

Factors Influencing Football Participation: A Survey of Male High School Students in the State of Iowa

Scott Bull, Mark Slavich, Astrid Araya, Alex Bush and Artie Bess

Grand View University

Overview

The purpose of this study was to assess the decline in Iowa high school football participation. The study assessed motives and constraints for football participation among both football and non-football playing student-athletes. The results exhibited that socialization and fun were the primary motives for both football and other sport participation among student-athletes while constraints included participation in other activities and working to earn money. Further, concussions and other injuries were not highly-rated constraints, exhibiting the relative little concern that student-athletes have for these issues. The following sections provide further detail on the study, including context for the study, method of data collection, results, and implications.

Background

Despite the many benefits of youth and adolescent sport participation including enhancement of emotional and behavioral well-being and a number of physical and social benefits, we have seen declines in youth sport for some time and in the last year, high school sport participation declined for the first time in 30 years. The Annual High School Athletics Participation Survey conducted by the National Federation of State High School Associations (NFHS), revealed that football and basketball were the sports contributing most to the decline with the number of participants in boys 11-player football dropping for the fifth consecutive year. Participation in 6-player, 8-player and 9-player football increased slightly over the previous year. Football remains the number one participatory sport for boys in high school, but many are concerned the numbers may continue to decrease due to injury concerns, including concussions. The NFHS is working with member state associations and USA Football to make the game as safe as possible and spark interest in football among youth as they reach junior high and high school age.

While there is surely concern about concussions and other injuries in football, it is unclear from the literature whether these concerns are leading to the decline in participation. It is clear that other constraints and factors that students face in adolescence are related to the incidence of withdrawal from participation in sport, leading to attrition. These factors influencing participation include internal, social, and external constraints, as well as motivational factors that play a key role in high school males deciding whether to participate in football and other sports.

Procedure and Participants

With the intention to assess motives and constraints of high school football participation, the research team distributed the survey to a sample of male high school athletes, which comprised male students in grades nine through twelve, enrolled in high schools in the state of

Iowa. The sample size was approximately 35,000 students, with all schools within Iowa being eligible to participate. Administrators conducted the survey in school settings with male students during November, during the final weeks of the high school football season.

With the purpose of investigating motives and constraints of football participation, the survey first asked participants whether they participated in football in 2019. Based upon their response, they were directed to a series of other questions to assess either their motives or constraints for participation. Participants who participated in football in 2019 also were asked whether they planned to participate the next season. If they responded indicating they did not, they were asked why they did not plan to participate. Further, participants who indicated they did not participate in football were asked if they participated in another fall high school sport, and if so, which sport. They then received a series of questions assessing their motives for participation in their identified fall sport. Also, participants who indicated they did not participate in football in 2019 were asked questions about why they did not play and also what might motivate them to play in the future. The full list of questions can be found in Table 1. Each of the scaled-response questions were assessed on a 1 (Not important at all) to 5 (Extremely important) scale.

Results

A total of 9,220 participants began the survey, with 7,715 completed responses. Prior to responding to questions regarding sport participation motivation, participants responded to several demographic questions concerning their football participation including grade and school classification. Concerning school classification, 24% participated at the 1A level while Classes Single A (one level below 1A), 2A, and 3A each accounted for 19% of respondents. Meanwhile, 28% of respondents were freshmen, 27% sophomores, 25% juniors, and 20% seniors. Complete results concerning participant school and grade classification levels are shown in Figures 1 and 2.

Figure 1

Participants based upon School Classification

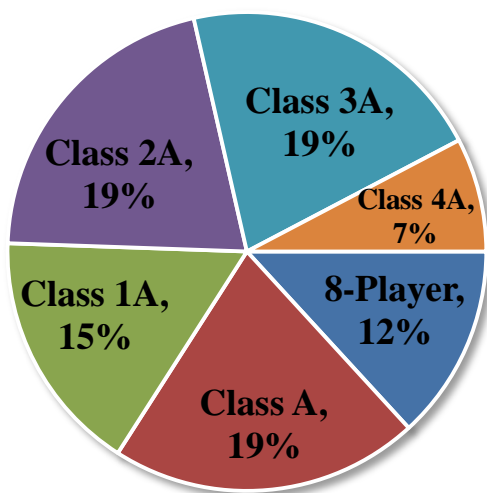
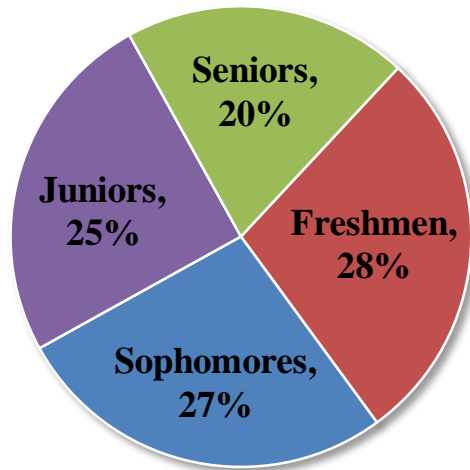


