BOUMA, ROSS A. Ed.D. The Decline in Interscholastic Sports Officials: Identifying College Athletes' Perceived Barriers of Becoming a High School Sports Official. (2022) Directed by Dr. Michael Hemphill. 65 pp.

In some areas of the U.S., high school varsity athletic contests are being postponed and sub-varsity contests are being canceled due to a shortage of registered officials. In recent decades, the number of different high school sports offered as well as the number of studentathletes participating in high school sports has risen. However, the number of registered high school sports officials is declining. The recruitment rate of new high school sports officials is not sufficient for the number of officials leaving the profession. Research indicates that officials often start officiating for a variety of reasons, such as: the love of the game, physical activity, building relationships, and extra income. Research also indicates that officials guit officiating due to a variety of reasons, such as: age, poor sportsmanship, career demands, low pay, and the number of meetings to attend. Few studies have investigated the barriers of becoming an official initially. This exploratory study identified what college athletes (n = 417) at a small, rural, private institution located in the Midwest, perceive to be barriers of becoming a registered high school sports official. Since many officials were once athletes themselves and the typical college athlete is relatively young, this is an ideal population to recruit and retain as registered high school sports officials. The biggest barriers identified by college athletes in this study were related to a lack of respect for officials, the time commitment of being an official, the stress/pressure/responsibility of being an official, the possibility of abuse, not knowing how or who to contact to become a registered official, and not knowing how or who to contact to schedule games/events. The findings from this study can be used to improve recruitment strategies and inform current practice in order to help increase the number of new young officials.

# THE DECLINE IN INTERSCHOLASTIC SPORTS OFFICIALS: IDENTIFYING COLLEGE ATHLETES' PERCEIVED BARRIERS OF BECOMING A HIGH SCHOOL SPORTS OFFICIAL

by

Ross A. Bouma

A Dissertation

Submitted to

the Faculty of The Graduate School at

The University of North Carolina at Greensboro

in Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

Greensboro

2022

Approved by

Dr. Michael Hemphill Committee Chair

# DEDICATION

I would like to dedicate this project to the many high school officials who have committed their time and talents to making high school sports a valuable experience for student-athletes.

# APPROVAL PAGE

This dissertation written by Ross A. Bouma has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

Committee Chair

Dr. Michael Hemphill

**Committee Members** 

Dr. Pamela Brown

Dr. Dennis Johnson

June 20, 2022

Date of Acceptance by Committee

April 29, 2022

Date of Final Oral Examination

# ACKNOWLEDGEMENTS

I want to acknowledge my family, friends, cohort members, committee members, colleagues, student-athletes, and officials who have helped make this project possible. Each person assisted in their own unique way and provided me with the needed resources, advice, and motivation to continue. Without their help, guidance, encouragement and support, this project would not be possible. Most of all, I want to acknowledge God, the Creator, Sustainer, and Redeemer of all things. To God be the glory!

LIST OF TABLES	vi
CHAPTER I: PROJECT OVERVIEW	1
Background	2
Purpose and Aims	9
Methods	10
Results	14
Discussion	17
CHAPTER II: DISSEMINATION	23
Presentation Script	23
CHAPTER III: ACTION PLAN	31
REFERENCES	34
APPENDIX A: IN-PERSON RECRUITMENT SCRIPT	
APPENDIX B: CONSENT FORM	40
APPENDIX C: SURVEY QUESTIONS	43
APPENDIX D: PRESENTATION SLIDES	54

# TABLE OF CONTENTS

# LIST OF TABLES

Table 1. Means and Standard Deviations for all 26 Barriers	15
Table 2. Frequency Distributions for all 26 Barriers	16

#### CHAPTER I: PROJECT OVERVIEW

The number of student-athletes participating in high school sports in the U.S. increased approximately 4% from the 2009-10 school year (7,628,377) to the 2018-19 school year (7,937,491). In the same ten-year span, the number of sports listed by the National Federation of State High School Associations (NFHS) rose from 44 to 66 (NFHS, 2019). The rise in both the number of high school student-athletes and the number of sport offerings has increased the demand for registered high school sports officials.

Officials are a vital part of high school sports. Sports officials enforce the rules of play which promote fairness among the competitors, protect the integrity of the sport, and provide safety for the participants. State high school activity associations are responsible for licensing and registering high school sports officials within their respective states for the sanctioned sports they offer. The requirements for registered officials may vary slightly from state to state and from sport to sport. Typically, in order to become a registered official, one would need to complete the necessary training, pass an examination, and pay a registration fee. To continue as a registered official, one would typically need to fulfill the necessary renewal requirements and pay a registration fee again, usually on an annual basis.

High schools are responsible for providing registered officials for the competitions they host. High schools may contract dates and times directly with individual officials or they may contract with an officials' organization or group of officials, which then provide the officials for the contest. In most states, a typical high school varsity volleyball match requires two officials, a basketball game or soccer match uses three officials, and a football game needs five officials. On any given day or night, numerous officials are needed to officiate the many high school sport competitions occurring across the country.

The problem is that the number of registered officials available to officiate high school sports is declining. The number of new officials replacing those lost to attrition is insufficient.

Recruitment and retention of interscholastic sports officials is a problem affecting many state high school activity associations, officials' organizations, and high schools across the country.

## Background

The recent decline in registered high school sports officials occurring across the U.S. is well-documented. *Referee* (2019) magazine, the official magazine of the National Association of Sports Officials (NASO), surveyed four states (Alabama, Michigan, Ohio, and Washington) and found that the average number of registered high school sports officials in those states declined by over 10% in just eight years. In the 2009-10 school year, the average number of officials for those four states was over 9,000. In 2017-18, that number dropped to under 8,000. Many other states have experienced similar declines. The Pennsylvania Interscholastic Athletic Association (PIAA) reported 1,132 fewer officials in the 2018-19 school year than in 2013-14 school year (Anastasia, 2019). According to the Iowa High School Athletic Association (IHSAA) (L. Brooker, personal communication, February 18, 2020), there were 5,274 registered officials for the 2009-10 school year and only 4,408 for the 2018-19 school year. The Minnesota State High School League (MSHSL) had 8,847 registered officials for the 2010-11 school year and only 7,975 registered officials for the 2019-20 school year (P. Inniger, personal communication, April 21, 2020). The recent nationwide decrease in the number of registered high school sports officials is starting to affect high school sports.

Hoffman (2020) states the number two concern for high school athletic directors is finding staff/volunteers, which includes referees. According to Ohio University (2018), the shortage of officials has caused some sub-varsity teams to be dropped, some sports to be dropped, and some games to be rescheduled in order to have officials at the game. Derryk Sellers, the athletic director at Lindenwold High in New Jersey and the president of the West Jersey Football league, asked every school in the 95-school league to schedule one football game on Thursday night instead of the traditional Friday night for the 2020 season so there

would be enough officials to cover the games (Anastasia, 2019). In January of 2019, Minnehaha Academy, located in Minneapolis, MN, moved their boys' and girls' basketball games from a Tuesday night to a Monday night because of a shortage of officials in the metro area (Paulsen, 2019).

Despite the recent media coverage, the decline in high school sports officials is not a new concern. In 2001, NASO published a special report titled, *How to Get & Keep Officials*. In the introduction letter of the report, Barry Mano, president of NASO, stated that NASO surveyed the individuals responsible for overseeing high school officials at the state level and found that 90% of them reported a shortage of officials. They also noted that recruiting new officials was a bigger problem than retaining current officials (Sabaini, 2001).

The decline of sports officials is also not limited to high school sports in the United States. For example, in 2004, Cuskelly and Hoye prepared a report for the Australian Sports Commission titled, *Problems and Issues in the Recruitment and Retention of Sports Officials*. In the report, they state there is a significant problem in the retention of officials, especially at the grass roots level. Auger et al. (2010) report federations and associations in Quebec have difficulties recruiting and retaining officials. Dell et al. (2016) note a decline in soccer referees in England in recent years. The decline in sports officials is a concern in various parts of the world and at multiple levels.

Besides the well-documented decline in sports officials and its impact on sports, there is also a variety of research available on officials and the officiating profession. Most of the research on officials and the officiating profession has focused on the following four areas: motivations to begin and continue; reasons for quitting; stress; and self-efficacy.

#### Motivations to Begin and Continue

Research has identified numerous reasons why officials begin officiating. The reasons identified vary depending on the level, the location, and the sport in which the research was conducted. According to Livingston and Forbes (2016), many officials were once athletes in the

sport they officiate and are motivated to start officiating because they have a love for the game, want to give back to the sport, and to challenge themselves. NASO (2017) lists the reasons why people start officiating as the love of the game, to stay fit, to challenge themselves, to be part of a competitive sport, and to have a hobby. Wolfson and Neave (2007) list the top reasons for officiating as the love of the game, pride in accomplishments, opportunity to contribute to the sport, and the challenge and excitement. Hancock et al. (2015) categorized the two main reasons officials begin officiating as intrinsic reasons (prove one could do it, personal development, enjoyment, and passion for one's sport) and sport reasons (being active in and serving their sport, responding to a need in their sport, and to promote their sport). Jordan et al. (2019) identified continued involvement, enjoyment, giving back, and extra income. Auger et al. (2010) list the top three reasons as the love and passion of the sport, a leisure activity, and for personal development. Titlebaum et al. (2012) identified overall enthusiasm for sports, contributing to players' experience, and the challenge and excitement as the top three reasons why officials decide to officiate. Ridinger et al. (2017) found enjoyable affiliation, remuneration, need for officials, and encouragement to be the four main themes for initial involvement in officiating.

As for reasons why officials continue to officiate, NASO (2017) lists the same five reasons as mentioned previously for becoming an official, plus, to mentor new officials and friendships within officiating. Fowler et al. (2019) found that the "reasons officials continue to officiate are the commitment to the sport, the relationships they develop as an official, and the large role that officiating plays in the lives of the participants" (p. 27). Baldwin and Vallance (2016) found three categories that emerged as reasons why officials continue to officiate. They were, camaraderie (referees, referee coaches, administration), individual goals (improvement and bettering oneself, fitness, assisting community and rugby union), and rewards (achievements, promotions, awards, representative games, milestones). Ridinger et al. (2017) identified enjoyable affiliation, remuneration, fitness, community, and challenge as themes to

continue officiating. Auger et al. (2010) found being satisfied, useful, and integrated and to improve and surpass yourself personally as the top two reasons for continuing. Not surprisingly, the reasons and motivation to continue officiating may change over time (Symonds & Russell, 2018).

#### **Reasons for Quitting**

Research has identified a variety of reasons officials quit. Some of the reasons are similar to each other but some differ depending on the level, location and sport. It is possible that some of the reasons why officials guit may also act as barriers to initially becoming an official. For Dutch volleyball officials, VanYperen (1998) identified lack of enjoyment and involvement alternatives as reasons for their intent to guit, and not surprisingly, determined that intent to quit actually led to quitting. Some officials quit because they are burned-out. A study of high school basketball officials from Ohio and a study of Rugby Union officials from Wales, Scotland, and England, showed burnout was a consistent indicator of officials' intentions to guit (Rainey, 1999; Rainey & Hardy, 1999). Some officials report abuse, harassment and safety concerns. Soccer referees in England regularly experienced psychological and physical abuse and intimidation. These experiences made them feel isolated and vulnerable and led to feelings of low self-confidence and low self-worth (Dell et al., 2016). Cuskelly and Hoye (2004) report that an Australian Sports Commission study along with anecdotal evidence suggest that harassment and abuse of officials "may be one of the reasons that the number of sports officials is declining" (p. 1). NASO (2017) reports that 47.94% of male respondents and 44.74% of female respondents "felt unsafe or feared for their safety because of administrator, coach, player, or spectator behavior" (p. 4). Sabiani (2001) reports that a previous NASO survey asked state association administrators why they thought officials did not re-register. The reasons given were as follows: poor spectator sportsmanship, poor participant sportsmanship, career and family demands, difficulty in advancement, retirement, assignor or local association problems, and low pay. Similarly, Sabaini (2001) reports the NFHS surveyed officials and found

the top reasons men officials did not re-register were career and job demands, poor participant sportsmanship, poor spectator sportsmanship, low games fees, relationship with assignor and local association, and difficulty advancing. The top reasons given for women officials not reregistering were career and job demands, time away from family and friends, poor spectator sportsmanship, poor participant sportsmanship, and low game fees. In one study, items such as cost of gear to be an official, availability of facilities for officials, the number of meetings to attend, and dealing with athletic directors were listed as the top four items impacting decisions to continue officiating. Interestingly, dealing with players ranked as number six, dealing with fans and parents as number 11, and dealing with coaches as number 12 (Titlebaum et al., 2012).

