student-athletes the liberty of creating their own deals and benefitting in ways they see fit within the parameters of Pennsylvania law.

Another specification in the bill prevents the student-athlete's respective institution from restricting their NIL deals, however there are two exceptions for why a deal may not be permitted. The first is that a student-athlete's deal may not interfere with their respective university's pre-established sponsorship deals. The bill states, "An institution of higher education may prohibit a college student athlete's involvement in name, image or likeness activities that conflict with existing institutional sponsorship arrangements," (Pennsylvania, 2021). For example, if a Penn State student-athlete is offered an NIL deal with Under Armor, the institution will reject the deal during an approval process because Penn State has an existing sponsorship agreement with Nike, a direct Under Armor competitor.

Another exception for why an NIL deal would be rejected is if it involves a company whose business type or industry is prohibited by Pennsylvania law. The inclusion of this rule is to protect the image of student-athletes and the reputation of their institution. The bill states:

(D) Prohibition. --A college student athlete may not earn compensation as a result of the use of the college student athlete's name, image or likeness in connection with a person, company or organization related to or associated with the development, production, distribution, wholesaling or retailing of any of the following:

- (1) Adult entertainment products and services.
- (2) Alcohol products.
- (3) Casinos and gambling, including sports betting, the lottery and betting in connection with video games, online games and mobile devices.
- (4) Tobacco and electronic smoking products and devices.
- (5) Prescription pharmaceuticals.
- (6) A controlled dangerous substance. (Pennsylvania, 2021)

This list applies to all Pennsylvania NIL, but institutions can have their own additions to the list if it is explicitly stated and available to student-athletes. Due to these restrictions, a student-athlete is required to disclose proposed contracts to their respective school at least seven days prior to the execution of the contract (Gurwin, 2022).

## **Penn State NIL**

Penn State has had a wide array of successful NIL stories in the first two years of the rule's existence. The well recognized institution created many opportunities for student-athletes to capitalize on the new legislation. Seemingly, Penn State student-athletes have endless NIL

possibilities. One Penn State student-athlete who immediately jumped into the world of NIL was former quarterback Sean Clifford. Clifford founded his own company, *Limitless NIL* an NIL agency “for athletes, by athletes,” (Limitless NIL, n.d.). Limitless has since been purchased by TEAM Group Holdings, Inc. and their mission is to “maximize an athlete’s earning potential while ensuring a strong ROI for the client company through traditional and influencer activation,” (Yahoo Finance, 2024). This venture was the first of its kind (Limitless NIL, n.d.) and continues to partner student-athletes with reputable brands to ensure a successful experience for both parties involved. Limitless has an array of student-athletes that prospective brands can partner with from across the country who play a variety of sports. Their group of student-athletes includes three notable student-athletes from Penn State. The first is Liam Clifford, who is also a Limitless cofounder and Sean’s younger brother. Clifford is joined by Penn State men’s soccer players Kaleb Alva and Femi Awodesu.

The scalability of Limitless shows how powerful Penn State NIL related companies can become. For example, over the course of ninety days, Limitless talent received a total of 437 million views, 402 million impressions, and 44 million interactions across social media (Limitless NIL, n.d.). As the NIL landscape continues to change, Limitless stays up to date and continues to reach large audiences. Penn State’s reputation and resources created an opportunity for Clifford to excel and will continue to do so for the many student-athletes to follow.

In addition to Sean Clifford and Limitless NIL, Penn State student-athletes have been very successful in partnering with brands, hosting youth camps, making personal appearances, and building their social media following. One notable deal includes current Penn State quarterback, Drew Allar. Allar signed with popular headphone company, Bose, and had the chance to gift the

offensive line with their own Bose headphones. He posted to social media a photo of himself with the offensive line and thanked Bose for making it possible (Chapman, 2023).

NIL deals are available for more than just football players. Campus Ink represents one major partnership for Penn State student-athletes that provides opportunities for student-athletes to capitalize on the new NIL rules. If a student-athlete chooses to sign with Campus Ink, they can have their name sold on a variety of clothing designs through the Penn State NIL Store and will receive a portion of the profit of each item sold with their name or image displayed. Current trending student-athletes on the site include field hockey's Sophia Gladieux, Cole Ignaszak of men's volleyball, and Matt Traynor of men's lacrosse (Penn State NIL Store, n.d.).

## **Social Media**

The most common way that student-athletes have profited from NIL is by creating a social media presence. According to INFLCR and Opendorse, two of the leading NIL technology providers, roughly two-thirds of all NIL activities involve posting content on social media (Wittry, 2023). When a student-athlete wants to use social media for NIL, there are multiple options for how to do it including posting their own content, product seeding, and paid campaigns.