Figure 2

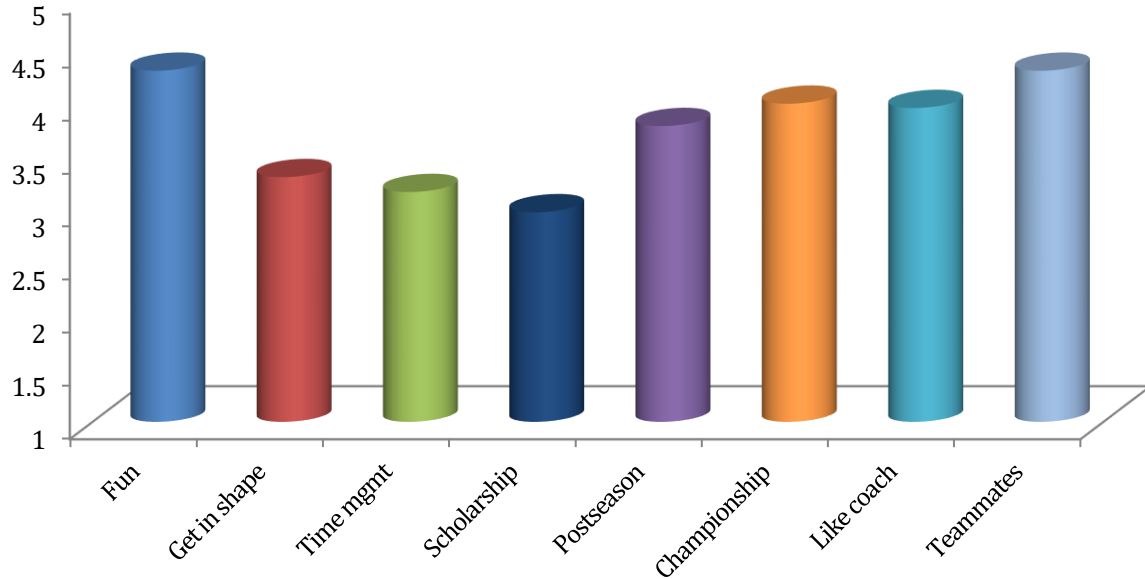
Participants based upon Grade Classification



Participants who indicated they played football in 2019 were asked why they participated in football. Results exhibited that participants' teammates also being their friends ($M = 4.30$) and because they think football is fun ($M = 4.30$) were the highest-rated contributors to football participation. Complete results are shown in Figure 3.