## Stress

Research has found that stress and stressors for sports officials can come from multiple sources. A variety of questionnaires and surveys have been developed to identify sources of stress for sports officials. Researchers have used these, and other methods, to rank and assess sources of stress. Voight (2009) developed the Sources of Officiating Stress Questionnaire (SOSQ) and found the top sources of stress for U.S. soccer officials to be conflict between officiating and family, making a controversial call, conflict between officiating and work, making a wrong call, and verbal abuse by coaches. Anshel et al. (2013) used the Sources of Acute Stress Scale for Sports Officials (SASS-SO) to survey high school, college, and professional sports officials in 13 different sports. They found the top sources of acute stress to be making an incorrect call, being out of position, having a problem with their partner, and receiving verbal abuse from coaches. Wolfson and Neave (2007) found the top four potential stressors for English soccer referees to be having a bad game, people who protest decisions when they don't understand the rules of the game, possible demotion to a lower level of officiating, and verbal abuse by managers, coaches or spectators. Ritchie et al. (2017) considered the effect of situation criticality on sports officials' perceived levels of stress. Situation criticality was determined by time remaining and score differential. The highest level

of perceived stress was at the end of the second half and with a tie score. The lowest level of perceived stress was early in the first half in a routed game.

Interestingly, even though sports officials identify many different sources of stress, some report the level or amount of stress as low. For example, Turkish soccer referees and assistant referees (linesmen) rated their amount of stress during the soccer season between very little and moderate (Gencay, 2009).

Some studies show a connection between stress and performance. In a study of Turkish basketball referees, Anshel et al. (2014) identified three stressors and labeled them as distractions, subpar performance, and verbal abuse. They found the stressor distractions was positively associated with subpar performance. Also, Neil et al. (2013) studied soccer referees in the UK and found that the crowd, previous mistakes, confrontation, players with bad reputations, and assessors watching could cause stress appraisals which are associated with negative emotions which could lead to poor decision making.

It is important for sports officials to recognize stressors and implement strategies to manage stress. Officials' associations should not only educate officials on the rules of the game and proper mechanics, but they should also focus on ways to help officials manage stress (Voight, 2009). Voight (2009) suggests educating officials in time management practices and mental skills training techniques to help manage stress. Maheu (2015) lists imagery, self-talk, and relaxation breathing as examples of cognitive/mental skills training techniques for officials. Maheu (2015) also lists the following stress-busting techniques: have a pregame routine, relaxation breathing and imagery, psyching up, humor, socialize with stressors (if they are people), and have a post-game routine. Stress management training for officials is important in reducing turnover and minimizing burnout (Taylor et al., 1990).

## Self-efficacy

Referee self-efficacy has also received attention from researchers. According to Myers et al. (2012), referee self-efficacy is "the extent to which a referee believes that he or she has

the ability to successfully officiate a competition" (p. 739). Early work on referee self-efficacy began with a conceptual model by Guillen and Feltz (2011) in which they referred to referee self-efficacy as 'refficacy'. In their initial conceptual framework, they determined six dimensions for officials' success: Game Knowledge, Strategic Skills, Decision-Making Skills, Psychological Skills, Communication/Control of Game, and Physical Fitness. Guillen and Feltz (2011) state that "refficacy beliefs will have an influence on one's decision-making performance, referee stress....and co-referee satisfaction" (p. 4).

Based on this earlier work by Guillen and Feltz (2011), Myers et al. (2012) developed the referee self-efficacy scale (REFS). The REFS conceptualized four first order dimensions: Game Knowledge (GK), Decision Making (DM), Pressure (PR), and Communication (CM). Myers et al. (2012) found that years of experience and physical/mental preparation were sources of referee self-efficacy for all four dimensions. The REFS, or a slightly revised version based on different contexts, appears to be useful in studying self-efficacy of referees and sport officials (Myers et al., 2012). A Norwegian version of the REFS was found to have measurement/factorial validity in elite and non-elite soccer referees (Johansen et al., 2018). The REFS has revealed self-efficacy differences among gender, sports, age, and experience. In a Turkish study, male referees for football, basketball, and handball had significantly higher total REFS scores than females. By sport, total REFS scores were higher in football and basketball referees than in handball referees. For age and experience, a positive and significant relationship was found for game knowledge, decision making, pressure, communication, and REFS total scores (Karaçam & Pulur, 2017a). In a separate study of Turkish basketball referees, Karacam and Pular (2017b) found similar results to their previous study pertaining to gender, age, and experience but failed to find a significant difference for education (Karacam & Pulur, 2017b).

Self-efficacy has also been studied as a predictor of performance. Theoretically, a high self-efficacy for sport officials will lead to more correct calls and less stress and anxiety (Lirgg et

al., 2016). Karacam and Adiguzel (2019) examined the relationship between performance scores of Turkish basketball referees and self-efficacy and found a significant positive relationship between basketball referees' physical fitness, game knowledge, decision-making, pressure, communication, and REFS total score and their performance scores.

Research has provided a variety of valuable insights into officials and the officiating profession. The driving force behind some of this research has been the recent decline in sports officials. Despite the recent research, the number of sports officials continues to decline, particularly at the high school level in the U.S. An area of research that has not received much attention is identifying the barriers that keep people from becoming officials initially. A better understanding of these barriers is important in recruiting new officials and reversing the current trend of declining officials.

# **Purpose and Aims**

The overarching goal of this study was to help reverse the declining trend of registered high school sports officials. More specifically, the purpose of this study was to describe the barriers of becoming a registered high school sports official as perceived by college athletes attending a small, rural, private institution, located in the Midwest. Since many officials were once athletes themselves (Livingston & Forbes, 2016) and the typical college athlete is relatively young and is familiar with the game, they are an ideal demographic to recruit and retain as officials. Considering why college athletes choose *not to become officials initially* and describing their perceived barriers is an area of research that has not received much attention. Identifying and describing these perceived barriers can help improve recruitment strategies and initiatives for becoming a registered high school sports official. The specific aims of this study were to:

Aim #1 - Determine what college athletes perceive to be barriers of becoming a registered high school sports official.

**Aim #2** – Describe which perceived barriers college athletes rank as being the most influential in becoming a registered high school sports official.

#### Methods

This study was an exploratory study using survey research. According to Creswell (2014), "survey research provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population" (p. 13). The survey used in this study asked the student-athletes basic demographic information, to rate how much they agreed or disagreed that a particular statement acted as a barrier to becoming a registered official, and to list and rate any barriers that were not included in the survey list.

#### Participants

Purposeful and convenience sampling (Creswell, 2014) were used to select participants for this study. The participants for this study were student-athletes at the institution where the researcher is employed. The institution is a relatively small, private, liberal-arts institution with an undergraduate enrollment of approximately 1,000 students. It is located in the rural Midwest and is a member of the National Association of Intercollegiate Athletics (NAIA). The rationale for choosing current student-athletes is because many current officials were once athletes in the sport they officiate and were motivated to start officiating because of a love for the game and a desire to give back to the sport (Livingston & Forbes, 2016).

The participants were members of one or more of the following 13 athletic teams: men's baseball, men's basketball, men's cross-country, men's football, men's soccer, men's track & field, men's wrestling, women's basketball, women's cross-country, women's soccer, women's track & field, women's softball, and women's volleyball. Teams representing sports that typically do not require a registered official at the high school level were not included in the study. For example, high school golf meets and tennis matches are usually self-officiated by the athletes

while cheer and dance competitions use judges who are not required to be registered with the state activity association.

The survey was administered to 440 student-athletes. Of the 440 student-athletes, six did not consent to participate and five consented but did not complete the survey. Of the 429 that consented and completed the survey, 12 were currently registered officials. Thus, the number of responses analyzed in the survey was 417 (n = 417). According to Daniel (2012), the sample size for a nonprobability sample like the one used in this exploratory research study should include at least 20 to 150 participants. The extremely high response rate for this study was due impart to the support of the institution's athletic director and coaches and the opportunity to meet with each team individually.

Of the 417 participants, 138 were female (33%) and 279 were male (67%). There were 123 freshmen (29%), 126 sophomores (30%), 94 juniors (23%), 66 seniors (16%), and 8 fifthyear seniors (2%). Three hundred ninety-nine (96%) of the participants were from the United States and 18 (4%) were from a country other than the United States. Team representation was as follows: baseball = 52 (11%); men's basketball = 25 (5%); women's basketball = 20 (4%); men's cross-country = 15 (3%); women's cross-country = 16 (3%); football = 119 (25%); men's soccer = 39 (8%); women's soccer = 33 (7%); softball = 27 (6%); men's track & field = 42 (9%); women's track & field = 36 (8%); volleyball = 26 (5%); and wrestling = 27 (6%). There were 477 total team members represented. This number was higher than the number of participants used in the study (n=417) due to 60 student-athletes being members of multiple teams.

#### Procedure

After IRB approval was obtained, coaches from the previously mentioned 13 teams were contacted to schedule a time to meet with each of their teams individually. The coaches were familiar with the project as the researcher had previously attended an athletic department meeting and explained the project. The individual team meetings were scheduled for a variety of times and occurred over a six-week period. Student-athletes were instructed to bring to the

meeting a device in which they could access the internet and their student email accounts. Just prior to each of the meetings an email containing a link to the Qualtrics survey was sent to each of the student-athletes of that team. At the beginning of the meetings, an in-person recruitment script was read to the student-athletes (Appendix A). At the conclusion of the in-person recruitment script, student-athletes were directed to access their email accounts for the Qualtrics survey link. The first question on the survey included an additional link which contained the consent form (Appendix B). After reading the consent form, the next question asked the student-athletes whether or not they wanted to consent and continue with the survey. For student-athletes who did not consent, the survey ended. Student-athletes who did consent continued with the survey (Appendix C). The researcher remained available to answer any questions until all participants had completed the survey.

## Measures

At the time of this study no survey had been developed to measure the perceived barriers of college athletes to becoming a registered high school sports official. The survey developed for this study was done so using results from previous research, expert consultation and review, and a pretest.

The initial development of the list of barriers to be included in the survey began with a review of previous studies that focused on identifying reasons why officials quit. These reasons served as a starting point because reasons why officials quit could potentially be barriers to becoming an official. In order to better serve the aims of this study, reasons for quitting identified in previous studies were grouped and reworded by the researcher into statements representing potential barriers.

Along with using previous research findings, meetings with current officials were also used to develop the list of possible barriers. The researcher met with numerous registered officials, explained the project and asked what they would include on the list of possible barriers. These suggestions were used to further refine the list of possible barriers.

In the development of the survey as a whole, three different experts in research design were consulted. One was a colleague at the institution were the researcher is employed and the other two were from the researcher's degree granting institution. The researcher explained the aims of the project and shared design ideas with the experts. Advice from the experts was used to develop questions and aid in the design of the survey.

Face validity was added in the next step of the process as the entire survey was subjected to expert review. The survey, in a word processing format, was sent to five registered officials (different than the ones consulted earlier) and five current high school athletic directors. The officials and athletic directors provided insight and feedback that was used to refine, modify, and clarify the list of barriers as well as other questions on the survey.

The last step in the process was a pretest sent to 10 recent college graduates who were student-athletes while they were in the college. The pretest was sent via an email that included a link to the Qualtrics survey. Six of the 10 surveys were completed and returned. These former student-athletes were also asked to provide feedback. The feedback received was positive and no changes were made to the survey. This final step was also included to ensure the Qualtrics link and the survey were working correctly before the survey was administered to the actual participants. The link and survey worked correctly and no changes were needed.

The final design of the survey developed for this study can be divided into four conceptual parts. The first part of the survey focused on demographic information. The second part consisted of 26 different statements and asked the participants to rate how much they agreed or disagreed that each statement acted as a barrier to becoming a registered official. The third part asked two open-ended questions. The first question asked participants to identify and rate any other barriers that were not included in the list of 26 and the second question asked participants what they thought could be done to get more college athletes to become registered officials when their playing careers were finished. The final portion of the survey asked if participants would be interested in being part of a focus group or interview if the

researcher desired follow-up information. If participants did agree to this they were taken to a different survey to provide their contact information so they would remain anonymous.