The main way that student-athletes can generate revenue through social media is by becoming an influencer who creates content and partners with brands. Influencer marketing is “a collaboration between popular social-media users and brands to promote brands’ products and services,” (McKinsey & Co., 2023) and has been on the rise with the increasing usage of platforms such as TikTok, YouTube, and Instagram. The emerging role of influencers allows student-athletes to curate a brand and build an online persona independent of their athletic performance. Becoming

an influencer takes more than simply being known for athletic performance and requires creating authentic and personable content that encourages engagement amongst followers.

By building a personal brand and online presence, student-athletes open themselves up to be known for their personalities, hobbies, and passions, rather than just their performances. This allows companies to consider a wide range of factors when choosing which student-athletes to work with rather than simply the ones with the highest statistics. While performance and popularity typically go hand in hand, some student-athletes can reach a more niche following that is optimal for specialty businesses of any size. If brands only choose to look for the student-athlete with the highest follower count and most recognizable name to partner with, then they may be missing out on more specialized connections. By showcasing unique qualities, traits, and experiences, student-athletes can act as a relatable business representative and help companies reach an audience that connects with their uniqueness. Examples include student-athletes who are gluten-free working with a gluten-free food brand, an individual working with a company from their hometown, or someone working with a sport-specific brand.

When a student-athlete acquires an NIL deal, they can share Instagram posts, TikTok videos, or share on another form of social media. The posts can be made in a variety of ways. The first way is called product seeding, and it is a tactic used by companies to send influencers their product for free in exchange for posting the items or reviewing them online (Cottee, 2023). In this case the influencer has full creative liberty over the posts and can promote the products however they see fit (Power Digital, 2020). Due to NIL rules, student-athlete influencers cannot receive free products without offering something to the company in return which in this case is posting on social media. This type of deal may also include compensation in addition to the product.



Another way that student-athletes post for companies on social media is through paid campaigns. Paid campaigns are more expensive for a brand to undertake but they keep control of the content that the student-athlete will post (Power Digital, 2020). These types of posts are seen more as an advertisement rather than reviewing or using products. Both product seeding and paid campaigns are effective ways for student-athletes to be compensated.

Sometimes student-athletes have time constraints that preclude them from NIL activities such as influencing. However, they can still connect with brands without dedicating time to becoming an influencer by posting limited but personable content that would make themselves marketable to brands. They can increase their performance content, showcase personal and inspirational stories, and share their community involvement (Alexis, 2023). Having a marketable personal brand entices companies to want to work with that individual and form a partnership or agreement. Social media is a valuable tool for student-athletes to take advantage of NIL rules and generate revenue.

## **Methodology**

Discussing NIL history, legislation, and the impact of social media builds the foundation of this study which is related to the per post profit of Penn State student-athletes. To collect Penn State student-athlete data, a survey (see Appendix) was distributed to roughly 800 student-athletes, on 31 varsity athletic teams. For ease of data collection, track and field and cross-country respondents were combined. Swimming and diving were also combined.

The main goal of the survey was to gather data relating to the profit that a student-athlete makes from one Instagram post and one TikTok video. The collected data was then used to evaluate per post profit figures based on four variables: gender, sport, follower count, and recognition status. The average for each data point from the survey was calculated on an overall level along with the following sections which were used to isolate each variable and gather results independent of the other variables.

### **Gender and Sport**

For the gender variable, respondents were categorized based on being a member of a men's or women's athletic team. The average per post profit was calculated to evaluate and compare the "market value" of male student-athletes versus female. Similarly, the average per post profit and total NIL revenue was calculated for each team. See Table 1 for the number of respondents per team.

### **Follower Count**

To evaluate the impact of follower count on per post profit, each student-athlete's Instagram and TikTok follower counts were gathered. With this data, the correlation coefficient was calculated using the formula below.

$$\text{Correl}(X, Y) = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}}$$

Figure 1. Correlation Formula

### Recognition Status

Recognition Status	Value
Penn State	1
Big Ten	2
Regional	3
National	4
Global	5

Table 1. Recognition Status Values

For this research, recognition status means a student-athlete's accomplishments on a Penn State, Big Ten, Regional, National, and Global level. To quantify these levels, each was assigned a value. Student-athletes responded

with which levels they had been recognized and accumulated "points" for each level. The sum of each respective student-athlete's point values indicates their recognition status from 0 to 15 (See Table 1).