Figure 3

Mean scores of motives to participate in football



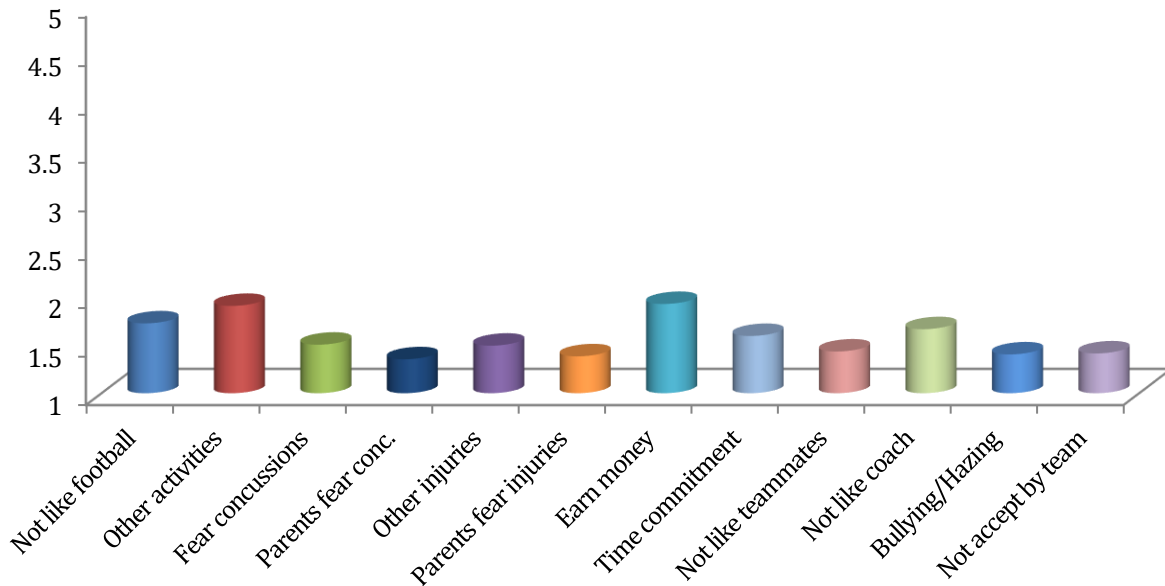
1 = Not important at all; 5 = Extremely important

Participants who participated in football in 2019 were also asked whether they planned to play the following season. The majority (78.3%) indicated they did plan to play football the following season.

Participants who responded that they did not plan to play football the following season were asked why they did not plan to play. The highest-rated reasons cited were not planning to play because they were working to earn money for themselves or their family ($M = 1.92$) and because of other activities ($M = 1.90$). Complete results are shown in Figure 4.

Figure 4

Mean scores of constraints for intentions to not participate in football in 2020



1 = Not important at all; 5 = Extremely important

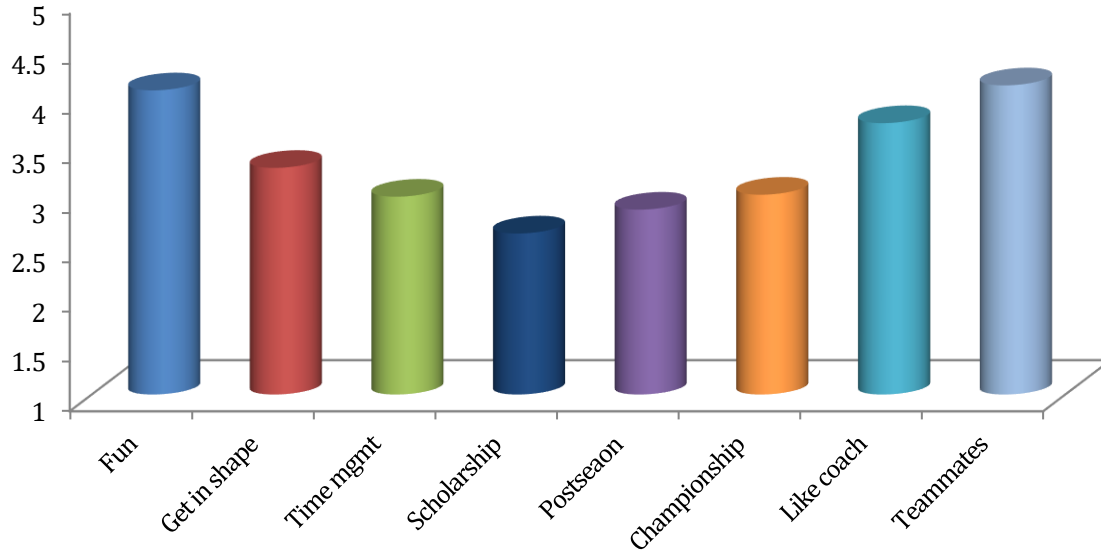
The same participants who indicated that they did not plan to play football the following season were also asked if they planned to participate in another fall high school sport the next year. The majority (86.7%) indicated they did not plan to play another fall sport.

Participants who did not plan to play high school football the next season were also asked if they currently participated in another fall high school sport (other than football). The majority (72.2%) indicated they did not participate in another fall high school sport.

Participants who did participate in another fall high school sport were asked why they participated in this sport. The highest-rated reasons were participants' teammates also being their friends ($M = 4.11$) and because they think participating in the sport is fun ($M = 4.06$). Complete results are shown in Figure 5.