#### Data Analysis

To determine the size of the barriers, exploratory data analysis of three different metrics was used. The first metric used was the mean rank order of Likert scale responses for each of the 26 barriers. The higher the Likert scale average, the bigger the barrier. The lower the Likert scale average, the smaller the barrier. Second, was the frequency distribution of the number of participants who indicated they *strongly agree* that a particular statement acted as a barrier. The higher the number of *strongly agree* responses a statement had, the bigger the barrier. The third metric used was the frequency distribution of *strongly agree* and *agree* responses. The higher the number of *strongly agree* and *agree* responses a statement had, the bigger the barrier. The lower the number of *strongly agree* and *agree* responses a statement had, the bigger the barrier. The higher the number of *strongly agree* and *agree* responses a statement had, the bigger the barrier. The higher the number of *strongly agree* and *agree* responses a statement had, the bigger the barrier. The bigher the number of *strongly agree* and *agree* responses a statement had, the bigger the barrier. The lower the number of *strongly agree* and *agree* responses a statement had, the bigger the barrier. The lower the number of *strongly agree* and *agree* responses a statement had, the bigger the barrier.

To determine if there were any other perceived barriers that were not included in the list of 26 statements, simple count data of the responses to the question, 'Are there any other items or reasons that would act as barriers and discourage you from becoming a registered high school sports official?' was used.

Simple count data was also used to analyze the open-ended question, 'What do you think could be done to get more college athletes to become registered high school sports officials when their playing careers are finished?'

#### Results

This project sought to determine what college athletes perceive to be barriers of becoming a registered high school sports official and to describe which perceived barriers college athletes rank as being the most influential in becoming a registered high school sports official.

Participants used a Likert scale to indicate how much they agreed or disagreed that each of the 26 statements acted as a barrier for them becoming a registered official. The Likert scale used was as follows: *strongly agree* = 5; *agree* = 4; *neutral* = 3; *disagree* = 2; and *strongly disagree* = 1. The more they agreed, the bigger the barrier. The less they agreed, the smaller the barrier. The mean scores and standard deviations for all 26 barriers are shown in Table 1 and the frequency distributions for all 26 barriers are shown in Table 2. The order of the barriers in Tables 1 and 2 was the order in which they appeared in the survey.

# Table 1. Means and Standard Deviations for all 26 Barriers

Barriers	M(SD)
I do not know the rules of the sport well enough	1.99(1.00)
I am not confident in my skills/abilities as an official	2.58(1.09)
I want/need a break from sports	2.17(1.04)
I do not like the stress/pressure/responsibility of being an official	3.12(1.20)
I do not like working with high school-aged athletes	2.08(0.86)
I do not like the possibility of officiating/working with people I do not know	2.10(0.83)
I do not like the possibility of officiating or working with the opposite sex	1.70(0.76)
The risk of COVID-19 exposure	1.29(0.60)
The abuse/harassment officials may experience from players	2.62(1.16)
The abuse/harassment officials may experience from coaches	2.84(1.20)
The abuse/harassment officials may experience from spectators	2.94(1.26)
I do not know who to contact or how to become registered	3.02(1.06)
I do not know who to contact or how to schedule games/events	3.18(1.03)
There is a lack of mentors to help me get started/work events with	2.91(0.98)
There is too much of a time commitment to become registered	3.12(0.95)
There are too many requirements to become registered	2.83(0.84)
It costs too much money to become registered	2.59(0.85)
It costs too much money to purchase officiating gear and apparel	2.56(0.84)
The pay is not enough	3.13(0.90)
There is a lack of respect for officials and the profession	3.46(1.05)
Officiating will conflict with my post graduation plans	3.22(1.13)
Officiating takes too much time away from family	3.07(1.00)
Officiating takes too much time away from other jobs/responsibilities	3.44(0.97)
Officiating takes too much time away from other interests/hobbies	3.41(0.93)
It is too difficult to learn the proper mechanics	2.32(0.84)
There are too many rules to learn	2.33(0.92)

Note. 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree.

Barriers	SA	А	Ν	D	SD
I do not know the rules of the sport well enough	9	34	50	176	148
I am not confident in my skills/abilities as an official	15	83	100	148	71
I want/need a break from sports	8	47	78	159	125
I do not like the stress/pressure/responsibility of being an official	54	127	90	108	38
I do not like working with high school-aged athletes	5	23	73	215	101
I do not like the possibility of officiating/working with people I do not	3	25	76	221	92
I do not like the possibility of officiating/working with the opposite	2	9	36	183	187
The risk of COVID-19 exposure	1	2	19	74	321
The abuse/harassment officials may experience from players	20	94	88	139	76
The abuse/harassment officials may experience from coaches	31	115	92	114	65
The abuse/harassment officials may experience from spectators	48	114	82	110	63
I do not know who to contact or how to become registered	25	127	131	98	36
I do not know who to contact or how to schedule games/events	22	165	125	74	31
There is a lack of mentors to help me get started/work events with	9	121	144	109	34
There is too much of a time commitment to become registered	25	123	160	93	16
There are too many requirements to become registered	10	71	195	122	19
It costs too much money to become registered	5	47	173	155	37
It costs too much money to purchase officiating gear and apparel	6	48	152	180	31
The pay is not enough	19	131	166	88	13
There is a lack of respect for officials and the profession	56	190	76	81	14
Officiating will conflict with my post graduation plans	54	130	117	85	31
Officiating takes too much time away from family	26	126	140	103	22
Officiating takes too much time away from other jobs/responsibilities	48	173	126	56	14
Officiating takes too much time away from other interests/hobbies	37	179	132	57	12
It is too difficult to learn the proper mechanics	5	33	105	221	53
There are too many rules to learn	3	53	89	204	68

*Note.* SA, A, N, D and SD represent *strongly agree*, agree, *neutral*, *disagree* and *strongly disagree* respectively.

Of the 417 responses to the open-ended question, 'Are there any other items or reasons

that would act as barriers and discourage you from becoming a registered high school sports

official? If so, please list them and rate the extent to which they would act as a barrier using the

following scale. 1 = small barrier, 2 = moderate barrier, 3 = extreme barrier', only 6 participants

listed something other than 'no' or something that could not be included in one of 26 barriers.

Two responses indicated 'being a female in a male dominated profession' as a barrier (1 as a

moderate barrier and 1 as an extreme barrier) and four responses indicated 'travel' as a barrier

(1 as a *small* barrier, 2 as a *moderate* barrier, and 1 as an *extreme* barrier).

There were 398 responses to the open-ended question, 'What do you think could be done to get more college athletes to become registered high school sports officials when their playing careers are finished?' Simple count data revealed two major ideas. The first idea was increased awareness, exposure, and/or education. Of the 398 responses, 284 responses (71.3%) mentioned something related to increased awareness, exposure, and/or education. The second idea was increased pay. Of the 398 responses, 110 responses (27.6%) mentioned increased pay.

#### Discussion

The first aim of this study was to determine what college athletes perceive to be barriers of becoming a registered high school sports official. The list of 26 possible barriers developed for this survey appears to have identified nearly all of the perceived barriers. When the participants were asked to list and rate any other barriers that were not included in the list of 26, only two other barriers were listed that were different than the 26 presented in the survey.

The first barrier mentioned that was not specifically listed in the survey was, 'being a female in a male dominated profession'. This was listed twice. One of the 26 possible barriers in the survey that participants were asked to rate was, 'I do not like the possibility of officiating/working with the opposite sex'. While this statement is similar and may be related to 'being female in a male dominated profession', it does not fully capture the level to which females may experience this as a barrier. Future studies, especially those that want to consider how barriers differ between males and females, should consider including this as a possible barrier.

The second barrier that was different from the list of 26 was, 'travel'. 'Travel' was listed four times. While it could be argued that 'travel' should be included as part of one of the 26 barriers that mention 'too much time away', a few participants felt travel was different enough to

mention in specifically. A barrier specifically mentioning travel may also be worth including in future studies.

It should also be noted that 12 responses specifically indicated 'wanting to coach' as a barrier. However, 'wanting to coach' was not considered to be different because it could be included in two different barriers from the list of 26, specifically, 'conflicts with post graduation plans' and 'too much time away from other jobs/responsibilities'. The fact that some student-athletes felt 'wanting to coach' was a barrier to becoming a registered official is intriguing and an area that may warrant further investigation. Understanding why they specifically viewed coaching, as opposed to other jobs/responsibilities, as a barrier, may provide interesting and useful insights.

The second aim of the study was to describe which perceived barriers college athletes rank as being the most influential in becoming a registered high school sports official. The following discussion will focus on barriers commonly ranked in the top 10 for mean score and frequency distributions for *strongly agree* and *strongly agree* plus *agree*.

The number one barrier according to mean scores was 'a lack of respect for officials and the profession' (M = 3.46, SD = 1.05). According to the frequency distribution, 'a lack of respect for officials and the profession' also received the highest number of *strongly agree* responses (56) and the highest number of *strongly agree* plus *agree* responses (246). This is the most influential barrier for participants in this survey. The lack of respect for and poor treatment of officials (Dell et al., 2016; NASO, 2017) is a systemic issue with many factors and is evidenced by the declining number of officials in recent years (Anatasia, 2019; Referee, 2019). Many state high school activity associations have launched programs and initiatives to address this barrier. For example, the Minnesota State High School League (MSHSL) started the "Thank a Ref" campaign in 2015 to raise the recognition and appreciation of officials (Leighton, 2017). Addressing the number one barrier, 'a lack of respect for officials and the profession', and

promoting the profession in a positive light must continue to be an important initiative for all stakeholders.

Of the top 10 barriers based on mean scores, five were related to time commitment or conflicts with other plans. When considering frequency distribution, five of the top 10 number of responses in the strongly agree category were also related to the time/conflicts. When combing strongly agree and agree responses, four of the top 10 were related to time/conflicts. Time constraints and conflicts with other commitments have been a concern for officials for numerous years and are reasons why some officials guit (Sabaini, 2001; VanYperen, 1998). It may be difficult for the profession or related associations to completely eliminate these barriers because, like most other professions or hobbies, becoming and continuing as a registered official does require time, commitment and sacrifice. However, there may be some things that can be done, specifically for college students, to help reduce 'time commitment' as a perceived barrier. One idea that participants mentioned often in response to the survey question, 'what do you think could be done to get more college athletes to become registered high school sports officials when their playing careers are finished?', was to create a college course on officiating. Creating a course in which college students could become registered may reduce 'time commitment' as a perceived barrier as they may not view the registration process as taking extra time. Other common responses to the question mentioned increasing awareness, education and exposure to the officiating profession. Increasing awareness, education and exposure could be used to address 'time commitment' as it pertains to the actual time of officiating and associated travel. One idea could be having current officials talk to college students about how they themselves balance officiating with their other commitments, responsibilities and hobbies. Hearing and knowing how current officials address the issue of 'time commitment' may help to reduce it as a barrier for college students.

The 6<sup>th</sup> highest ranked mean score was 'the pay is not enough'. 'The pay is not enough' was ranked 10<sup>th</sup> when combining *strongly agree* and *agree* responses. It was not in the top 10

for only *strongly agree* responses. The amount of pay for officiating is interesting as some studies show extra income and remuneration as reasons some officials begin and/or continue officiating (Jordan et al., 2019; Ridinger et al., 2017) while other studies show the amount of pay as a reason some officials quit (Sabaini, 2001). Results from this study would indicate that high schools and state activity associations should at least consider remuneration as a possible way to attract more officials.

The 8<sup>th</sup> highest ranked mean score was 'do not like the stress/pressure/responsibility of being an official'. 'Do not like the stress/pressure/responsibility of being an official' was tied for 2<sup>nd</sup> for the number of responses who *strongly agree* and it was ranked 6<sup>th</sup> for *strongly agree* and *agree*. Stress is part of the officiating profession and there are multiple sources of stress for officials (Voight, 2009; Anshel et al., 2013; Wolfson & Neave, 2007). The stress, pressure and responsibility associated with officiating will never be completely removed. However, state activity associations and officials' associations should note that stress management training for officials is important in reducing turnover and minimizing burnout (Taylor et al., 1990). For a college athlete who is considering becoming a registered official, knowing that stress management techniques for officials have been identified (Maheu, 2015; Voight 2009) and knowing that training is available, may help to reduce it as a barrier.