The main statistic calculated for recognition status was correlation. The correlation between a student-athlete's recognition status and their profit per post was calculated for both Instagram and TikTok (see Figure 1 for formula). This process of evaluating recognition status does not consider the success of the student-athlete's respective team and only considers their accomplishments on an individual basis.

## Data Results

The survey was distributed to roughly 800 student-athletes and had a response rate of 10.25%. Respondents represented 25 of 31 Penn State teams. The 6 teams that are not represented in the following data include men’s basketball, women’s golf, women’s swimming and diving, women’s tennis, and men’s volleyball. Table 2 offers a breakdown of the number of respondents per team.

Baseball	4
Men's Basketball	0
Women's Basketball	2
Men's XC/TF	6
Women's XC/TF	15
Men's Fencing	1
Women's Fencing	1
Field Hockey	3
Football	2
Men's Golf	2
Women's Golf	0
Men's Gymnastics	3
Women's Gymnastics	8
Men's Ice Hockey	1
Women's Ice Hockey	10
Men's Lacrosse	2
Women's Lacrosse	3
Men's Soccer	3
Women's Soccer	6
Softball	3
Men's Swim/Dive	2
Women's Swim/Dive	0
Men's Tennis	1
Women's Tennis	0
Men's Volleyball	0
Women's Volleyball	1
Wrestling	4
<b>Total</b>	<b>83</b>

**Table 2. Total Respondents Per Team**

National data shows that over two-thirds of NIL deals involve posting on social media (Wittry, 2023). The results of this study are in line with that statistic, saying that of the respondents who had an NIL

Data Point	Average
Total Profit	\$2,746.15
Insta Profit	\$857.60
TikTok Profit	\$543.36
Recognition Status	4.24
Insta Followers	4109
TikTok Followers	7057

**Table 3. Overall Averages**

deal, 81% of them are required to post on social media at least once. When asked which platforms they

are required to post on, Instagram and both (Instagram and TikTok), each had an equal number of responses. Zero

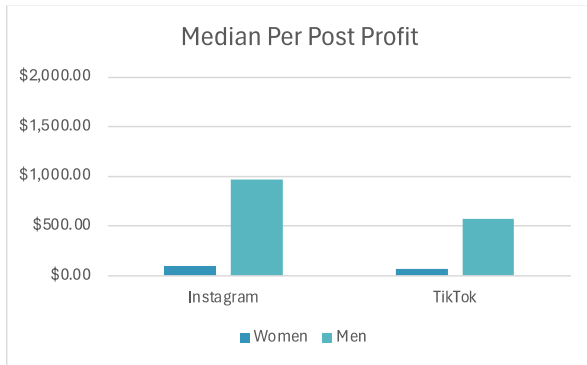
respondents stated to be required to post only on TikTok. More data was provided for Instagram overall compared to TikTok.

The main objective of the study is to quantify how much a social media post is worth for NIL based on a variety of variables. The maximum Instagram post profit was \$10,000 and the minimum was \$23. This is crucial in understanding the wide range of NIL profit opportunities and market values of each student-athlete. Additionally, averages were calculated for each category

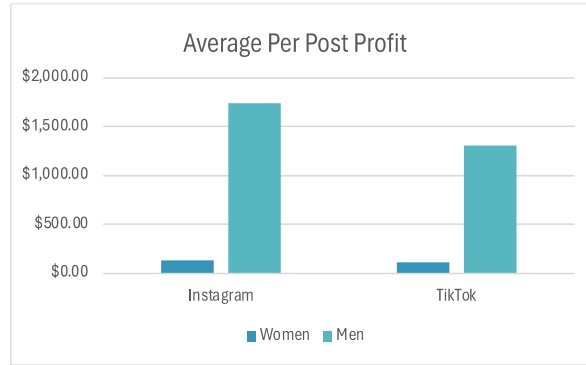
asked about in the survey. Table 3 shows the statistics for the average Penn State student-athlete respondent and can be used as a baseline to compare each variable.

### **Gender**

In terms of gender, members of women's teams accounted for 63% of responses and members of men's teams accounted for 37%. However, the number of women compared to men who hold at least one NIL deal leans in favor of the men who had 58% with at least one deal compared to the women with 35%. The main finding in comparing men to women is the average profit from one Instagram post for student-athletes who are women is \$133.73 and \$106.00 for one TikTok video. In comparison, student-athletes who are men generate \$1,742.33 for a single Instagram post and \$1308.75 for one TikTok video (See Figure 2). On average, men make about 13 times more per post than women. One thing to consider is the outliers, specifically in the men's data. Therefore, the median per post profit was also evaluated to prevent skewed data. The median presented a slightly smaller discrepancy between men's and women's profits. The median for a woman's Instagram post was \$100.00 and \$71.00 for a TikTok video compared to \$974.00 for a man's Instagram and \$578.50 for a Tik Tok (See Figure 3).



