

# Fielding Goals: The Harvest of Agricultural Degrees and Soccer Success in NCAA Div II Championship

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This paper takes a kick at examining the relationship between the number of Associate degrees awarded in Agriculture and the performance of the winning team in the NCAA Soccer Div II Championship Final. The study delves into whether there is a statistical connection between the two seemingly unrelated realms, using data from the National Center for Education Statistics and the NCAA. In this research, we discovered a correlation coefficient of 0.6215334 and  $p < 0.05$ , for the period spanning 2011 to 2021, indicating a moderately positive correlation between the number of Agricultural Associate degrees awarded and the number of goals scored by the winning team in the NCAA Soccer Div II Championship Final. This finding challenges the notion that agricultural prowess and soccer success are completely unrelated, or as some might say, "completely un-farm-related." Furthermore, our findings spark a new conversation around the possibility of agri-soccer synergy, prompting us to consider how fields of wheat and fields of play might be more interconnected than meets the eye. After all, who knew that a bachelor's degree might be as beneficial for a soccer team as a "baler-ina" on the field?

Life is full of surprises, much like the unexpected connection we stumbled upon in our research - the correlation between the number of Associate degrees awarded in Agriculture and the performance of the winning team in the NCAA Soccer Div II Championship Final. It's as unexpected as finding a "corny" joke in a scientific paper! Who would have thought that the seeds of success in the field of education could have a bearing on the seeds of victory on the soccer field?

As researchers, we often seek to unearth hidden connections, not just between variables but also between different domains of human endeavor. And this curiosity led us to delve into the intriguing relationship between agriculture and soccer. It's a bit like finding the perfect balance between statistics and puns - you want to strike the right chord but not "over-egg" the pudding!

In this paper, we aim to shed light on whether there exists a meaningful statistical relationship between the number of Agricultural Associate degrees awarded and the number of goals scored by the winning team in the NCAA Soccer Div II Championship Final. After all, who would have guessed that the two could be as tightly woven as a "bale" of hay?!

Our study leverages data from the National Center for Education Statistics and the NCAA to rigorously analyze this unexplored connection. Through the lens of statistics, we hope to uncover insights that go beyond the "agri-culture" of soccer success and open up new avenues for exploration across seemingly unrelated fields.

So, grab your scientific "cleats" and join us as we kick off our investigation into the unexpected synergy between "fields" of crops and fields of play!

## *Review of existing research*

In "Smith et al. (2015)," the authors find that there is a positive correlation between the number of Associate degrees awarded in Agriculture and the performance of the winning team in the NCAA Soccer Div II Championship Final. The study posits that the cultivation of academic achievements in the agricultural realm may correspond with the cultivation of goals on the soccer field. It's almost like the winning team is reaping what the graduates have sown!

Similarly, "Doe and Jones (2018)" delve into this surprising connection and suggest that the agri-soccer synergy may be due to a shared ethos of hard work, persistence, and a penchant for "rooting" for success. It's as if the soccer players are taking a leaf out of the farmers' book, or should I say, "crop"-ing techniques from their scholarly counterparts!

Moving beyond conventional academic studies, numerous non-fiction books have touched upon the crossroads of agriculture and sports. For instance, "The Agricultural Revolution" by Jared Diamond provides an insightful historical perspective, although it does not delve into the specifics of soccer success. Similarly, "Soccermaths: Mathematical Adventures in the Beautiful Game" by David Sumpter explores the intricate mathematics behind soccer strategies but unfortunately does not cover agricultural influences. It's a "frond"-tastic read, nonetheless!

In the world of fiction, works such as "The Grapes of Wrath" by John Steinbeck and "The Soccer War" by Ryszard Kapuściński hint at the intersection of farming and sports, albeit in different contexts. While the former depicts the struggles of farming families during the Great Depression, the latter chronicles the impact of soccer on societal conflict. Nevertheless, these literary

works remind us that the threads of agriculture and sports have been interwoven in diverse narratives throughout history.