Figure 5

Mean scores of motives to participate in other fall sport

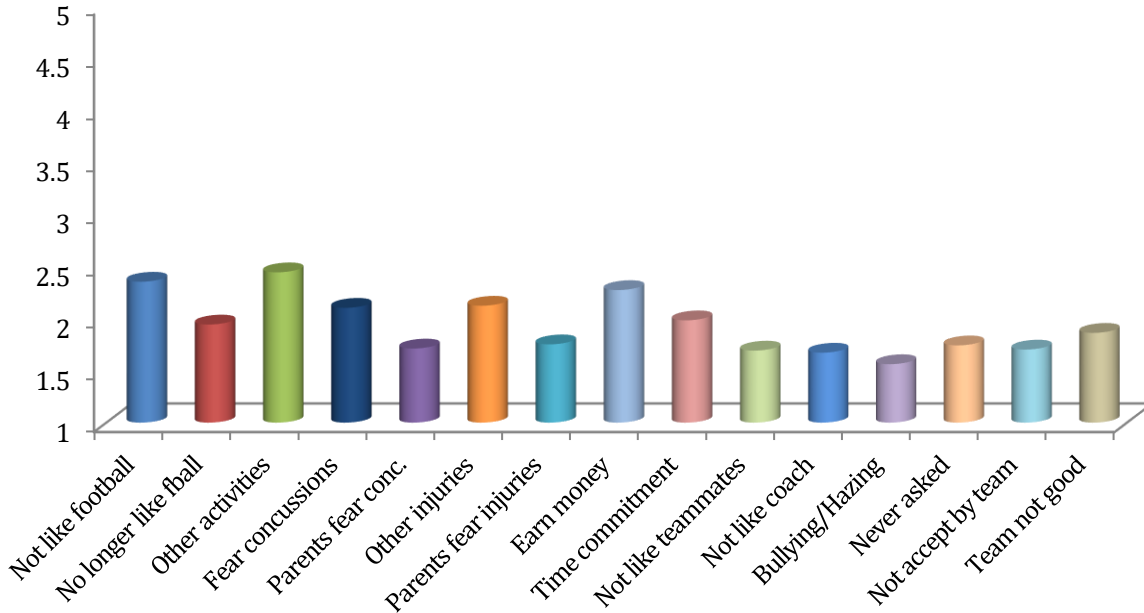


1 = Not important at all; 5 = Extremely important

Participants who did not participate in football were asked why they did not participate. The highest-rated results were working to earn money for themselves or their family ($M = 2.27$), due to participation in other activities ($M = 2.44$), because of fear of suffering an injury other than a concussion ($M = 2.12$) and because of fear of suffering a concussion ($M = 2.10$). Complete results are shown in Figure 6.