The 5<sup>th</sup> highest ranking mean score was 'do not know who to contact or how to schedule games/events' and the 10<sup>th</sup> highest was 'do not know who to contact or how to become registered'. When considering frequency distribution, 'do not know who to contact or how to become registered' was ranked tied for 9<sup>th</sup> for responses of *strongly agree*. 'Do not know who to contact or how to schedule games/events' was ranked just out of the top 10 at 11th. When combining *strongly agree* and *agree* responses, 'do not know who to contact or how to schedule games/events' jumped to 4<sup>th</sup> and 'do not know who to contact or how to become registered' was tied for 8<sup>th</sup>. Not knowing who to contact or how to become registered or schedule games/events are barriers worth noting. These results indicate that current college student-athletes are not

well informed as to the procedures and processes of becoming registered and scheduling games/events. Participant responses to the open-ended question 'What do you think could be done to get more college athletes to become registered high school sports officials when their playing careers are finished?' also support this idea. As stated previously, 284 participants (71.3%) mentioned something related to increased awareness, exposure, and/or education.

Many state activity associations and officials' associations have increased awareness, exposure and education by implementing new recruitment programs. For example, the Texas Association of Sport Officials (TASO) began the "Students Today are Referees Tomorrow" (STaRT) program in the summer of 2013 (Texas Association of Sport Officials, 2013). In 2018, the Iowa High School Athletic Association (IHSAA) began their "Add One" campaign (Iowa High School Athletic Association, 2018). The National Association of Sports Officials (NASO) launched their new "Say Yes to Officiating" website in 2018 (Referee, 2018). The National Federation of State High School Associations (NFHS) began the "National Officials Recruitment Campaign" in April of 2017 (National Federation of State High School Associations, 2017). However, a more targeted approach towards institutions and student-athletes similar to the ones in this study may prove to be beneficial as well. The information in this study could be used to modify existing recruitment programs and/or begin new programs specifically targeting college athletes at small, rural institutions.

The institution where this research was completed does not offer a course on officiating and does very little to raise awareness, increase exposure and provide education on officiating. Institutions, similar to the one in this study, and state and officials' associations should consider partnering together to increase awareness, exposure and education. By increasing awareness, exposure and education, barriers can be reduced and recruitment numbers for this demographic should increase.

Recruiting and retaining young athletes who are familiar with sport is important and could play a key role in helping to reverse the current decline in registered high school sports officials.

# Limitations

One limitation of this study is that the list of 26 barriers in the survey may need to be modified. Future studies should consider using factor analysis to determine what statements should or should not be listed as possible barriers and also consider the most appropriate wording for each statement.

A second limitation is that this exploratory study may not be transferable across all collegiate student-athletes. Future studies should consider the views of collegiate student-athletes from other geographic regions and/or different institutions.

Future research in this area should use the results from this exploratory study to continue to identify and analyze barriers of becoming a registered high school sports official.

## CHAPTER II: DISSEMINATION

The initial dissemination of the findings from this research project occurred at the Siouxland Officials Association's (SOA) spring meeting in March of 2022. The SOA is a group of approximately 80 registered high school officials mostly from Iowa, South Dakota, and Nebraska. There were approximately 30 officials at the meeting. This presentation was the first item on the agenda and was to be 15-20 minutes long. However, with the questions, comments and discussion that followed the presentation, it was nearly 30 minutes long and had to be cut off so they could continue with the remainder of the meeting. Many of the comments and much of the conversation that followed the presentation centered on how to increase awareness, exposure and education about officiating. Some officials mentioned that when they were in college (decades ago) they were able to take an officiating course, but since that time many of those colleges have eliminated the officiating course. They commented how impactful that course was for them and how they would like to see more colleges start offering an officiating course again. Some officials also mentioned they would be willing to come to college campuses to talk to classes and/or sport teams about becoming an official. Some of the officials commented that they were once college athletes and see the value of targeting this demographic. The overall sentiment of the officials was that the information in the presentation should be shared with local colleges and with local state activity associations in order to raise awareness of, exposure to and education on officiating.

The information from this study was presented to the SOA using the following script as a guide and was accompanied by Power Point slides (Appendix D). Due to time constraints at the presentation, not all information for each slide was presented.

#### **Presentation Script**

*Slide 1.* Thank-you to Marlin Schoonhoven and the Siouxland Officials Association for this opportunity. Thank-you to those of you who have assisted me in this project in various

ways and at various times. And, thank-you to all of you for what you do for high school sports and student-athletes. My name is Ross Bouma from Northwestern College. I am currently working on my dissertation for my Ed.D. from the University of North Carolina at Greensboro (UNCG). The title of my dissertation is *The Decline in Interscholastic Sports Officials: Identifying College Athletes' Perceived Barriers of Becoming a High School Sports Official.* 

*Slide 2.* The decline in high school sports officials is something you are well aware of. Sport officials and administrators from various levels have been concerned about the shrinking pool of officials for years. Researchers have also taken note, especially lately.

*Slide 3.* Research has identified many reasons officials start officiating. Things like the love of the game, an opportunity to give back to the sport, the challenge and excitement, a hobby/leisure activity, and earning extra income are just a few of the many reasons, officials start officiating.

*Slide 4.* Research has also identified many reasons officials quit officiating. Things like family and career demands, involvement in other activities, the number of meetings to attend, abuse, the cost of gear, and others have all been identified as reasons why officials quit.

*Slide 5.* What is lacking in the research is the question, "What is keeping people from becoming officials initially?" Specifically, the goal of this study is to identify what college athletes perceive to be the barriers of becoming a registered high school sports official.

*Slide 6.* Before we consider the study itself, let's quickly look at some background information that unfortunately, is all too familiar. Pennsylvania had 1,132 fewer officials in 2018-19 than in 2013-14. Minnesota dropped 9.8% going from 8,847 in 2010-11 to 7.975 in 2019-20. Kansas lost approximately 13% and Florida lost nearly 30% in less than a decade. The National Association of Sports Officials (NASO) survey showed a 10% average decline Alabama, Michigan, Ohio and Washington from 2009-10 to 2017-18.

*Slide 7.* I did my own research in the spring of 2020 and received data from 15 states for a 10-year span, beginning with the 2010-11 school year and going through the 2019-20

school year. The average number of registered high school officials in these 15 states declined from 5,632 to 5,124, that is just over a 9% decrease in a 10-year span.

*Slide 8.* Here you see the individual change in percent for each of the 15 states as well as the average decrease of 9.02%. Notice only one state increased while the majority of the others decreased, some by over 20%. It is worthwhile to note that the lowa boys' athletic association reported a 17.67% decrease.

*Slide 9.* As you know, the results of this decrease are games being rescheduled, some sub-varsity games being cancelled, and officials being overworked.

*Slide 10.* As mentioned previously, research has identified numerous reasons why officials start and why they quit. Research has also identified reasons why officials continue to officiate. However, there is a gap in the research as it pertains to identifying reasons why officials do not start in the first place. So, the focus of this research project was to identify why more people, specifically college-athletes, do not want to get into officiating when their playing careers are finished. Many officials were once athletes themselves and college athletes are young, know the sport, and would be an ideal population to recruit and retain.

*Slide 11.* The specific aims of this project were to determine what college athletes perceive to be barriers of becoming a registered high school sports official and to describe which perceived barriers college athletes rank as being the most influential.

*Slide 12.* Before we consider the results, let's take a closer look at the survey itself and some demographic information regarding the participants. The first portion of the survey asked participants a variety of questions regarding their demographic information. The next portion listed 26 possible barriers and asked participants to rate how strongly they agree or disagree that each statement acted as a barrier to becoming a registered official. The next portion asked two open ended questions. The first question was "are there any other barriers, and if so what would you rate them?" The second question was "what do you think could be done to get more college athletes to become officials when their playing careers are finished. The last portion of

the survey simply asked if they would be willing to be part of a follow-up focus group or interview if I decided I wanted to do so (of which I choose not to do).

Slide 13. The participants were Northwestern College student-athletes from the following teams: Men's - baseball, basketball, cross-country, football, soccer, track & field, and wrestling; and Women's - basketball, cross-country, soccer, softball, track & field, and volleyball. The reason that some teams like golf and tennis were not included is because they are typically self-officiated at the high school level.

*Slide 14.* The survey was administered to 440 student-athletes, 6 did not consent, 5 consented but did not complete the survey, and 12 were already registered officials. That means there were 417 student-athletes whose information was included in the results.

Slide 15. Sixty-seven percent of the participants were male while 33% were female.

*Slide 16.* Twenty-nine percent were freshmen, 30% were sophomores, 23% were juniors, 16% were seniors, and 2% were 5<sup>th</sup> year seniors.

*Slide 17.* Ninety-six percent were from the United States and the remaining 4% were from a country other than the U.S.

*Slide 18.* Most of the participants were from this region. Two hundred thirty-three were from Iowa, 40 from South Dakota, and 23 from both Minnesota and Nebraska. The only other state with double digit representation was California with 15.

*Slide 19.* Before they were asked about barriers, they were asked to indicate their interest level in becoming an official. As you can see only 8 were *very seriously* interested and another 35 were *seriously* interested. I would argue that if these 43 actually became registered, we would be moving in the right direction. This would be just over 10% of the student-athletes in this survey.

*Slide 20.* As for the barriers. The original list of possible barriers presented in the survey was developed from previous research findings regarding why officials quit and initial meetings with officials. Next, the list (and the rest of the survey) was reviewed by current AD's

and officials. Finally, the survey was sent to and tested by recent college graduates who were student-athletes while in college.

*Slide 21.* The question in survey regarding barriers was worded as follows: Read each statement below and indicate the extent to which you agree or disagree that the statement is a barrier for you becoming a registered high school sports official. (The more you agree = the bigger the barrier; the more you disagree = the smaller the barrier).

*Slide 22.* To rank the barriers the following Likert scale was used: *strongly agree* = 5, *agree* = 4, *neutral* = 3, *disagree* = 2, and *strongly disagree* = 1.

*Slide 23.* Here is the list of the 26 barriers participants were asked to rate.

Slide 24. A continuation of the list.

Slide 25. A continuation of the list.

Slide 26. A continuation of the list.

*Slide 27.* After participants rated each of the 26 barriers they were asked if there were any other barriers, and if so, to rate them as either *small*, *moderate*, or *extreme*.

Slide 28. Two participants listed 'being female' and 4 participants listed 'travel'. In future studies it may be worth adding these as possible barriers. 'Wanting to coach' was mentioned 12 times. In my opinion 'wanting to coach' would best be included in one of the 26 listed barriers like 'conflicts with post graduation plans' or 'time away from other jobs/responsibilities'. Regardless, it is interesting to note that 12 participants specifically mentioned coaching as a barrier.

*Slide 29.* We will now consider the results of rating the 26 barriers based on Likert scale averages, the number of *strongly agree* responses, and the number of *strongly agree* plus *agree* responses. We will briefly look at all the results and then come back and focus on ones in the top 10. I think it is important to quickly look at all the results so we can get an idea of what barriers are ranked towards the bottom as well.

*Slide 30.* First, here are the Likert scale averages, starting with the bottom half.

*Slide 31.* Here are the Likert scale averages for the top half.

Slide 32. Next is the number of strongly agree responses. Here we see the bottom half.

Slide 33. Here is the top half of strongly agree responses.

*Slide 34.* Now let's look at the number of *strongly agree* responses plus *agree* responses. We will start again with the bottom half.

*Slide 35.* This slide shows the top half of *strongly agree* plus *agree* responses.

Slide 36. Let's focus now on the barriers ranked in the top 10 for each

category.....strongly agree responses, strongly agree plus agree responses, and averages. For the sake of time, I will not expound in detail on all of these. In fact, there are just a couple I would like to highlight at end.

*Slide 37.* 'There is a lack of respect for officials and the profession' is ranked number 1 in each category.

*Slide 38.* 'Officiating will conflict with my post graduation plans' is ranked tied for 2<sup>nd</sup>, 5<sup>th</sup>, and 4<sup>th</sup>.

*Slide 39.* 'I do not like the stress/pressure/responsibility of being an official' is ranked tied for 2<sup>nd</sup>, 6<sup>th</sup> and 8<sup>th</sup>.

*Slide 40.* 'Time away from other jobs/responsibilities' is tied for 4<sup>th</sup>, 2<sup>nd</sup>, and 2<sup>nd</sup>.

*Slide 41.* 'Abuse/harassment from spectators' is tied for 4<sup>th</sup> and 7<sup>th</sup> and is not in the top 10 for averages.

*Slide 42.* 'Time away from other hobbies/interests' is ranked 6<sup>th</sup>, 3<sup>rd</sup>, and 3<sup>rd</sup>.

Slide 43. 'Abuse/harassment from coaches' is only in the strongly agree top 10.