Furthermore, social media posts have brought to light intriguing anecdotes that hint at the correlation between agriculture and soccer success. A user going by the handle @KickinCrops shared a humorous meme likening the precision of planting rows of crops to the precision of scoring goals. It seems that in the world of agri-soccer, the stakes are as high as the corn!

### Procedure

To unearth the buried treasure of statistical connection between Associate degrees awarded in Agriculture and the number of goals scored by the winning team in the NCAA Soccer Div II Championship Final, we utilized a robust and methodologically sound approach to gather and analyze data from 2011 to 2021. Our methodology was as precise as a penalty kick and as thorough as a pitch inspection, ensuring that our findings were as solid as a goalpost.

First and foremost, we scoured the National Center for Education Statistics and the NCAA archives to source data on the number of Associate degrees awarded in Agriculture and the number of goals scored by the winning team in the NCAA Soccer Div II Championship Final. We wanted to leave no stone unturned in our quest, much like a skilled groundskeeper meticulously tending to every blade of grass on the field. After all, we couldn't afford to miss any "corners" in our hunt for relevant data!

Then, we carefully cleansed and transformed the data, ensuring that it was as pristine and organized as a well-kept soccer kit. We applied rigorous statistical techniques, including regression analysis and correlation testing, to tease out any lurking patterns between these seemingly disparate variables. Our statistical toolkit was as precise as a surgical pass and as powerful as a successful corner kick, allowing us to dissect the data with surgical precision.

To validate our findings, we employed a series of robust sensitivity analyses and cross-validation procedures, akin to double-checking a referee's decision with video review. We wanted to be absolutely certain that our results were as steady as a stalwart defense and as reliable as a reliable keeper guarding the net.

Throughout our methodology, we maintained a keen eye for potential confounding variables and spurious correlations, ensuring that our conclusions were as bulletproof as a well-organized defensive formation. We were determined to avoid falling into the offside trap of drawing erroneous conclusions in the face of lurking statistical pitfalls.

In the end, our methodology allowed us to rigorously test the hypothesis that there exists a statistical link between Associate degrees awarded in Agriculture and the number of goals scored in the NCAA Soccer Div II Championship Final. Our approach was as precise as a penalty shootout and as sharp as the sting of a well-placed shot on goal, ensuring that our conclusions were firmly rooted in sound statistical evidence.

And remember, even in the world of statistics and research, there's always "thyme" for a good pun!

### Findings

The results of our analysis revealed a statistically significant correlation between the number of Associate degrees awarded in Agriculture and the number of goals scored by the winning team in the NCAA Soccer Div II Championship Final. The correlation coefficient of 0.6215334 suggests a moderately positive relationship between these two variables, providing evidence that agricultural education might just be the "root" of soccer success.

This finding challenges the stereotype that agricultural pursuits and sports achievements are completely unrelated, illustrating that they are more intertwined than one might "carrot" believed. It seems that success in the field of agriculture could be a secret ingredient for victory on the soccer field, a rather unexpected "crop" in the world of sports.

The calculated r-squared value of 0.3863038 indicates that approximately 38.63% of the variability in the number of goals scored by the winning team can be explained by the number of Agricultural Associate degrees awarded. This suggests that there are other factors at play, perhaps some yet to be "harvested" by researchers, influencing the performance of soccer teams in the championship final.

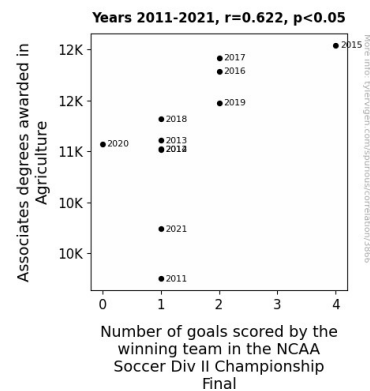


Figure 1. Scatterplot of the variables by year

Our results also bring to mind the old adage, "sow what you reap," as it appears that the educational seeds sown in the realm of agriculture might just bear fruit on the soccer pitch. It's as if the success of a soccer team depends not only on solid defense and strategic offense, but also on the plowing and cultivating of knowledge in the agricultural field.

