

Examining the Correlation Between Personality and Sport Choice Among High School

Student-Athletes

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### **Abstract**

After Dr. James Gavin published his theory on the various factors that contribute to people choosing a sport to play, many researchers flocked to test the validity of his theory. One such factor is tested in this study: personality. This study aims to eliminate the other factors of his theory and focus solely on how personality affects sport choice. Another goal of the study is to test if Gavin's theory is true and, if so, what patterns can be associated with various types of sports. A survey containing the Big Five personality test was given to student-athletes at Thousand Oaks High School to self assess their respective personalities. The data collected from this survey was used to draw conclusions on the personality traits associated with each sport type. Individual and low risk sports were found to have higher conscientiousness scores while team and high risk sports had higher extraversion scores. Boys' sports were found to have higher conscientiousness scores compared to girls' sports. However, girls' sports scored higher in neuroticism scores than the boys' sports.

## Examining the Correlation Between Personality and Sport Choice Among High School Student-Athletes

Extracurricular activities are an important aspect of the lives of many. One of the most common forms of extracurricular activity is sports, especially among the youth, specifically high school students. There are a variety of sports in which to participate at most high schools, with the variety depending on how much funding the athletics receive as well as how many students want to participate in those respective sports.

The reason that students choose their sports is widely discussed among sports psychologists. According to sports psychologist Dr. James Gavin in his book, *Body Moves: The Psychology of Exercise*, not only does personality factor into the sport choice, but the cost of the sport, availability, and social networks also contribute to the decision in deciding what sport in which to participate. However, this study will focus specifically on personality.

The correlation between personality type and sports has been a long debated topic. Some researchers believe that there is a connection between an individual's personality and sport choice while others have found no connection. However, the methods of these sports psychologists vary as there are many ways to test this connection, possibly causing this disconnect.

Few studies have been conducted on high school student-athletes relating sport choice and personality. According to Mark S. Allen from the School of Psychology at the University of Wollongong in his 2014 study, "adolescence is a critical developmental stage during which we observe not only the greatest changes in levels of physical activity but also the greatest changes in personality". With this gap in knowledge, there is promising room for research.

### Literature Review

In 1988, the previously mentioned Dr. James Gavin published his book, *Body Moves: The Psychology of Exercise*. Since then, many studies have been conducted, testing several versions of his theory that the four factors- cost, personality, availability, and social networks- affect sport choice.

In order to measure personality among athletes, there are many popular tests available to professional psychologists. One is Zuckerman's Sensation Scale (Zuckerman, Kolin, Price, & Zoob, 1964), which measures the level of enjoyment in different activities of varying risks. Another is the Myers-Briggs personality test (Briggs, 1980), which measures one's personality based on four characteristics. These four characteristics are combined to form sixteen combinations of the characteristics. The Myers-Briggs test was inspired by Carl Jung's personality test, which measures: preferences for dealing with and relating to people, processing information, making decisions and organizing one's life. The four characteristics that make up the Myers-Briggs test are: introversion/extraversion, sensing/intuition, judgement/perceiving, and feeling/thinking. Finally, there is the Big Five Personality test, the test that this study will utilize. This test was invented by Paul Costa and Robert McCrae. It narrows the human personality into five traits: introversion/extraversion, openness to experience, agreeableness, conscientiousness, and neuroticism.

As explained by Adel Mirzaei from the Faculty of Physical Education and Sports Sciences at the Islamic Azad University in his study, *The Relationship Between Personality and Sports Performance*, each Big Five factor has certain components to it. Extraversion/introversion measures how talkative, assertive, outgoing and sociable one is. Neuroticism measures an

individual's emotional stability. These two factors are considered the "big two" of the Big Five according to Mirzaei, deeming them the most important of the five. The factors that make up the agreeableness aspect is someone's emotional support or hostility, sensitivity, politeness, care, and nurturing or lack thereof. Conscientiousness is defined as an individual's ability to achieve goals and his or her dependability. Finally, openness to experience is described as someone's creativity and divergent thinking as well as one's openness to new ideas and feelings.