Figure 6

Mean scores of constraints for football participation in 2019

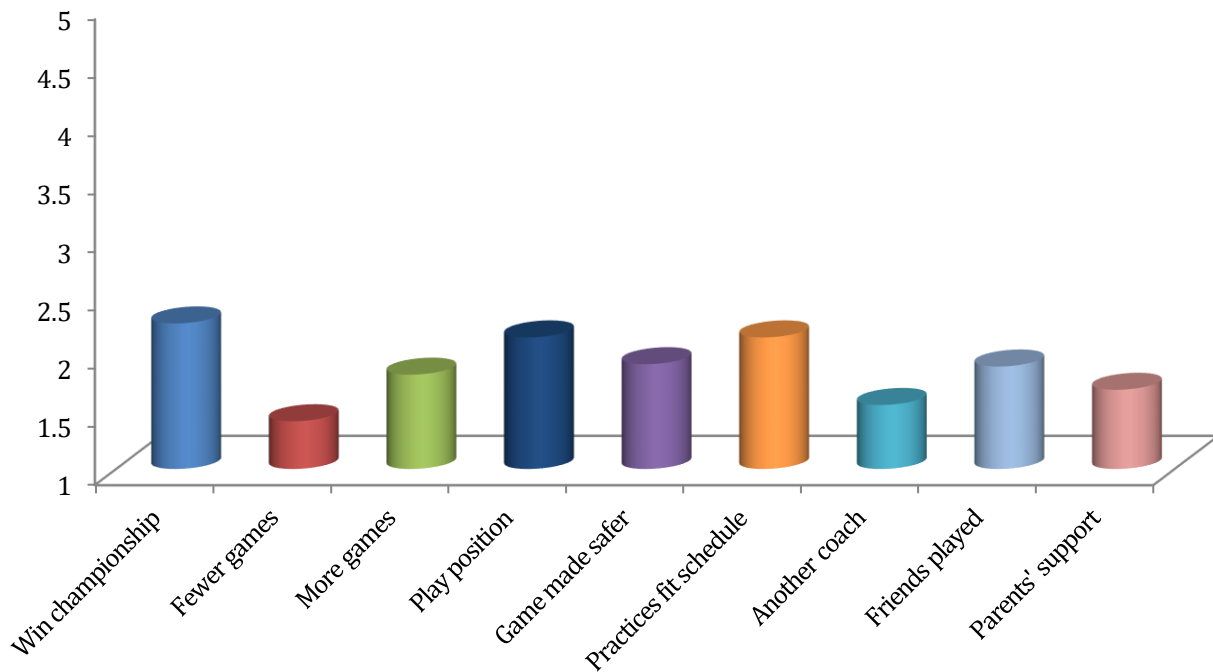


1 = Not important at all; 5 = Extremely important

Finally, participants who did not participate in football were asked what might motivate them to participate in football in the future. The highest-rated responses were for the opportunity to win a state championship ($M = 2.25$), if they knew they could play their preferred position ($M = 2.13$), and if they could fit practices and games into their schedule ($M = 2.13$). Complete results are shown in Figure 7.

Figure 7

Mean scores of potential motives to participate in football in future



1 = Not important at all; 5 = Extremely important

Discussion and Implications

The results of the study provide a number of practical implications as well as areas for future investigation by school, regional, and state athletics administrators. First, results exhibited that football participation because it is fun and due to teammates being friends were the two-highest rated motives, both with mean scores of 4.30 on the five-point scale, while playing for the opportunity to win a championship maintained a mean of 3.99. Meanwhile, participating because the student likes the coach was rated at 3.95. This result, combined with the other highly-rated means, provide support for the importance of quality coaches. Clearly, coaches have a strong influence on the culture of the team and their behavior impacts the level of fun experienced by student-athletes, as well as effecting the success of the team. Therefore, schools should place high priority on coaches and the culture they create within their program.

Regarding constraints, the results exhibited that not playing due to earning money for themselves or family ($M = 1.92$) and engaging in other activities ($M = 1.90$) were the highest-rated reasons for students planning to not participate in football the following season. Other reasons included because they did not like football ($M = 1.72$) and they did not like the coach ($M = 1.66$). With these results on a five-point scale, no constraints were highly-rated, and thus

caution should be taken when attempting to assign causation to these factors contributing to lack of participation. However, lack of participation due to earning money for themselves as well as engaging in other activities are areas in which schools can place focus when determining how to increase participation rates.

In addition to focus on football participation, the study explored reasons for participation in other sports, in attempt to glean potential explanation for lack of football participation. Results of motives for participation in a fall sport other than football aligned with the motivation for football participation, with playing because teammates are friends ($M = 4.11$) and because it is fun ($M = 4.06$) were the two highest-rated responses while playing because they liked their coach ($M = 3.73$) was the only other motive with a mean above 3.50. This also provides further support for the importance of having quality coaches and developing a positive team culture.

The study also aimed to identify why students did not play football during the year the survey was completed. Similar to constraints to participation for those who did play in 2019, the highest-rated reasons included not participating due to other activities ($M = 2.44$) and to earn money ($M = 2.27$). Meanwhile, fear of an injury other than a concussion maintained a mean score of 2.12 while fear of receiving a concussion was rated at 2.10. No other constraints were rated at 2.0 or above on the five-point scale. However, it should be noted that not participating due to parents' fear of injuries other than concussions ($M = 1.75$) and parents' fear of concussions ($M = 1.71$) were also assessed. Thus, examining the role of injuries, there is little difference between fear of concussions versus other types of injuries, for both students and their perceptions of their parents' views. These are compelling and important takeaways. While there is no significant difference between types of injuries, a 2014 survey of National Football League (NFL) players displayed players fearing knee injuries more than concussions. Thus, if anything, the results of this study show that fear of concussions is no more than other types of injuries. Also, with both rated far below the scale's midpoint (three), these factors are shown to be not important. While a healthy fear of injuries, and especially concussions, may be a good thing, from the perspective of school administrators, these results exhibit injuries not playing a significant role in football participation.