Slide 44. 'Time away from family is 8<sup>th</sup>, tied for 8<sup>th</sup>, and 9<sup>th</sup>.

*Slide 45.* 'Too much time to become registered is tied for 9<sup>th</sup> for *strongly agree* responses and 7<sup>th</sup> in averages.

Slide 46. 'Do not know who to contact to become registered' is tied for 9<sup>th</sup>, 8<sup>th</sup>, and 10<sup>th</sup>.

*Slide 47.* 'Not enough pay' is 10<sup>th</sup> for *strongly agree* plus *agree* responses and 6<sup>th</sup> in averages.

*Slide 48.* 'Do not know who to contact to schedule games/events' is number 4 for *strongly agree* and *agree* responses and 5<sup>th</sup> in averages.

*Slide 49.* Here is a list of the barriers that are in the top 10 for all three categories. The lack of respect is an obvious concern and one that many state activity associations, officials' associations, and high schools are trying to reverse. This is a systemic issue and is evidenced by the declining number of officials. This will continue to be an important topic for all stakeholders to continue to address. Many of the other barriers reflect a concern with time and conflicts with other plans. I'm not sure there much that can be done here as officiating does require a time commitment and often a sacrifice of other things. Not liking the stress/pressure/responsibility is another one that I'm not sure much can be done about. Stress, pressure, and responsibility are part of the job.

*Slide 50.* The barriers I would like to briefly discuss are 'do not know who to contact to become registered' and 'do not know who to contact to schedule games/events' (even though it just misses the top 10 for *strongly agree* responses.....it is number 11). The barriers in the survey actually read 'I do not know who to contact *or how* to become registered' and 'I do not know who to contact *or how* to become registered' and 'I do not know who to contact *or how* to become registered' and 'I do not know who to contact *or how* to schedule games/events' (there wasn't enough room in the graph to include the entire statement). In my opinion these barriers may be the lowest hanging fruit. As mentioned earlier, I'm not sure there is a lot that can be done with some of the other top barriers. It appears that for student-athletes in this survey, not knowing the procedures and processes of becoming an official and then of scheduling games/events are barriers worth addressing. I believe it would be worthwhile to review current recruitment strategies and consider new recruitment initiatives, especially as they pertain to college athletes. Can we (and I am including myself in the we) provide better education of and exposure to officiating and the officiating profession? Can we help them know 'who to contact' and 'what to do'? I believe

collegiate student-athletes would be an excellent demographic to recruit and I would like to partner with state activity associations and officials' associations such as you, the SOA to do so. Let me reiterate, I am not pointing fingers or placing blame or saying we need a complete overhaul of recruiting strategies, I am saying I think there are things we can do and I would like to be part of the solution.

*Slide 51.* So, what might some of these ideas look like when targeting college athletes? There are many organizations that set up a table or booth in our student center throughout the year to recruit college students. Of course, social media can be a powerful tool (not my area of expertise). I know one football official spoke to our football team last fall and addressed some of these issues. I know in the past officials have been guest speakers or a panel-members in a class. Please, if these are things you would like to do, contact me. I would love to help you increase the exposure to and education of the officiating profession, especially on our campus.

The idea I think I am most excited about is creating a college course on officiating. Ideally, I would like to partner with the IHSAA and IGHSAU (and other state activity associations) so that at the completion of the course, students would be registered officials in the sport of their choosing. As time and resources allow, this is something I would like to see on our campus and other campuses across the country. This could be a very concrete way of addressing the barriers of not knowing who to contact and not knowing how to do it. I would anticipate the course could be used to address some of the other barriers as well. Again, please let me know if there is anything you think I (we) can do to help you and I would also welcome any and all of your feedback and advice.

Slide 52. Any questions or comments?

Slide 53. Here is my contact info if you would like to get a hold of me. Thank you again!

#### CHAPTER III: ACTION PLAN

The results of this study indicate that some of the perceived barriers for college athletes becoming registered high school sports officials were due to a lack of awareness, exposure and education. The immediate action plan for this project is to share the findings of this study with local officials' associations, state activity associations and with college students. Sharing the information from this study with officials' associations and state activity associations will hopefully prompt them to raise awareness, exposure and education about officiating on college campuses as well as provide insight on how to best recruit this demographic. The reason for sharing this information directly with college athletes is obviously to increase their awareness, exposure and education on officiating.

A presentation of this study was given to the Siouxland Officials Association (SOA) in March of 2022. In April of 2022 a slightly modified version of the presentation was given to college students in a course I teach called Legal and Ethical Issues in Sport. I have also had a conversation with the individual responsible for recruiting and retaining officials from the Iowa High School Athletic Association (IHSAA) about the possibility of sharing my presentation with the IHSAA.

One intermediate plan for this project is to collaborate with current officials, officials' associations and state activity associations to provide more information to college students about officiating. My goal is to develop relationships with and partner with these individuals and organizations and help provide opportunities for them at the institution where I work. One idea would be to set up a table or booth in the student center for a day that provides information on officiating and the registration process. Current officials and/or representatives from state activity associations could be present to promote officiating and answer questions. A second idea is to bring current officials in as guest speakers or panel-members in a class. After my presentation to the SOA some officials have already indicated their willingness to do this. A

third idea is to collaborate with the athletic department and have officials and/or representatives from state activity associations speak directly to athletic teams about the officiating profession. All of these ideas will increase awareness, exposure and education of officiating to college students.

A second intermediate plan is to incorporate the topic of officiating into our sport management course called Topics in Sport Management. Our Topics in Sport Management course is designed to examine a variety of current topics/issues in the sport management realm. The issue of the declining number of officials is a topic worth addressing. Including this topic in this course will increase awareness of the issue for future sport managers and may also inspire some of them to become an official.

The long-range plan for the findings of this project is to create and implement an officiating class at the institution where I work. The information gathered in the surveys can help determine topics covered in the class and provide content for the class. For example, barriers such as stress, time commitment, not knowing how to schedule games/events, remuneration, and others could be included in the curriculum. By addressing the perceived barriers and then providing the students with the necessary knowledge, practice, skills, and resources, it is hoped that many of the barriers will be reduced or eliminated. As part of the creation and implementation of the officiating class, I would also like to form a partnership with the local state activity association(s) so that students can become registered officials in a sport of their choosing at the completion of the class. Since one of the barriers identified in the survey was 'do not know who to contact or how to become registered', including this as part of the class would help to lessen this barrier. Each student would choose which sport(s) they want to become registered in and the specific coursework needed for that sport would be included as part of the curriculum.

After developing a course for the institution where I work I would also like to help other colleges and universities develop similar courses. The results of this project and the comments

from officials after my presentation to the SOA indicate that student-athletes and current officials desire colleges to offer a course on officiating if they do not already do so. It is anticipated that the state activity association(s) will see the value of partnering with our institution and want to partner with other colleges and universities as well. I would anticipate helping other colleges and universities in the region first and then possibly expanding to other parts of the country.

The ultimate goal of these action plans is to increase the number of college studentathletes who become registered high school sports officials and thus begin to reverse the trend in the declining number of officials.

#### REFERENCES

- Anastasia, P. (2019, November 6). Referee shortage: It's a big problem for high school and youth sports that is getting worse. *The Philadelphia Inquirer*.
  https://www.inquirer.com/high-school-sports/pennsylvania/official-shortage-referee-high-school-youth-sports-southeastern-pennsylvania-south-jersey-20191101.html
- Anshel, M. H., Kang, M., & Jubenville, C. (2013). Sources of acute sport stress scale for sports officials: Rasch calibration. *Psychology of Sport and Exercise*, *14*(3), 362-370. https://doi.org/10.1016/j.psychsport.2012.12.003
- Anshel, M. H., Sutarso, T., Ekmekci, R., & Saraswati, I. W. (2014). A model linking sources of stress to approach and avoidance coping styles of Turkish basketball referees. *Journal* of Sports Sciences, 32(2), 116-128. https://doi.org/10.1080/02640414.2013.816762
- Auger, D., Fortier, J., Thibault, A., Magny, D., & Gravelle, F. (2010). Characteristics and motivations of sports officials in the province of Québec. *International Journal of Sport Management, Recreation & Tourism, 5.* https://doi.org/10.5199/ijsmart-1791-874X-5b
- Baldwin, C., & Vallance, R. (2016). Community based rugby referees' experiences with recruitment and retention. *International Sports Studies*, *38*, 49-63. https://doi.org/10.30819/iss.38-1.05
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches.* Sage Publications.

Cuskelly, G., & Hoye, R. (2004). Problems and issues in the recruitment and retention of sports officials. Australian Sports Commission. https://www.researchgate.net/profile/Graham\_Cuskelly/publication/29467171\_Problems \_in\_the\_recruitment\_and\_retention\_of\_sports\_officials/links/56a58ea008ae1b651132a2 4a/Problems-in-the-recruitment-and-retention-of-sports-officials.pdf

- Daniel, J. (2012). Sampling essentials: Practical guidelines for making sampling choices. SAGE Publications. https://dx.doi.org/10.4135/9781452272047
- Dell, C., Gervis, M., & Rhind, D. J. A. (2016). Factors influencing soccer referee's intentions to quit the game. Soccer & Society, 17(1), 109-119. https://doi.org/10.1080/14660970.2014.919275
- Fowler, B., Smith, J., Nordstrom, H., & Ferguson, T. (2019). Ice hockey officiating retention: A qualitative understanding of junior ice hockey officials' motivations in Canada. *Managing Sport and Leisure*, *24*(1-3), 18-31. https://doi.org/10.1080/23750472.2019.1565944
- Gencay, S. (2009). Magnitude of psychological stress reported by soccer referees. Social Behavior & Personality: An International Journal, 37(7), 865-868. https://doi.org/10.2224/sbp.2009.37.7.865
- Guillén, F., & Feltz, D. L. (2011). A conceptual model of referee efficacy. *Frontiers in Psychology, 2.* https://doi.org/10.3389/fpsyg.2011.00025
- Hancock, D. J., Dawson, D. J., & Auger, D. (2015). Why ref? Understanding sport officials' motivations to begin, continue, and quit. *Movement & Sport Sciences - Science & Motricité*, 87, 31-39. https://doi.org/10.1051/sm/2014018
- Hoffman, K. (2020). 2020 state of the industry. Coach & A.D., 89(4), 16-20.
- Iowa High School Athletic Association. (2018, July 18). Add one: How one state is examining the shortage of officials. https://www.nfhs.org/articles/add-one-how-one-state-isexamining-the-shortage-of-officials/
- Johansen, B. T., Ommundsen, Y., & Haugen, T. (2018). Referee efficacy in the context of Norwegian soccer referees – A meaningful construct? *Psychology of Sport and Exercise*, 38, 184-191. https://doi.org/10.1016/j.psychsport.2018.06.013
- Jordan, P., Upright, P., & Forsythe, S. (2019). Rural Kentucky sport officials' perspectives on recruitment, training and retention. *Kentucky Association for Health, Physical Education, Recreation and Dance Journal*, *55*(2), 15.

- Karacam, A., & Adiguzel, N. S. (2019). Examining the relationship between referee performance and self-efficacy. *European Journal of Educational Research*, 8(1), 377-382. https://doi.org/10.12973/eu-jer.8.1.377
- Karaçam, A., & Pulur, A. (2017). Examining the relationship between referee self-efficacy and general self-efficacy levels of football, basketball and handball referees. Universal Journal of Educational Research, 5(9), 1571-1579.

https://doi.org/10.13189/ujer.2017.050914

- Karaçam, A., & Pulur, A. (2017). Examining the relationship between referee self-efficacy and general self-efficacy levels of basketball referees in terms of certain variables. *Journal of Education and Training Studies*, *5*(8), 37-45. https://doi.org/10.11114/jets.v5i8.2450
- Leighton, T. (2017, November 8). Minnesota starts program to thank officials for service. https://www.nfhs.org/articles/minnesota-starts-program-to-thank-officials-for-service/
- Lirgg, C. D., Feltz, D. L., & Merrie, M. D. (2016). Self-efficacy of sports officials: A critical review of the literature. *Journal of Sport Behavior, 39*(1), 39-50.
- Livingston, L. A., & Forbes, S. L. (2016). Factors contributing to the retention of Canadian amateur sport officials: Motivations, perceived organizational support, and resilience. *International Journal of Sports Science & Coaching.*

https://doi.org/10.1177/1747954116644061

Maheu, S. (2015, March 28). *Managing stress on and off the field.* [PowerPoint slides]. Elgin Middlesex Soccer Association.

http://emsareferee.yolasite.com/resources/Soccer%20Clinic%20presentation%20-%20Stress.pdf

Myers, N. D., Feltz, D. L., Guillén, F., & Dithurbide, L. (2012). Development of, and initial validity evidence for, the referee self-efficacy scale: A multistudy report. *Journal of Sport and Exercise Psychology*, 34(6), 737–765. https://doi.org/10.1123/jsep.34.6.737 National Association of Sports Officials. (2017). National Officiating Survey. https://www.naso.org/survey/

National Federation of State High School Associations. (2017, April 6). NFHS launches national officials recruitment campaign. https://www.nfhs.org/articles/nfhs- launches-national-officials-recruitment-campaign/

National Federation of State High School Associations. (2019). 2009-10 high school athletics participation survey. https://www.nfhs.org/media/1020197/2009-

10\_hs\_participation\_survey.pdf

National Federation of State High School Associations. (2019). 2018-19 high school athletics participation survey. https://www.nfhs.org/media/1020412/2018-

19\_participation\_survey.pdf

Neil, R., Bayston, P., Hanton, S., & Wilson, K. (2013). The influence of stress and emotions on association football referees' decision-making. *Sport & Exercise Psychology Review*, 9(2), 22-41.