The Big Five Personality test has been used in many studies that focus on sports and personality, however all have only utilized adult participants. In his 2011 study, *The Big Five Personality Traits and Risky Sport Participation*, Serdar Tok, from the School of Physical Education and Sports at Ege University, found that athletes who participate in high risk sports tend to be less neurotic than those who do not participate in risky sports. The more neurotic participants prefer to participate in activities with lower levels of arousal, which is why they opt for the lower risk sports as opposed to higher risk activities. Not only have discoveries about neuroticism been linked to sports based on their level of risk, but also based on whether they are team or individual sports. Athletes in team sports are typically more neurotic than athletes who participate in an individual sport. Individual sport athletes tend to be more emotionally stable. However, Urska Dobersek, from the McNeese State University Psychology Department, found in 2008 study, *Connection Between Personality Type and Sports*, it was found that participants who involve themselves in an individual sport also tend to be more egoistic. Additionally, Dobersek found that those who score high on the neuroticism scale do not enjoy high levels of arousal, showing that they do not want all the attention on them throughout a game. Therefore, they opt for a team sport which allows for the attention on the match or game to be distributed

amongst the team. Clearly, neuroticism levels are a major factor when adults determine the sport that they play.

Not only does neuroticism play a part in sport choice, but it also affects sport performance. In a 2008 study, Christopher Kovacs from the Western Illinois University Kinesiology Department found that, along with conscientiousness, high levels of neuroticism relate to better sports performance. This relates to sport choice because athletes enjoy participating in sports more when they are successful. Also, if a student does not have adequate skill, they may be cut from a sports program.

Conscientiousness also plays an important role in sport choice. Those who are conscientious are more reserved, think actions through, and take into account potential consequences. Unsurprisingly, risky sport participants have low levels of conscientiousness (Tok, 2011).

Another reason individuals choose the sports that they do may be due to similarities in personality between members of the sports. Mark S. Allen found in his study *The Role of Personality in Sport and Physical Activity* that “adherence levels in exercise programs” may be due to personality similarities, not only among members of the program, but also with the instructor of the program. In this study, the instructor was the coach and the program was the various sports teams that the school provides to the students. This applies to social networks, one of Gavin’s four factors that contribute to sport choice as well.

### **New Direction**

Much research has been conducted and reported on concerning the subject of sport choice and personality. However, most have not used high school students as the subject group, opting

for college students in intramural or collegiate sports or adults in recreational or professional sports. This is presumably because previous researchers would have to obtain parental consent forms for a large subject group, which is difficult and time consuming.

By not utilizing high school students, previous studies do not effectively eliminate some factors besides personality in choosing a sport to play. As previously mentioned, the factors that an individual takes into account when deciding on a sport to play are: cost, availability, personality, and social networks (Gavin, 1988). By using these student-athletes as the subject of the study, the cost and availability factors are basically eliminated due to the school district's rule that sports be provided to students for free. By eliminating this problem of sport accessibility to the subjects concerning cost and availability, the results will be more accurate than previous studies and therefore valuable to the academic subject in this field.

Also, at the high school level, the competition is greater than that of recreational leagues for youth or adults. The athlete must be competitive in the sport to make the team, as high school sports cut players that are not of adequate skill. In this case, the meaning of the term competitive can vary from sport to sport and level to level, as some sports are more inclusive than others. Also, as the levels of the sport increase, the highest being varsity, the sport generally tends to be more selective in relation to the lower levels of frosh/soph and junior varsity.

Finally, there has never been a test on these specific student-athletes from this area. This area is comprised of mainly middle to upper middle class families and is in a suburban city.

With all these factors, this study aims to achieve a better understanding of why high school students choose to participate in the sport that they do. This will be important to younger people as they will want to find out in what sport they have the greatest chance to succeed. By

choosing a sport that matches their personality type, the student-athletes will also have a greater chance to enjoy and continue the sport and thus they will stay active and healthy.