**Figure 3. Median Per Post Profit: Gender**



**Figure 2. Average Per Post Profit: Gender**

It is obvious from the data that there is an identifiable difference between the profit of men compared to women, however, the data was not statistically significant recording a p-value of .0821 for Instagram and .1452 for TikTok. There can be a variety of external factors that impact these numbers that are not assessed in this research, but the sample size is likely not large enough to have definite results.

## Sport

Sport	# with Deal	% of Team Respondents
Men's XC/TF	5	83%
Baseball	4	100%
Women's Gymnastics	4	50%
Women's Soccer	4	67%
Wrestling	4	100%
Women's Ice Hockey	3	30%
Women's XC/TF	2	13%
Football	2	100%
Softball	2	67%
Women's Basketball	1	50%
Field Hockey	1	33%
Men's Lacrosse	1	50%
Women's Lacrosse	1	33%
Men's Swim/Dive	1	50%
Men's Tennis	1	100%

**Table 4. Number With NIL Deal Per Sport**

The next variable evaluated was sport. Each team had a varying number of respondents with at least one NIL. The data relating to sport is dependent upon the following number of respondents from each of the 15 teams mentioned in Table 4 who had at least one member with an NIL deal.

The team that had the highest average profit per Instagram post was wrestling (See Table 5). They had an average post value of \$5,186.50. This was over 3 times more than the

team with the second highest Instagram post value which was the football team averaging \$1,479. There was far more data relating to Instagram rather than TikTok, which is to be expected because it is rather new compared to Instagram. The highest value for a TikTok post was men's cross country and track and field. Their average value of a TikTok post was \$2,039 and the second most was men's swimming and diving at \$1,033. The two highest valued teams for both Instagram and TikTok were men's teams which was to be expected after evaluating the data based on gender.

There are many factors that could impact the wrestling team having higher NIL dollar figures, the main reason being their team success and popularity. Penn State wrestling has created a dynasty, winning 11 national titles under head coach Cael Sanderson and 12 in program history. Most recently, the Nittany Lions broke the record for most points scored at a National

Championship with 172 points (Snyder, 2024). Their success on the mat may be responsible for a higher market value for the team members and increased their popularity amongst brands.

Despite men’s teams holding the top spots for most valuable posts, it is worth noting which teams on the women’s side have the greatest value as well. For Instagram value, field hockey has the highest value at \$398 and for TikTok it is women’s ice hockey at \$177.50. See Table 5 for the average per post profit for each team who had a respondent with at least one NIL deal.

Sport	Avg Instagram	Avg TikTok
Men's XC/TF	\$425.33	\$2,039.00
Women's XC/TF	\$155.00	\$155.00
Field Hockey	\$398.00	-
Football	\$1,479.00	-
Women's Gymnastics	\$74.75	\$48.50
Women's Ice Hockey	\$213.00	\$177.50
Women's Lacrosse	\$70.00	\$35.00
Women's Soccer	\$61.50	\$100.00
Men's Swim/Dive	\$974.00	\$1,033.00
Men's Tennis	\$100.00	-
Wrestling	\$5,186.50	\$124.00

**Table 5. Average Social Media Profit Per Sport**

### **Follower Count**

To determine the relationship between follower count and profit, the correlation coefficient was calculated. It was originally thought that the number of followers was positively correlated with per post profit, but this research obtained mixed results. Based on survey results, for Instagram it was found that the number of followers that a student-athlete has creates little to no correlation between followers and profit. It was determined that the correlation is -0.052 with a p-value of .051 against a null hypothesis of zero. The negative correlation indicates that with an increase in Instagram follower count, the amount of money made per post decreases. On the other hand, the



correlation coefficient for TikTok was .925 and had p-value of .086. This high correlation coefficient signals a strong positive correlation between TikTok followers and TikTok post profit, however, the results are not statistically significant.

The average follower count of those student-athletes who have at least one NIL deal was higher than the overall average follower count. For Instagram, the overall average for a student-athlete was 4,109 and the average for a student-athlete with at least one deal was 6,123. The discrepancy for TikTok was even higher for TikTok, with the overall average for a student-athlete was 7,057 and 11,278 for those with at least one deal. This statistic suggests that a student-athlete with at least one deal was more likely to have a high follower count on social media.