Ohio University. (2018, October 9). The nationwide decline in sports officials. https://onlinemasters.ohio.edu/blog/the-nationwide-decline-in-sports-officials/

Paulsen, J. (2019, January 14). Officials shortage leads to games being rescheduled for tonight. *The Star Tribune.* https://www.startribune.com/where-are-the-refs- shortage-leads-togames-being-rescheduled-tonight/504315301/

Rainey, D. W. (1999). Sources of stress, burnout, and intention to terminate among basketball referees. *Journal of Sport Behavior, 22*(4), 578-590.

Rainey, D. W., & Hardy, L. (1999). Sources of stress, burnout and intention to terminate among rugby union referees. *Journal of Sports Sciences*, *17*(10), 797-806. https://doi.org/10.1080/026404199365515

Referee. (2018, November 6). Recruitment & retention website available to all. https://www.referee.com/officiating-recruitment-retention-website/

- Referee. (2019, June 10). *The officiating economy: Bull or bear?* https://www.referee.com/the-officiating-economy-bull-or-bear/
- Ridinger, L. L., Warner, S., Tingle, J. K., & Kim, K. R. (2017). Why referees stay in the game. *Global Sport Business Journal, 5*(3), 22-37.
- Ritchie, J., Basevitch, I., Rodenberg, R., & Tenenbaum, G. (2017). Situation criticality and basketball officials' stress levels. *Journal of Sports Sciences*, *35*(21), 2080-2087. https://doi.org/10.1080/02640414.2016.1255770
- Sabaini, D. (2001). *How to get & keep officials*. National Association of Sports Officials. http://www.donaldcollins.org/uploads/7/7/2/3/77230529/specreptconf\_copy.pdf
- Symonds, M. L., & Russell, W. (2018). Intrinsic and extrinsic motivation of small college sports officials. *Journal of Sport Behavior*, *41*(2), 209.
- Taylor, A. H., Daniel, J. V., Leith, L., & Burke, R. J. (1990). Perceived stress, psychological burnout and paths to turnover intentions among sport officials. *Journal of Applied Sport Psychology*, 2(1), 84-97.
- Texas Association of Sport Officials. (2013, June 12). TASO introduces "STaRT" program. https://taso.org/news/taso-introduces-start-program/
- Titlebaum, P., Dick, R., Crow, B., & Daprano, C. (2012). Staying in the game. Journal for the Study of Sports and Athletes in Education, 6(3), 325–334. https://doi.org/10.1179/ssa.2012.6.3.325
- VanYperen, N. W. (1998). Predicting stay/leave behavior among volleyball referees. *The Sport Psychologist*, *12*(4), 427-439. https://doi.org/10.1123/tsp.12.4.427
- Voight, M. (2009). Sources of stress and coping strategies of US soccer officials. *Stress and Health*, *25*(1), 91-101. https://doi.org/10.1002/smi.1231
- Wolfson, S., & Neave, N. (2007). Coping under pressure: Cognitive strategies for maintaining confidence among soccer referees. *Journal of Sport Behavior; Mobile*, *30*(2), 232–247.

#### APPENDIX A: IN-PERSON RECRUITMENT SCRIPT

Thank you for your willingness to meet with me today. My name is Ross Bouma and I teach in the kinesiology department here at Northwestern College. I am working on my dissertation project for my EdD from the University of North Carolina Greensboro. The title of my project is "The Decline in Interscholastic Sports Officials: Identifying College Athletes' Perceived Barriers of Becoming a High School Sports Official". My research goals are to identify and rank what college athletes perceive to be barriers to becoming registered high school sports officials. The reason you are being asked to participate in this survey is because you are currently a collegiate athlete in a sport that requires registered officials at the high school level. You must be 18 or older to participate in this survey and your participation is voluntary. Each of you have been emailed a link to a survey. At the beginning of the survey is a consent form. Please read the consent form completely and carefully. If you do not consent to participate you can check the appropriate box in question 1 and you are free to dismiss yourself. If do you agree to participate you can indicate your agreement by checking the appropriate box in guestion 1 and continue with the survey. If you would like more time to consider your participation, you may complete the survey at a later time. If you do consent to participate you will be asked questions regarding your demographic information, college education and sport participation, and how you perceive different barriers to becoming a registered high school sports official. There will be a series of statements that you will be asked to indicate the level in which you agree or disagree that the statement would act a barrier to you becoming a registered high school official. The stronger you agree, the bigger the barrier. The stronger you disagree, the smaller the barrier. You will also be asked if you are willing to participate in possible follow up interviews and/or focus groups. After the initial data collection, I may decide to do more research by way of interviews and/or focus groups. If you agree to the possible interviews and/or focus groups you will be asked to provide your email address which will only be used to contact you to set up a time. It will not be used to identify your survey. The total time to complete the survey is approximately 20 minutes. If you have any questions while reading the consent form or about the project, please ask. You should have received an email from me with the subject of "barriers to officiating survey". Using your laptop or other mobile device, please open that email and access the survey at this time. Again, thank you for your time, it is much appreciated.

#### APPENDIX B: CONSENT FORM

#### UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

#### CONSENT TO ACT AS A HUMAN PARTICIPANT

**<u>Project Title</u>**: The decline in interscholastic sports officials: Identifying college athletes' perceived barriers of becoming a high school sports official.

#### Principal Investigator and Faculty Advisor: Ross Bouma (PI) and Dr. Michael Hemphill (FA).

#### What are some general things you should know about research studies?

You are being asked to take part in a research study. Your participation in the study is voluntary. You may choose not to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. There may not be any direct benefit to you for being in the research study. There also may be risks to being in research studies. If you choose not to be in the study or leave the study before it is done, it will not affect your relationship with the researcher, Northwestern College or the University of North Carolina at Greensboro.

Details about this study are discussed in this consent form. It is important that you understand this information so that you can make an informed choice about being in this research study.

A hard copy of this consent form will be available upon request. If you have any questions about this study at any time, you should ask the researchers named in this consent form. Their contact information is below.

#### What is the study about?

The purpose of this study is to determine the perceived barriers of college athletes to becoming registered high school sports officials.

This study involves an online questionnaire that will ask some demographic information (i.e. age, sex, year in school, major, etc...), information regarding your college education and sport participation, and how you view a variety of items as they pertain to barriers of becoming a registered high school sports official.

#### Why are you asking me?

You are being asked to participate because you are a college athlete. Members of the following teams at Northwestern College will be asked to participate in this study: men's and women's basketball, track and field, cross-country, and soccer; women's volleyball and softball; and men's baseball and football.

#### What will you ask me to do if I agree to be in the study?

You will be asked to answer some questions using an online survey tool. You will be asked demographic information (i.e. age, sex, year in school, major, etc...), information regarding your college education and sport participation, and how you view a variety of items as they pertain to

barriers of becoming a registered high school sports official. The estimated time to complete the survey is 20 minutes. The researcher may want to conduct a follow-up study using focus groups or interviews at a later date. Even if you agree to take the survey, you are not required to participate in the follow-up focus groups or interviews. If you would like to be part of the possible focus groups or interviews you will be asked to provide your email address so you may be contacted about setting up a time for the possible focus groups or interviews.

#### Is there any audio/video recording?

There is no audio/video recording during this project.

#### What are the risks to me?

The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants.

If you have questions or want more information, please contact Ross Bouma at (712) 707-7310 or Michael Hemphill at (336) 334-4794.

If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

#### Are there any benefits to society as a result of me taking part in this research?

This study may benefit high school athletics in that it may help to increase the number of registered high school sports officials.

#### Are there any benefits to me for taking part in this research study?

There are no direct benefits to participants in this study.

#### Will I get paid for being in the study? Will it cost me anything?

There are no costs to you and no payments made to you for participating in this study.

#### How will you keep my information confidential?

Anonymous data collection procedures will be used for this study and no individual identifying information or data will be disseminated. If you do agree to participate in the possible focus groups or interviews and provide your email address, your email address will only be used to contact you to set up a time for the possible focus groups or interviews. The data and information gathered in this study will be stored on a password protected account. Data and information obtained in this study is strictly confidential unless disclosure is required by law. Absolute confidentiality of data provided through the internet cannot be guaranteed due to the limited protections of internet access. Please be sure to close your browser when finished so no one will be able to see what you have been doing.

#### Will my de-identified data be used in future studies?

Your de-identified data will be kept indefinitely and may be used for future research without your additional consent.

#### What if I want to leave the study?

You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you in any way.

<u>Voluntary Consent by Participant:</u> By checking the "I agree" button (used for an IRB-approved waiver of signature) you are agreeing that you read, or it has been read to you, and you fully understand the contents of this document and are openly willing to consent to take part in this study and all of your questions concerning this study have been answered. By checking the "I agree" button, you are agreeing that you are 18 years of age or older and are agreeing to participate in this study.

#### APPENDIX C: SURVEY QUESTIONS

\*Survey flow and display logic as used in Qualtrics are not indicated below. Some questions are contingent on how previous questions were answered. Below is a list of all questions in the survey:

#### Click on "Informed consent" below to open a PDF of the informed consent. Please carefully and completely read the informed the consent.

#### Informed Consent

#### Do you agree to give your informed consent to participate in the described research studv?

- I agree
- o I do not agree

#### What is your age?

		ago.		
0	18	_	0	22
0	19		0	23
0	20		0	24
0	21		0	over 21
		•		

- What is your sex?
  - Male
  - Female

#### Which of the following race/ethnicity categories best describes you? • White or Caucasian

- Asian or Pacific Islander
- Black or African American
- Hispanic or Latino
- Native American or Alaskan Native

#### What year are you in school?

- Freshman
- o Sophomore
- o Junior
- o Senior
- o 5th year senior

### What is your home country?

- United States of America
- Afghanistan
- o Albania
- o Algeria
- o Andorra
- Angola
- o Antigua and Barbuda
- Argentina
- o Armenia
- o Australia

• Azerbaijan

• Multiracial or Biracial

• A race/ethnicity not listed here

- o Bahamas
- Bahrain 0
- Bangladesh 0
- Barbados 0
- 0
- Belgium 0
- 0
- o Benin

- o Austria

- Belarus
- Belize

- o Bhutan
- o Bolivia
- Bosnia and Herzegovina
- o Botswana
- Brazil
- o Brunei Darussalam
- o Bulgaria
- o Burkina Faso
- o Burundi
- o Cambodia
- $\circ$  Cameroon
- $\circ$  Canada
- o Cape Verde
- Central African Republic
- Chad
- $\circ$  Chile
- o China
- o Colombia
- Comoros
- o Congo, Republic of the...
- o Costa Rica
- o Côte d'Ivoire
- o Croatia
- Cuba
- o Cyprus
- o Czech Republic
- Democratic Republic of the Congo
- o **Denmark**
- o Djibouti
- o Dominica
- o Dominican Republic
- o Ecuador
- Egypt
- El Salvador
- Equatorial Guinea
- o Eritrea
- o Estonia
- o Ethiopia
- o Fiji
- o Finland
- o France
- o Gabon
- o Gambia
- o Georgia
- o Germany
- o Ghana
- $\circ$  Greece
- o **Grenada**
- o Guatemala
- o Guinea