### **Methods**

This study conducted research on students attending Thousand Oaks High School. In order to qualify for this study, students must attend the high school and play a sport that is run through the school. This excludes sports participation outside of the school. This qualification is put in place to ensure that cost, one of the factors that contributes to an individual's choosing a sport besides personality, is eliminated. The school is required to provide students free athletic opportunity. This allows students to choose any sport they wish based on what they prefer, not just what their family can afford. It also somewhat eliminates the availability factor as students are required to take two years of physical education or a sport in their high school career. This forces students to make time in their schedule to participate in a sport. Students that have completed their required two years of physical education do not have to participate in a sport or a physical education class, although many do. Students who do not play a sport but opt to participate in physical education will not be included in this study as they do not play a specific sport but rather a variety of physical games and sports.

To field responses from as wide of a variety as possible, this study will not just focus on high school varsity athletics, which are made up primarily of juniors and seniors. The lower level athletics will be utilized, including the freshman, soph-frosh, and junior varsity levels, depending how many levels there are in each respective sport. This will allow for more subjects as well as a wider variety of perspectives, allowing for a significant correlation to be observed.



To ensure that the results of this study reach statistical significance from each sport, sports that did not have five or more participants were excluded from the study. Of the 23 sports offered at Thousand Oaks High School, 19 were included, with boys' and girls' sports counting as unique sports (ex. boys' and girls' soccer would be counted as two sports). The sports that were included were: baseball, boys' and girls' basketball, girls' field hockey, football, boys' and girls' lacrosse, boys' and girls' soccer, softball, boys' and girls' swim, boys' and girls' track and field/cross country, boys' and girls' volleyball, boys' and girls' water polo, and wrestling. The sports that are provided by Thousand Oaks High School that did not reach the necessary amount of participants were: boys' and girls' tennis and boys' and girls' golf.

This study focused on 158 student athletes that are involved in the high school's sports programs. An anonymous survey was given to the participants that asked what grade the student was in and the sport they played. The survey included a twenty question Big Five personality test as well (Appendix).

The Big Five Personality test gauges individuals' personalities based on five traits. These traits are: openness to experience, agreeableness, extraversion/introversion, conscientiousness, neuroticism. The Big Five Personality test gives statements and has the participants rate how much they would agree with the statement for themselves on a scale from one to five, with one being strongly disagree and five being strongly agree. As the participants are taking the test themselves, the Big Five Personality test gauges the individuals' self-perceived personality. The results were then compared among sports to find a possible connection between sports. Higher and lower risk sports were compared as well as individual and team sports. For the purpose of this study, the contact sports are considered high risk and non contact sports are considered low

risk. These contact, or high risk, sports will consist of football, boys' and girls' lacrosse, boys' and girls' soccer, boys' and girls' basketball, baseball, softball, boys' and girls' volleyball, wrestling and boys' and girls' water polo. The low risk non-contact sports will be made up of boys' and girls' tennis, boys' and girls' golf, boys' and girls' swim, and boys' and girls' track and field/ cross country..

This personality test was chosen in order to find a correlation between the sports. Many other personality tests, such as the Myers-Briggs and Zuckerman Sensation Scale, have too many variables and factors that create a lower chance to find a connection between sports. As there are only five factors in the Big Five Personality test, it will be more likely to find such a connection. The Big Five personality test also converts personality types into numerical values rather than categories. This makes it possible to compare each individual trait based on a greater than, equal to, or less than analysis rather than only being able to note that there is a difference in category.

To ensure the validity of this study, the Institutional Review Board cleared this project. No participant's personal information, including identity, was gathered or exposed. Also, because many of the subjects are minors, parental consent forms were necessary. In order to take the survey, the consent forms needed to be returned before the student could take the survey.

### **Results and Discussion**

The results for the study are as follows and are in no particular order. For each sport included in the study, at least five student-athletes from each sport participated in the survey. The highest score in each category that students can score in any given personality trait overall is 20.0 and the lowest is 5.0.