### **Recognition Status**

Lastly, to evaluate recognition status, a point system was created to determine each student-athlete's "point value." The system took into consideration recognition at the Penn State, Big Ten, regional, national, and global levels. The correlation coefficient was found for recognition in comparison to per post profit on Instagram and TikTok. The correlation between recognition status and Instagram profit was .292 with a p-value of .0498. This shows a weak positive correlation between the two variables but is statistically significant. As for TikTok, the correlation coefficient was -.241 with a p-value of .0827 which indicates a weak negative correlation but is not statistically significant. There could be numerous explanations for the correlations between recognition status and profits. One main possibility is that TikTok influencers need to be better with in-app editing and must stay up to date with popular trends (GRIN Contributor, 2024). Not every student-athlete

has the time capacity to be an influencer, so the lesser recognized student-athletes could be more popular for their content rather than performance.

## **Conclusion**

The main goal of this research was to identify how much one TikTok video and one Instagram post is worth for a Penn State student-athlete based on gender, sport, follower count, and recognition status. The study aims to help draw conclusions about how these variables dictate commensurate compensation in relation to the student-athlete's market value.

The results of this research successfully identified the value of NIL-related posts by Penn State student-athletes. The average per post profit overall for Instagram was \$857.40 and \$543.36 for TikTok. As for the results for each variable, gender, sport, follower count, and recognition status, the p-values for each proved limited statistical significance. The only variable that was significant was the correlation between recognition status and Instagram per post profit with a p-value of .0498. This suggests that with an increase in point value, an increase in Instagram per post profit is also expected with a correlation coefficient of .292.

Notably, wrestling and football were the top earners for Instagram and surprisingly men's track and field and cross country and men's swimming and diving were the top earners on TikTok. Women were not top earners in either category. Future research may explore reasons why these teams generated the most revenue. It may be valuable to better understand the mechanism by which a team's popularity impacts their profit on each platform.

Despite the lack of statistical significance across the other variables, there are visible differences in the categorical data that may be of importance. When evaluating gender, men averaged 13 times more profit than women per Instagram post and 12 times more profit per TikTok video. Although NIL is new, historical wage gaps may have permeated the new compensation structure of NIL deals.

Based on research conclusions, it is expected that with a larger sample size, we may expect these results be proved on a more significant level. The limited number of respondents who were required to post on social media to be compensated for their NIL deal likely impacted the lack of significance in the data.

These findings may represent the first step in Penn State identifying and tracking monetization values related to the new NIL legislation. This data can be used as an initial comparison to other Big Ten schools and may be useful in understanding the implications of the new NIL laws and its effect on student-athlete compensation.

# Appendix A

## NIL Survey



**PennState**  
Schreyer Honors College

First Name

Last Name

\*Athletic Class

- Freshman
- Sophomore
- Junior
- Senior
- 5th Year/Graduate Student

\*Sport

- Baseball
- Men's Basketball
- Women's Basketball
- Men's Cross Country/Track and Field
- Women's Cross Country/Track and Field
- Men's Fencing
- Women's Fencing
- Field Hockey
- Football
- Men's Golf
- Women's Golf
- Men's Gymnastics
- Women's Gymnastics
- Men's Ice Hockey
- Men's Ice Hockey
- Women's Ice Hockey
- Men's Lacrosse
- Women's Lacrosse
- Men's Soccer
- Women's Soccer
- Softball
- Men's Swimming and Diving
- Women's Swimming and Diving
- Men's Tennis
- Women's Tennis
- Men's Volleyball
- Women's Volleyball
- Wrestling

\*How many followers do you have? (in thousands)

If you have more than 80k, please select the maximum.

Thousands (k) of Followers

Instagram

Not Applicable



0

80

Tik Tok

Not Applicable



0

80

In which ways have you been recognized athletically?

Select if applicable

Penn State recognition



Big Ten recognition



Regional recognition



National recognition



Global recognition



\*Do you have at least one NIL deal?

Yes

No

\*How much have you profited from NIL deals during the 23-24 season?

Which platform(s) do you post on to be compensated?

- TikTok
- Instagram
- Both TikTok and Instagram
- Other

How many posts have you been compensated for making?

- 1-5
- 6-10
- 11-15
- 16+

How much do you get paid per 1 (one) post? (if more than \$10,000, please select the maximum)

If you are compensated indirectly (i.e. products, food) or have multiple deals, please approximate an average amount.

Average Amount of Money (\$) Per Post

One Instagram Post



One TikTok Post



Any additional information you would like to share about your NIL deals?

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