- o Guinea-Bissau
- o Guyana
- o Haiti
- Honduras
- Hong Kong (S.A.R.)
- Hungary
- $\circ \quad \text{Iceland} \quad$
- o India
- o Indonesia
- o Iran
- o Iraq
- o Ireland
- o Israel
- o Italy
- o Jamaica
- o Japan
- o Jordan
- o Kazakhstan
- Kenya
- o Kiribati
- Kuwait
- o Kyrgyzstan
- o Lao People's Democratic Republic
- o Latvia
- o Lebanon
- o Lesotho
- o Liberia
- Libyan Arab Jamahiriya
- o Liechtenstein
- o Lithuania
- o Luxembourg
- o Madagascar
- o Malawi
- o Malaysia
- Maldives
- o Mali
- o Malta
- o Marshall Islands
- o Mauritania
- o Mauritius
- Mexico
- Micronesia, Federated States of...
- o Monaco
- o Mongolia
- o Montenegro
- o Morocco
- o Mozambique
- o Myanmar
- o Namibia
- o Nauru

- o Nepal
- o Netherlands
- o New Zealand
- o Nicaragua
- o Niger
- o Nigeria
- North Korea
- Norway
- o Oman
- o Pakistan
- o Palau
- o Panama
- Papua New Guinea
- Paraguay
- o Peru
- Philippines
- o Poland
- o Portugal
- Qatar
- Republic of Moldova
- o **Romania**
- Russian Federation
- o **Rwanda**
- Saint Kitts and Nevis
- Saint Lucia
- o Saint Vincent and the Grenadines
- o Samoa
- o San Marino
- Sao Tome and Principe
- o Saudi Arabia
- o Senegal
- o Serbia
- Seychelles
- o Sierra Leone
- Singapore
- o Slovakia
- o Slovenia
- Solomon Islands

#### What is your home state?

- o Alabama
- o Alaska
- o Arizona
- o Arkansas
- o California
- $\circ$  Colorado
- o Connecticut
- Delaware
- District of Columbia
- o Florida

- o **Somalia**
- South Africa
- South Korea
- o Spain
- o Sri Lanka
- Sudan
- o Suriname
- o Swaziland
- Sweden
- Switzerland
- o Syrian Arab Republic
- o Tajikistan
- $\circ$  Thailand
- The former Yugoslav Republic of Macedonia
- o Timor-Leste
- o **Togo**
- o **Tonga**
- o Trinidad and Tobago
- o Tunisia
- o Turkey
- o Turkmenistan
- o Tuvalu
- $\circ$  Uganda
- o Ukraine
- United Arab Emirates
- United Kingdom of Great Britain and Northern Ireland
- United Republic of Tanzania
- Uruguay
- o Uzbekistan
- o Vanuatu
- Venezuela, Bolivarian Republic of...
- Viet Nam
- $\circ$  Yemen
- o **Zambia**
- o Zimbabwe
- o Georgia
- o Hawaii
- o Idaho
- o Illinois
- o Indiana
- o lowa
- o Kansas
- Kentucky
- o Louisiana
- o Maine

- o Maryland
- o Massachusetts
- o Michigan
- Minnesota
- Mississippi
- o **Missouri**
- o Montana
- o Nebraska
- Nevada
- o New Hampshire
- New Jersey
- New Mexico
- o New York
- o North Carolina
- North Dakota
- o Ohio
- o Oklahoma

#### What is(are) your major(s)? (choose all that apply)

- Accounting
- o Actuarial Science
- o Art
- o Art Therapy
- Art/Graphic Design
- Biblical and Theological Studies
- o Biochemistry
- o Biology
- Biology Ecological Studies
- Biology Gen, Mol and Cell Bio
- Biology Health Professions
- o Biophysics
- o Bus Admin General
- o Bus Admin Agriculture
- o Bus Admin Finance
- Bus Admin International
- Bus Admin Management
- Bus Admin Marketing
- Business Education
- Chemistry
- Computer Science
- o Criminal Justice
- Economics
- Education Elementary
- Education Secondary
- English Teaching
- Exercise Science
- History
- Humanities

- OregonPennsylvania
- Puerto Rico
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- o Utah
- Vermont
- o Virginia
- Washington
- o West Virginia
- $\circ$  Wisconsin
- Wyoming
- I do not reside in the United States
- o Mathematics
- Medical Laboratory Science
- o Music
- Music Elementary Education
- Music Secondary Education
- Nursing
- Physical Education
- Physics Education
- Political Science
- Psychology
- Public Relations
- o Social Work
- Sociology
- Software Engineering
- o Spanish
- Spanish Eng Trans and Interp
- Sport Management Business
- Sport Management Leadership
- Sport Management -Media/Marketing
- Statistics
- o Theatre
- o Theatre Education
- o Worship Arts
- Youth Min and Christian Ed
- o Student initiated
- o Other
- Undecided

## In this academic year, what collegiate sport(s) will you participate in? (choose all that apply)

- o Baseball
- Basketball men's
- Basketball women's
- Cross-country men's
- o Cross-country women's
- Football
- o Soccer men's

- o Soccer women's
- o Softball
- Track & Field men's
- o Track & Field women's
- Volleyball
- o Wrestling

#### What are your plans after you complete your undergraduate degree?

- Enter the work force
- Attend graduate school
- o Other
- o Undecided

#### Are you currently a registered high school sports official?

- o Yes
- **No**

#### In what sport(s) are you a registered high school official? (check all that apply)

- o Baseball
- o Basketball
- Cross-country
- Football
- o Soccer

- Softball
  Track & Field
- Volleyball
- Wrestling
- Other

#### In what state(s) are you a registered high school sports official? (check all that apply)

- o Alabama
- o Alaska
- o Arizona
- o Arkansas
- o California
- o Colorado
- Connecticut
- o Delaware
- o District of Columbia
- Florida
- o Georgia
- o Hawaii
- o Idaho
- o Illinois
- o Indiana
- o lowa
- Kansas
- Kentucky
- o Louisiana
- o Maine
- Maryland
- Massachusetts

- o Michigan
- o Minnesota
- Mississippi
- Missouri
- o Montana
- o Nebraska
- o Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- o Ohio
- o Oklahoma
- o Oregon
- o Pennsylvania
- o Rhode Island
- o South Carolina
- o South Dakota
- o **Tennessee**
- o Texas

- o Utah
- o Vermont
- o Virginia
- Washington

- o West Virginia
- o Wisconsin
- Wyoming

### What is your interest level in continuing as a registered high school sports official?

- o not at all interested
- o slightly interested
- somewhat interested
- o seriously interested
- very seriously interested

#### How long do you anticipate continuing as a registered high school sports official?

- o Less than 1 year
- o 1-5 years
- o 6-10 years
- o 11-20 years
- o 20+ years

#### Have you ever considered becoming a registered high school sports official?

- o never
- o slightly
- $\circ$  somewhat
- $\circ$  seriously
- very seriously

## What is your interest level in becoming a registered high school sports official in the future?

- o not at all interested
- o slightly interested
- somewhat interested
- o seriously interested
- o very seriously interested

#### What is the likelihood that you will become a registered high school sports official.....

	extremely unlikely	unlikely	neutral	likely	extremely likely
before you complete your undergraduate degree	0	0	0	0	0
within 1 year of completing your undergraduate degree	0	0	0	O	o
within 2-5 years of completing	0	0	0	0	0

your undergraduate degree					
within 6-10 years of completing your undergraduate degree	O	0	0	0	0
within 11-20 years of completing your undergraduate degree	O	0	0	0	0
20+ years after completing your undergraduate degree	o	0	0	0	0

Read each statement below and indicate the extent to which you agree or disagree that the statement is a barrier for you becoming a registered high school sports official. (The more you agree = the bigger the barrier; the more you disagree = the smaller the barrier).

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I do not know the rules of the sport well enough	0	0	0	0	0
I am not confident in my skills/abilities as an official	0	0	0	0	0
I want/need a break from sports	0	0	0	0	0
l do not like the stress/pressure/responsibility of being an official	0	0	0	O	0
I do not like working with high school-aged athletes	0	0	0	0	0
I do not like the possibility of officiating or working with people I do not know	0	0	0	O	0
I do not like the possibility of of officiating or working with the opposite sex	0	0	0	O	0
The risk of COVID-19 exposure	0	0	0	0	0

The abuse/harassment officials may experience from players	0	0	0	0	0
The abuse/harassment officials may experience from coaches	O	0	0	0	0
The abuse/harassment officials may experience from spectators	0	0	o	0	0
I do not know who to contact or how to become registered	0	0	0	0	0
I do not know who to contact or how to schedule games/events	0	0	0	0	0
There is a lack of mentors to help me get started and to work games/events with me	O	0	0	0	0
There is too much of a time commitment to become registered	0	0	0	0	0
There are too many requirements to become registered	0	0	0	0	0
It costs too much money to become registered	0	0	0	0	0
It costs too much money to purchase officiating gear and apparel	0	0	0	0	0
The pay is not enough	0	0	0	0	0
There is a lack of respect for officials and the profession	0	0	0	0	0
Officiating will conflict with my post graduation plans	0	0	0	0	0
Officiating takes too much time away from family	0	0	0	0	0
Officiating takes too much time away from other jobs/responsibilities	0	0	0	0	0
Officiating takes too much time away from other interests/hobbies	0	0	0	0	0
It is too difficult to learn the proper mechanics	0	0	0	0	0

There are too many rules to	2	0	0	0	0
learn	0	0	0	0	0

Are there any other items or reasons that would act as barriers and discourage you from becoming a registered high school sports official? If so, please list them and rate the extent to which they would act as a barrier using the following scale.

1 = small barrier

2 = moderate barrier

3 = extreme barrier

What do think could be done to get more college athletes to become registered high school sports officials when their playing careers are finished?

\_\_\_\_\_

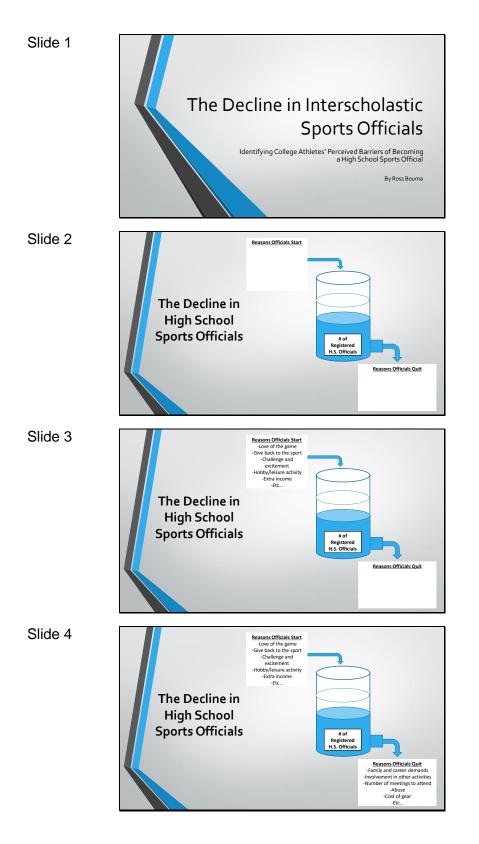
If follow-up information from this survey would be desired by the researcher, would you be willing to participate in a focus group or interview that would further explore barriers to becoming a registered high school sports official?