There are many interesting correlations to be made from the results of the survey. For purposes of comparison and reference, a scale was made specifically for this study. The scoring scale is as follows: scores between 5.0 and 9.9 are considered extremely low, scores between 10.0-11.9 are considered low, scores between 12.0-13.9 are considered medium, scores between 14.0-15.9 are considered high, and scores between 16.0 and 20.0 are considered extremely high.

The following tables are in the various category groupings previously mentioned: team and individual sports, high risk (contact) and low risk (non-contact) sports, and boys' and girls' sports. The scores of each unique sport were calculated by adding up the sums of each individual trait and taking the average for each sport. These averages for each Big Five personality trait represented each respective sport when they were compared to other sports. For each category, the averages of all the sports that fall under that category are averaged for the overall Big Five personality scores. As this study is comparing the various scores for each sport, scores that are considered high, medium, or low are considered so relative to the other sports.

The sports associated with team sports are: football, lacrosse, soccer, basketball, baseball, softball, volleyball, and water polo. The individual sports category consists of tennis, golf, swim, track and field, and wrestling. High risk, or contact, sports consist of football, boys' and girls' lacrosse, boys' and girls' soccer, boys' and girls' basketball, baseball, softball, boys' and girls' volleyball, wrestling and boys' and girls' water polo. Boys' and girls' swim, and boys' and girls' track and field/ cross country make up the low risk, or non contact, sports. The boys' and girls' sports are made up of the sports implemented into Thousand Oaks High School athletics for boys and girls respectively.

On the following tables, located on the x-axis, are the letters E, N, O, A, and C. E represents the extraversion scores, N represents the neuroticism scores, O represents the openness to experience scores, A represents the agreeableness scores, and C represents the conscientiousness scores.

Those values that are highlighted in the tables are significant values that are thoroughly analyzed. The green highlight draws attention to differing conscientiousness values. The yellow highlights differing neuroticism scores while the pink highlight makes differing extraversion scores conspicuous. The blue highlighter draws attention to differences in openness to experience with a difference of more than 0.3.

### Team and Individual Sports

Team Sports	E	N	O	A	C
<b>Baseball</b>	11.8	13.5	14	14	12.2
<b>Boys' Basketball</b>	12.5	11.8	13.3	13.5	11.8
<b>Girls' Basketball</b>	13.5	12.4	15	14.5	12.3
<b>Girls' Field Hockey</b>	14.7	13.3	14.1	14.8	13
<b>Football</b>	13.4	12.6	13.4	13.9	11.6
<b>Boys' Lacrosse</b>	12.2	11.8	16	14.6	13
<b>Girls' Lacrosse</b>	12.3	13.4	16	14.4	11.8
<b>Boys' Soccer</b>	13.2	11.9	16	14.2	13.2

<b>Girls' Soccer</b>	14.2	14	15.6	14.6	11.8
<b>Softball</b>	12.8	13.2	14.9	14	12.9
<b>Boys' Volleyball</b>	13.6	12.4	15.2	13.8	13.2
<b>Girls' Volleyball</b>	11.9	13.7	14.2	14	10.2
<b>Boys' Water Polo</b>	14	13.3	14	14.3	11.7
<b>Girls' Water Polo</b>	12.6	13.1	14.8	13.8	13.6
<b>Avg</b>	13.05	12.88571429	14.80	14.17142857	12.30714286

**Figure 1:** Team Sports Big Five Personality Test score averages.

Individual Sports	E	N	O	A	C
<b>Boys' Swim</b>	12.8	12.6	14.2	14.4	15.6
<b>Girls' Swim</b>	12	12.8	14.5	14	13.6
<b>Boys' Track</b>	11.3	13.5	14.8	14.3	14.4
<b>Girls' Track</b>	13.3	13.4	16.3	14	12.7
<b>Wrestling</b>	12.6	11.4	15.6	13.6	14.8
<b>Avg</b>	12.4	12.74	15.10	14.06	14.22