Finally, potential motives for future football participation revealed the opportunity to win a state championship ($M = 2.25$), if they knew they could play their preferred position ($M = 2.13$), and if they could fit practices and games into their schedule ($M = 2.13$) were the three highest-rated factors. No other motive was rated at or above 2.0. These results provide further support for the role of coaches, who can provide opportunities for students to excel in roles that they enjoy and perhaps develop skills in their most natural positions. Further, as previously noted, coaches also impact the success of the team, and therefore effect the opportunity to win a state championship. In addition, students' potential participation if they could align schedules is an interesting finding. A recommendation for coaches based upon this finding is to meet with students to gauge interest and football and attempt to identify a schedule that allows for participation for most students. Practically, there is no perfect solution, but with the benefits of football participation, coaches should look into how to attract the largest number of students.

Appendix A: Tables

The following tables display the complete survey question responses with mean scores.

Table 1

Student-Athletes' Football Classification

School Classification	Percentage
8-Player	11.6
Class A	18.5
Class 1A	14.7
Class 2A	18.9
Class 3A	19.3
Class 4A	7.3

Table 2

Student-Athletes' Grade Classification

Grade Classification	Percentage
Freshmen	28
Sophomores	27
Juniors	25
Seniors	20

Table 3

Motives for Football Participation

(Students who participated in Football in 2019)

Variable	Mean
Fun	4.30
Get in shape for another sport	3.31
Time management skills	3.16
Obtain a college scholarship	2.97
Qualify for the postseason	3.78
Win a state championship	3.99
I like my coach	3.95
My teammates are my friends	4.30

Table 4

Constraints to Football Participation in 2020
(Students who participated in Football in 2019)

Variable	Mean
I do not like the sport of football	1.72
I am involved in another activity outside of sports during the fall	1.90
I am afraid of suffering from a concussion	1.50
My parents will not permit me due to a concern of me suffering from a concussion	1.35
I am afraid of suffering an injury other than a concussion	1.49
My parents will not permit me due to a concern of suffering an injury other than a concussion	1.38
I am working to earn money for myself or my family	1.92
Offseason time commitment is too much	1.59
I do not like my teammates	1.43
I do not like the coach	1.66
Bullying or hazing issue	1.40
I would not be accepted by teammates	1.41

Table 5

Motives for Other Fall Sport Participation
(Students who did not participate in Football in 2019)

Variable	Mean
Fun	4.06
Get in shape for another sport	3.28
Time management skills	2.99
Obtain a college scholarship	2.62
Qualify for the postseason	2.86
Win a state championship	3.01
I like my coach	3.73
My teammates are my friends	4.11

Table 6

Constraints to Football Participation in 2019
 (Students who did not participate in Football in 2019)

Variable	Mean
I do not like the sport of football	2.35
I used to play but did not like it	1.94
I am involved in another activity outside of sports during the fall	2.44
I am afraid of suffering from a concussion	2.10
My parents will not permit me due to a concern of me suffering from a concussion	1.71
I am afraid of suffering an injury other than a concussion	2.12
My parents will not permit me due to a concern of me suffering an injury other than a concussion	1.75
I am working to earn money for myself or my family	2.27
Offseason time commitment is too much	1.98
I do not like my teammates	1.69
I do not like the coach	1.67
Bullying or hazing issue	1.56
I was never asked by a coach to participate	1.74
I would not be accepted by teammates	1.70
Our team has never been very good	1.86

Table 7

Motives to Football Participation in Future
(Students who did not participate in Football in 2019)

Variable	Mean
To win state championship	2.25
If there were fewer games	1.41
If there were more games	1.81
If I knew I could play the position I want	2.13
If the game could be made safer	1.90
If I could fit practices and games into my schedule	2.13
If there was another coach	1.55
If more of my friends played	1.88
If parents supported me playing football	1.68

Appendix B: Football Participation Survey

Section 1

1. Did you play football this season?
 - a. Yes
 - b. No

If “Yes,” then questions in section 2 will be asked.