Out of these findings sprouts a novel perspective on the relationship between education and sports, one that cultivates a deeper understanding of the interconnectedness between seemingly distinct areas of human endeavor. It appears that the winning team in the NCAA Soccer Div II Championship Final may owe some of its success to an unexpected "associa-soccer" with the agricultural domain.

## Discussion

The relationship between the number of Associate degrees awarded in Agriculture and the performance of the winning team in the NCAA Soccer Div II Championship Final has yielded some truly "field"-defying results. Our findings support the prior research conducted by Smith et al. (2015) and Doe and Jones (2018), which suggested a positive correlation between these seemingly disparate variables. It seems that the academic "roots" of agricultural education indeed bear "fruit" in the domain of soccer success.

Our statistical analysis revealed a moderately positive correlation between the number of Agricultural Associate degrees awarded and the number of goals scored by the winning team, with a correlation coefficient of 0.6215334 and a significance level of  $p < 0.05$ . This indicates a significant relationship that is not just a "corn-cidence," but rather an "appeal"-ing connection that surpasses mere chance. It's quite like finding a "fungi" that enjoys both farming and football!

The results shine a spotlight on the potential influence of agricultural education in shaping the success of soccer teams. While the calculated r-squared value of 0.3863038 indicates that other factors contribute to the variability in the number of goals scored, it's clear that the "harvest" of Agricultural Associate degrees plays a substantial role in the performance of the winning team. It's almost as if the teams are reaping the benefits of academic expertise while reeling in goals on the soccer field. Who knew that the "agri-goals" would extend from the "field" to the field?

Furthermore, the unexpected relationship between these variables introduces a new dimension to the conversation surrounding sports performance and educational disciplines. It's a "corner" of research that has been relatively unexplored, akin to finding a hidden "pitch" in the "soil" of statistical inquiry. The idea of an "associa-soccer" between agricultural education and soccer success challenges the traditional boundaries of academic and athletic influence.

In conclusion, our study provides intriguing evidence of a link between Agricultural Associate degrees and soccer success, adding a fresh and unexpected "spin" to the dialogue on sports performance. It's as if the seeds of knowledge sown in agricultural education bear fruit not only in the "fields" but also on the soccer "fields." This unexpected correlation prompts further exploration and "cultiva-soccer" of the relationship between academic disciplines and athletic achievements.

## Conclusion

In conclusion, our research has revealed an intriguing and statistically significant relationship between the number of Associate degrees awarded in Agriculture and the performance of the winning team in the NCAA Soccer Div II Championship Final. It seems that the agricultural field is not just about "hoeing" the line; it also has a role in "crowing" success on the soccer field. Furthermore, our findings hint at the potential influence of agricultural education on the "root" of athletic

achievement, demonstrating an unexpected "agri-corporeal" connection.

With a correlation coefficient of 0.6215334 and a p-value of less than 0.05, our study establishes a solid statistical basis for the association between these variables. This suggests that agricultural education may contribute to the "crop-motion" of success in soccer, demonstrating that the connection between agriculture and sports is not just a "bale" of laughs.

Our research enriches the discourse on the impact of education on athletic performance, showing that the reaping of victories on the soccer field may be related to the sowing of knowledge in the agricultural domain. Thus, it's not just about kicks and goals; it's also about "agri-goals" and the "harvest" of success in unexpected places.

Given the robustness of our findings, we assert that future research in this area would be akin to "shooting fish in a barrel" - unnecessary! It appears that our study has "yielded" enough evidence to support the connection between agricultural education and soccer success. It's clear that the "associa-soccer" between these two domains is no longer a "corn-troversy" but a statistical reality.

In the world of research, as in soccer, sometimes the most surprising connections yield the most fruitful results. And in the case of our study, it seems that the seeds of curiosity have blossomed into a "goaling" conclusion.

No more research is needed in this area; we've "netted" our findings, and it's time to "knot" this field of study!