**Figure 2:** Individual Sports Big Five Personality Test score averages

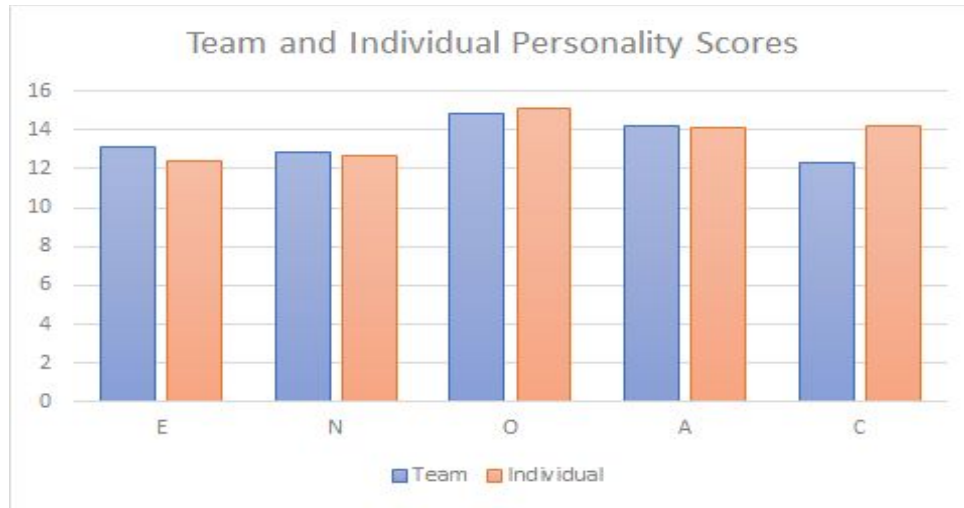
In order for a comparison between categories to be a statistical significant difference, there must be a difference greater than 0.3. Any difference below this is considered to be similar.

There is a notable difference between the team and individual sports. As expected, the team sports averaged a higher score than the individual sports did with respect to extraversion.

The team sports scored a 13.1 while the individual sports averaged a score of 12.4. This can be attributed to the different natures of the sports. Team sports require communication and good relationships among teammates in order to be successful. These communication and social skills correlate with a higher level of extraversion. However, individual sports do not require these social skills, as success depends solely on the performance of the individual and no one else. This makes individual sports appealing to introverts.

Individual sports also scored higher than team sports in conscientiousness, with individual sports scoring 14.2 and team sports scoring 12.3. Again, this is expected as the athletes who participate in individual sports must be more self-disciplined and self-reliant in order to succeed in their respective sports than those who participate in team sports.

The other personality traits all had similar results, with team sports scoring 12.9 for neuroticism and individual sports scoring 12.7 in neuroticism, a relatively low score. Team sports scored 14.8 and individual sports 15.1 for openness to experience, a relatively high score. Team sports scored 14.2 and individual sports scored 14.1, also relatively high scores, for agreeableness. The fact that the agreeableness scores were similar was unexpected. As Dobersek and Bartling found in their study, athletes that play an individual sport tend to be more egoistic. If this held true for this study, the agreeableness score would have been lower in relation to team sports.



**Figure 3:** The averages of the personality scores of team and individual sports are compared.

### High Risk and Low Risk Sports

High Risk	E	N	O	A	C
<b>Baseball</b>	11.8	13.5	14	14	12.2
<b>Boys' Basketball</b>	12.5	11.8	13.3	13.5	11.8
<b>Girls' Basketball</b>	13.5	12.4	15	14.5	12.3
<b>Girls' Field Hockey</b>	14.7	13.3	14.1	14.8	13
<b>Football</b>	13.4	12.6	13.4	13.9	11.6
<b>Boys' Lacrosse</b>	12.2	11.8	16	14.6	13
<b>Girls' Lacrosse</b>	12.3	13.4	16	14.4	11.8
<b>Boys' Soccer</b>	13.2	11.9	16	14.2	13.2
<b>Girls' Soccer</b>	14.2	14	15.6	14.6	11.8