If “No,” then questions in section 3 will be asked.

Section 2

If “Yes” to question in section 1, the following questions will be asked.

1. What classification of football does the school you attend participate in?
 - a. 8 Player
 - b. Class A
 - c. Class 1A
 - d. Class 2A
 - e. Class 3A
 - f. Class 4A

2. What current grade level are you in at your high school?
 - a. 9th
 - b. 10th
 - c. 11th
 - d. 12th

3. Please select all the grade levels in which you have participated in tackle football.
 - a. 12th
 - b. 11th
 - c. 10th
 - d. 9th
 - e. 8th
 - f. 7th
 - g. 6th
 - h. 5th
 - i. 4th
 - j. 3rd
 - k. 2nd
 - l. 1st
 - m. Below 1st

4. Why do you participate in football?

Please rate the following reasons why you participate in the sport of football, from the list below, from not important at all on the far left to extremely important on your decision to participate on the far right.

Not important at all	Minimally important	Moderately important	Very important	Extremely important
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Fun

Get in shape for another sport

Time Management skills

Obtain a college scholarship

Qualify for the post season

Win a state championship

I like the coach

My teammates are my friends

Other (please specify) _____

5. Are you planning to participate in high school football next year?

a. Yes

b. No

If the answer is “No” to this question, the follow up question #6 will be asked and the survey is complete.

6. Why do you not plan to participate in the sport of football?

Please rate the following reasons why you do not plan to participate in the sport of football, from the list below, from not important at all on the far left to extremely important on your decision to not participate on the far right.

Not important at all	Minimally important	Moderately important	Very important	Extremely important
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I do not like the sport of football

I used to play but did not like it

I am involved in another activity outside of sports during the fall

I am afraid of suffering from a concussion

My parents will not permit me to due to a concern of me suffering a concussion

I am afraid of suffering an injury other than a concussion

My parents will not permit me to due to a concern of me suffering an injury other than a concussion

I am working to earn money for myself or my family

Off-season time commitment is too much
I do not like my teammates
I do not like the coach
Bullying or hazing issue
I was never asked by a coach to participate
I would not be accepted by teammates
Our team has never been very good

Section 3

If “No” to question in section 1, the following questions will be asked.

1. Do you participate in another fall sport?
 - a. Yes
 - b. No

If yes, what other fall sport? _____

If the answer is “Yes” to this question, the follow up question #2 will be asked and the survey is complete.

If the answer is “No” to this question, the questions in section 4 will be asked

2. Please rate the reasons why you participate in this other fall sport, from the list below, from not important at all on the far left to extremely important on your decision to participate in the sport on the far right.

Not important at all	Minimally important	Moderately important	Very important	Extremely important
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Fun

Get in shape for another sport

Time Management skills

Obtain a college scholarship

Qualify for the post season

Win a state championship

I like the coach

My teammates are my friends

Other (please specify) _____

Section 4

If “No” to the question in section 3, the following questions will be asked.

1. Why do you not participate in the sport of football?

Please rate the following reasons why you do not participate in the sport of football, from the list below, from not important at all on the far left to extremely important on your decision to not participate on the far right.

Not important at all	Minimally important	Moderately important	Very important	Extremely important
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I do not like the sport of football

I used to play but did not like it

I am involved in another activity outside of sports during the fall

I am afraid of suffering from a concussion

My parents will not permit me to due to a concern of me suffering a concussion

I am afraid of suffering an injury other than a concussion

My parents will not permit me to due to a concern of me suffering an injury other than a concussion

I am working to earn money for myself or my family

Off-season time commitment is too much

I do not like my teammates

I do not like the coach

Bullying or hazing issue

I was never asked by a coach to participate

I would not be accepted by teammates

Our team has never been very good

2. What would be a reason that might motivate you to participate in football in the future?

Please rate the reasons why you do not participate in football, from the list below, from not important at all on the far left to extremely important on your decision participate in football in the future on the far right.

Not important at all	Minimally important	Moderately important	Very important	Extremely important
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To win a state championship

If there were less games

If there were more games

If I knew I could play the position that I want

If the game could be made safer

If I could fit practices and games into my schedule

If there was another coach

If more of my friends play

If my parents supported me playing football

Other (please specify) _____