<b>Softball</b>	12.8	13.2	14.9	14	12.9
<b>Boys' Volleyball</b>	13.6	12.4	15.2	13.8	13.2
<b>Girls' Volleyball</b>	11.9	13.7	14.2	14	10.2
<b>Boys' Water Polo</b>	14	13.3	14	14.3	11.7
<b>Girls' Water Polo</b>	12.6	13.1	14.8	13.8	13.6
<b>Wrestling</b>	12.6	11.4	15.6	13.6	14.8
<b>Avg</b>	13	12.8	14.7	14.1	12.5

**Figure 4:** High Risk (Contact) Sports Big Five Personality Test score averages

Low Risk	E	N	O	A	C
<b>Boys' Swim</b>	12.8	12.6	14.2	14.4	15.6
<b>Girls' Swim</b>	12	12.8	14.5	14	13.6
<b>Boys' Track</b>	11.3	13.5	14.8	14.3	14.4
<b>Girls' Track</b>	13.3	13.4	16.3	14	12.7
<b>Avg</b>	12.4	13.1	15	14.2	14.1

**Figure 5:** Low Risk (Non contact) Sports Big Five Personality Test score averages

There also were differences found between high risk, or contact, sports and low risk, or non-contact, sports. Similar findings were found when high risk and low risk sports were compared as to the findings of team and individual sports with respect to differing conscientiousness and extraversion scores and similar personality trait scores for agreeableness, openness to experience, and neuroticism.



The high risk sports had a higher extraversion score than low risk sports, 13 and 12.4 respectively. This difference is not surprising as those with higher extraversion scores tend to be more aggressive, a necessary trait for success in contact sports. Those that are more extraverted also seek to raise their arousal level, which is what high risk sports provide, so it can be concluded that extraverts are more attracted to high risk sports (Tok, 2011).

The low risk sports scored a conscientiousness score of 14.1 and the high risk sports scored a 12.5. The similarities in scores between high risk and team sports as well as low risk and individual sports can be attributed to the similarities in the subject groups. The subject groups contain the same sports, with wrestling being the exception as it is an individual sport but also is a contact sport and thus is categorized as a high risk sport. Therefore, it is not surprising that the average scores for the high risk and team sports as well as the low risk and individual sports were very similar. For this reason, the reasons and explanations for the reasons the personality scores differ between team and individual sports apply to these sports as well. Again, the scores for agreeableness, neuroticism, and openness to experience were statistically similar. Agreeableness had high risk sports with a score of 14.1 and low risk sports with a score of 14.2. Neuroticism had high risk sports with a score of 12.8 and low risk sports with a score of 13.1. Openness to experience had high risk sports with a score of 14.7 and low risk sports with a score of 15.

The similar openness to experience and neuroticism scores are surprising when comparing high risk and low risk sports. High risk sport participants tend to be more daring and open to trying new things, indicating a higher openness to experience score (Zuckerman, 1984). However, this similarity can be attributed to the level of risk involved in the sports. Other studies

used sports such as skydiving and mountain climbing as risky sports while this study's only requirement to be a risky sport was for it to be a contact sport. The neuroticism score similarity is unexpected as high risk sports tend to have lower neuroticism scores than low risk sports as they generally have higher self confidences (Somers, Korkmaz, & Tatar, 2004). Again, this can be attributed to the difference in sport subject groups.



**Figure 6:** The averages of the personality scores of high risk, or contact, sports and low risk, or non contact, sports are compared.

### Boys' and Girls' Sports

Boys' Sports	E	N	O	A	C
<b>Baseball</b>	11.8	13.5	14	14	12.2
<b>Basketball</b>	12.5	11.8	13.3	13.5	11.8
<b>Football</b>	13.4	12.6	13.4	13.9	11.6
<b>Lacrosse</b>	12.2	11.8	16	14.6	13
<b>Soccer</b>	13.2	11.9	16	14.2	13.2
<b>Swim</b>	12.8	12.6	14.2	14.4	15.6
<b>Volleyball</b>	13.6	12.4	15.2	13.8	13.2

<b>Water Polo</b>	14	13.3	14	14.3	11.7
<b>Wrestling</b>	12.6	11.4	15.6	13.6	14.8
Avg	12.9	12.36666667	14.63333333	14.03333333	13.01111111

**Figure 7:** Boys' Sports Big Five Personality Test score averages.

Girls' Sports	E	N	O	A	C
<b>Basketball</b>	13.5	12.4	15	14.5	12.3
<b>Field Hockey</b>	14.7	13.3	14.1	14.8	13
<b>Lacrosse</b>	12.3	13.4	16	14.4	11.8
<b>Soccer</b>	14.2	14	15.6	14.6	11.8
<b>Softball</b>	12.8	13.2	14.9	14	12.9
<b>Swim</b>	12	12.8	14.5	14	13.6
<b>Track</b>	13.3	13.4	16.3	14	12.7
<b>Volleyball</b>	11.9	13.7	14.2	14	10.2
<b>Water Polo</b>	12.6	13.1	14.8	13.8	13.6
Avg	13.03333333	13.25555556	15.04444444	14.23333333	12.43333333

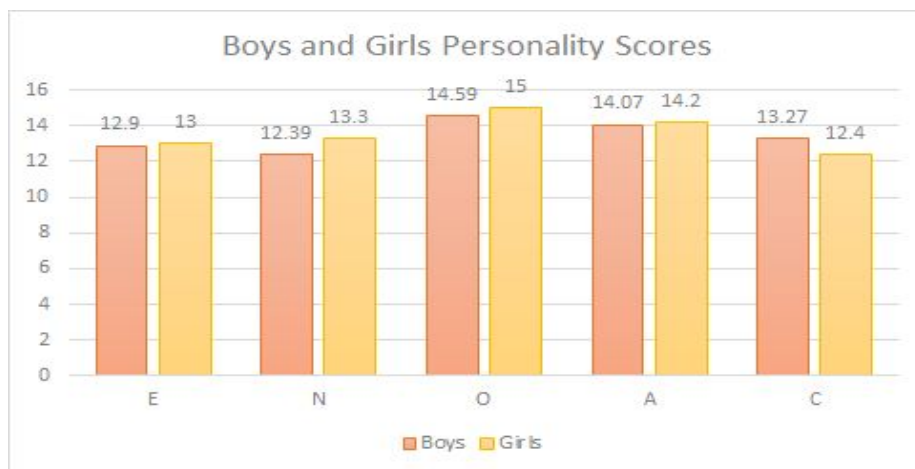
**Figure 8:** Girls' Sports Big Five Personality Test score averages

Boys' and girls' sports also had some interesting differences. Student-athletes who participate in boys' sports tended to have lower neuroticism scores than student-athletes who participate in girls' sports, with the girls averaging a score of 13.3 and the boys' averaging a score of 12.4. This was expected for a multitude of reasons. As found by Macoby and Jacklin (1974), men are less likely to admit fear or anxiety than women. As the Big Five Personality Test is a self-assessed personality test, this may have contributed to the boys' having a lower neuroticism score than the girls. In addition, men generally have higher self-esteems than women

(de Man and Blais, 2004). Because self-esteem is a subcategory of the Big Five neuroticism, this is logical that boys would have lower neuroticism scores than girls.

Additionally, the boys' sports averaged higher conscientiousness scores than the girls' sports, with the boys scoring 13.3 and the girls scoring 12.4. These conscientiousness scores may be connected with the differing neuroticism scores. Those that have low scores of anxiety tend to face problems with more effort and attention (Sarason, 1960). This would explain why the boys' sports scored higher on conscientiousness than the girls.

Furthermore, the girls' sports averaged higher openness to experience scores than the boys'. The boys' sports scored a 14.6 and the girls' sports scored a 15.0. This is surprising as various studies, including Tok's 2011 study, found that besides neuroticism and conscientiousness, all other Big Five personality factors were of similar scores. The openness to experience traits are creativity and divergent thinking. These particular traits are not more or less



**Figure 9:** The averages of the personality scores of boys and girls are compared.

prevalent in either gender as both genders are equally creative (Pinker, 2009). Therefore, it is a case by case scenario whether the boys' or girls' sports score higher or lower in openness to experience.

### **Conclusions**

There are various factors that contribute to a person's sports choice. By eliminating the other factors as much as possible, this study aimed to find trends in personality among each sport as well as among various categorizations of the sports. These categorizations were team and individual sports, high risk and low risk sports, and boys' and girls' sports.

It was found that those who play team and high risk sports tend to be more extroverted than individual and low risk sports. However, those that play individual and low risk sports tend to be more conscientious than those that play team and high risk sports. The similarities in openness to experience and neuroticism were initially unexpected, but once the different sport subject groups were accounted for, it was logical that the scores were like so. Finally, it was also found that those student-athletes that participate in boys' sports tend to be more conscientiousness than those that participate in girls' sports, while student-athletes that participate in girls' sports tended to be more neurotic and open to experience than boys' sports participants.

This information can be used in order to help prospective athletes, of any age, find the sport that will best fit them. In turn, this will promote a healthier lifestyle as exercising will be more appealing to these athletes, causing them to enjoy the act of physical activity.

### **Limitations**

Although these findings are interesting and beneficial to understanding why people play the sports that they do, there are some limitations to this study. One limitation was the fact that not every athlete from every sport could be surveyed, which would provide exact personality scores for each sport. Factors contributing to this lack of full participation include the fact that

this was an optional survey, parental consent was needed, and the inability, for various reasons, to easily distribute the survey.

Another limiting factor in the survey were the multisport athletes. Although not necessarily detrimental to the study, these athletes' scores were recorded for all sports in which the individuals participate and need to be taken into account. Various personality traits may be displayed by these athletes and may be outliers of one or more sports in which they participate. This, in turn, would affect the sports' overall average scores.

Furthermore, not every factor that contributes to the ultimate decision to play one or more sports was eliminated. The social network factor could not be eliminated as these networks are established by each individual participant at a young age, long before they took the survey associated with this study. Availability was only partially eliminated as it can only be considered eliminated to freshmen and sophomores as they have yet to fulfill the two years of physical education required by the school.

Finally, the validity of each participant's response can be questionable. The responses may reflect the ideal person that the individual wants to portray rather than the person that they actually are. The subjects may lie, as the survey is anonymous and the participants are not supervised when taking the survey.

### **Call for Future Research**

If this study were to be continued or replicated, the survey should be administered earlier to allow for more time for student-athletes to take the survey. As stated earlier, many students needed to have parental consent slips signed in order to participate, so giving the possible

participants more time to have these consent forms signed could lead to more survey responses and an even more accurate and thorough representation of each sport.

Another possibility would be to give the survey to more schools with the same rules about mandatory sport participation. This way, the study retains its purpose and new direction in that it eliminates some of the other factors besides personality that go into making the choice to play one or more certain sports.

This survey could also be given to younger subject groups. This would provide a larger subject base, however some problems would arise with this. These problems include that the cost and availability factors are not eliminated as well as the fact that some children are more or less forced to play sports at a young age when their parents sign them up for recreational sports, usually for the purpose of physical activity and to develop social skills.

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## Appendix

## Survey Given to Participants

1. What grade are you in?
2. What sport(s) do you play through the high school?

The following questions concern your perception of yourself. For each question, rate the strength of agreement, 1 being strongly disagree and 5 being strongly agree.

3. Are you talkative?
4. Do you become nervous easily?
5. Are you generally curious about various things?
6. Are you helpful/unselfish?
7. Do you tend to be lazy?
8. Do you like order?
9. Do you rarely feel blue?
10. Are you the life of the party?
11. Are you creative?
12. Are you forgiving?
13. Are you shy or timid?
14. Are you easily distracted?
15. Do you make plans and stick to them?
16. Do you worry a lot?
17. Are you generally trusting of others?
18. Are you adventurous?

19. Do you make friends easily?
20. Do you prefer routines and schedules?
21. Are you sometimes rude to others?
22. Can you be somewhat careless?