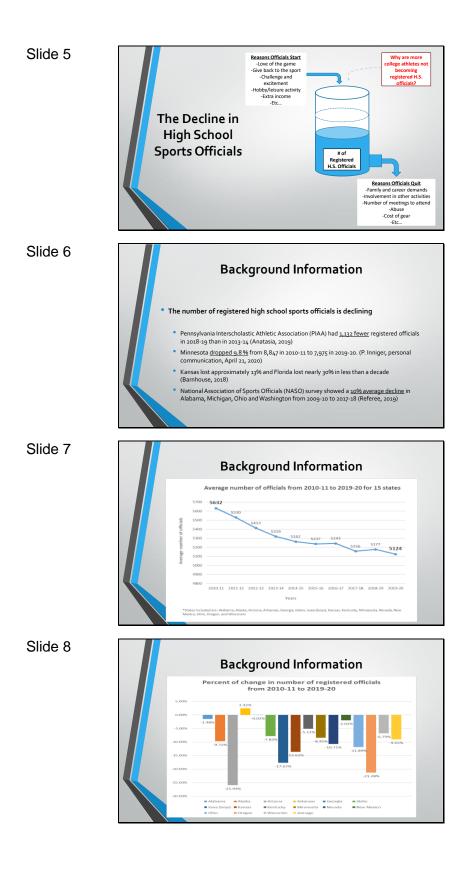
- o Yes
- o No

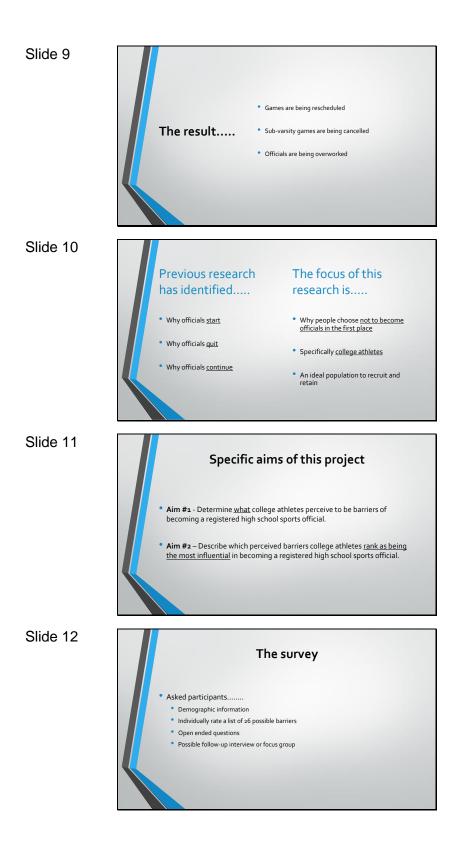
\*If participants answered 'Yes' to the previous question they were taken to another survey in which they could enter their email address. This was done so their email addresses could not be used to identify their survey responses.

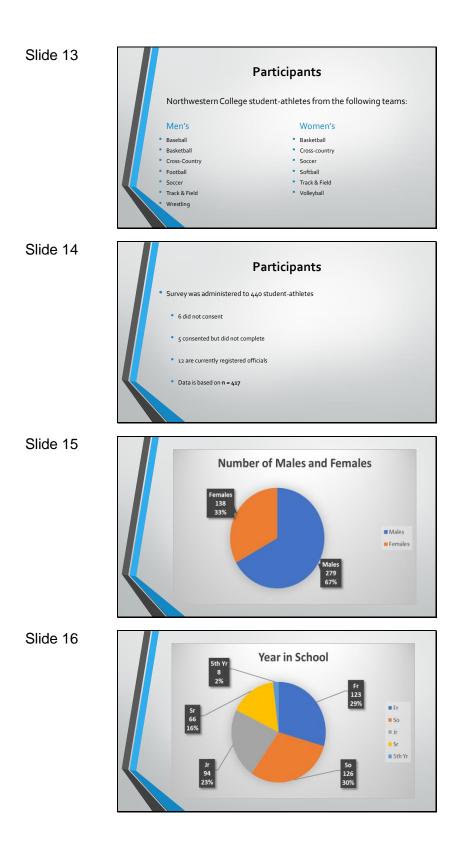
#### Thank you for your time!

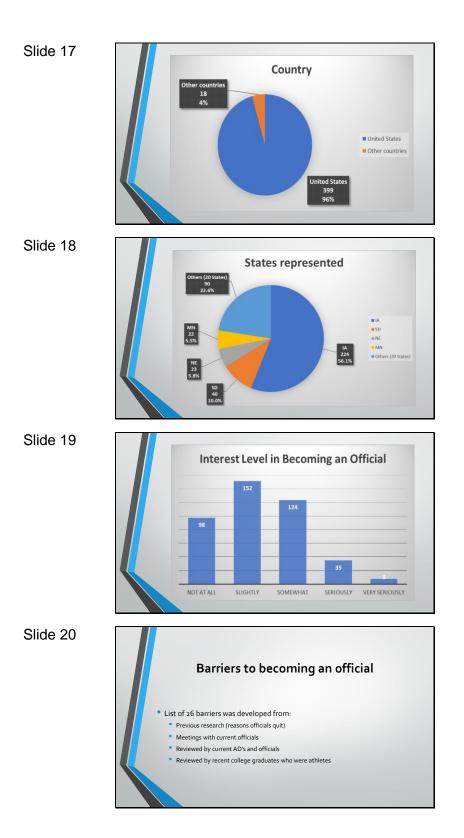
### APPENDIX D: PRESENTATION SLIDES

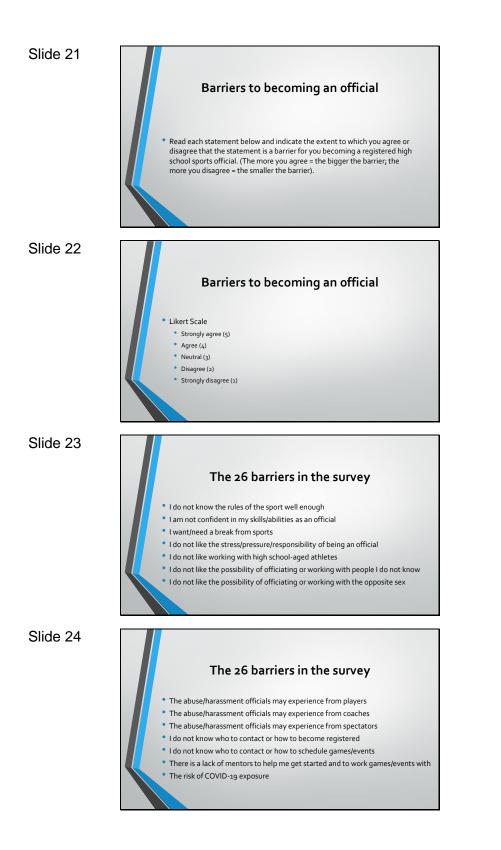


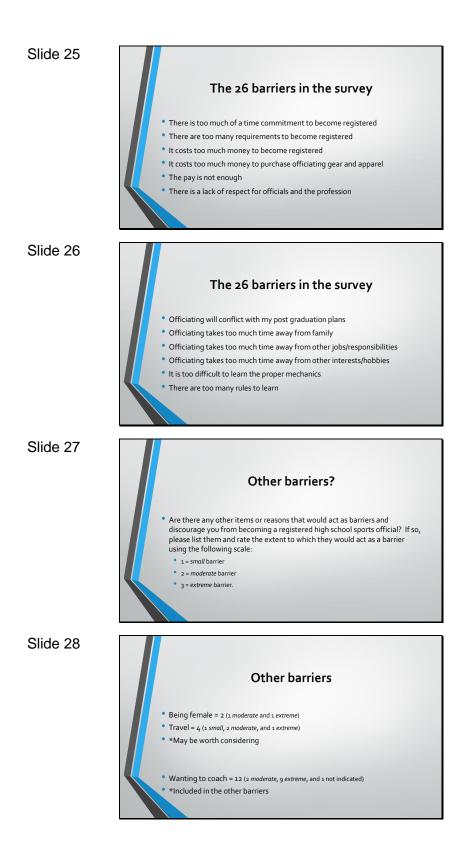


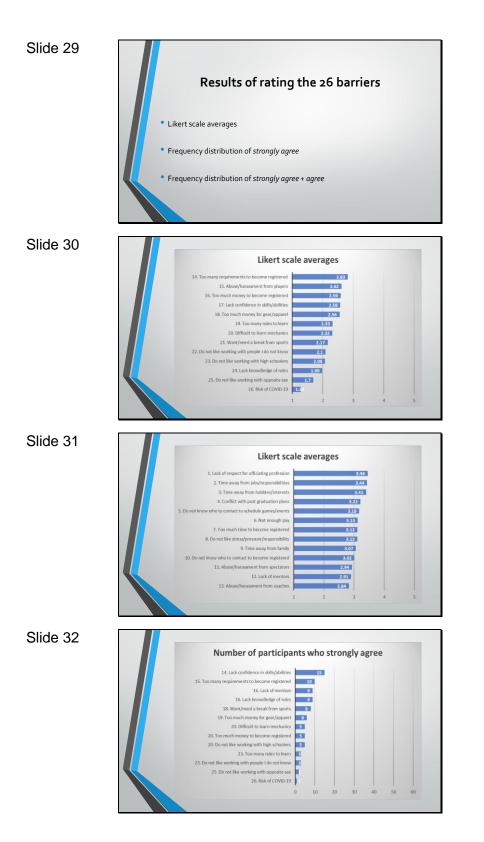


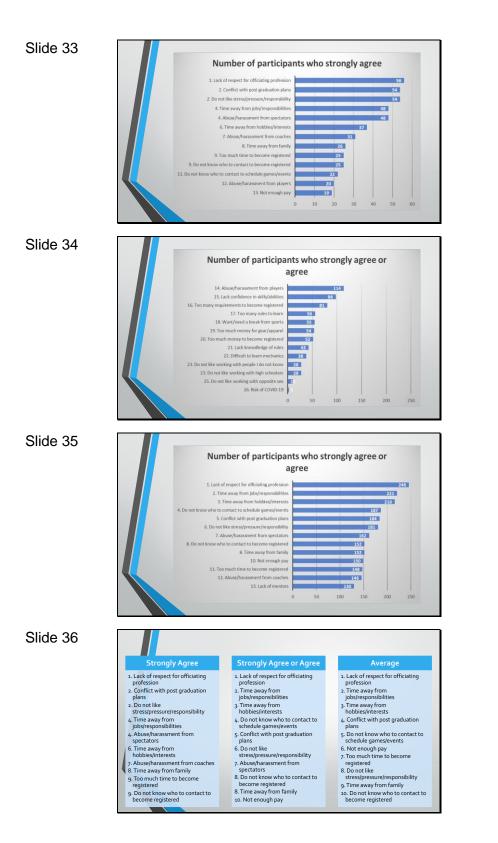












Strongly Agree	Strongly Agree or Agree	Average
1. Lack of respect for officiating profession	1. Lack of respect for officiating profession	1. Lack of respect for officiating profession
<ol> <li>Conflict with post graduation plans</li> </ol>	<ol> <li>Time away from jobs/responsibilities</li> </ol>	<ol> <li>Time away from jobs/responsibilities</li> </ol>
<ol> <li>Do not like stress/pressure/responsibility</li> </ol>	<ol> <li>Time away from hobbies/interests</li> </ol>	<ol> <li>Time away from hobbies/interests</li> </ol>
4. Time away from jobs/responsibilities	<ol> <li>Do not know who to contact to schedule games/events</li> </ol>	<ol> <li>Conflict with post graduation plans</li> </ol>
4. Abuse/harassment from spectators	5. Conflict with post graduation plans	5. Do not know who to contact to schedule games/events
6. Time away from	6. Do not like	6. Not enough pay
hobbies/interests 7. Abuse/harassment from coaches	stress/pressure/responsibility 7. Abuse/harassment from	<ol> <li>Too much time to become registered</li> </ol>
8. Time away from family	spectators	8. Do not like
9. Too much time to become	8. Do not know who to contact to	stress/pressure/responsibility
registered	become registered	9. Time away from family
<ol> <li>Do not know who to contact to become registered</li> </ol>	<ol> <li>Time away from family</li> <li>Not enough pay</li> </ol>	<ol> <li>Do not know who to contact to become registered</li> </ol>

#### Slide 38

Strongly Agree	Strongly Agree or Agree	
Lack of respect for officiating profession     Conflict with post graduation plans     Do not like     stress/pressure/responsibility     Time away from     jobs/responsibilities     4. Abuse/harassment from     spectators     7. Mouse/harassment from     coscharassment     coscharassment	Lack of respect for officiating profession     Time away from jobs/responsibilities     . Time away from hobbies/interests     4. Do not know who to contact to schedule games/events     5. Conflict with post graduation plans     6. Do not like stress/pressure/responsibility     7. Abuse/harassment from spectators     8. Do not know who to contact to become registered     8. Time away from family     10. Not enough pay	<ol> <li>Lack of profess</li> <li>Time a jobs/res</li> <li>Time ar hobbies</li> <li>Conflic plans</li> <li>Do not schedui</li> <li>Not en</li> <li>Too mu register</li> <li>Do not stress/p</li> <li>Time a</li> <li>Do not become</li> </ol>

# of respect for officiating sion ssion away from esponsibilities away from es/interests lict with post graduation ot know who to contact to ule games/events enough pay nuch time to become ered of tike /pressure/responsibility away from family not know who to contact to ne registered

#### Slide 39

Strong	ly Agree	St
4. Time away fro jobs/responsib 4. Abuse/harassr	oost graduation e/responsibility m ilities	1. Li pr 2. Ti jo 3. Ti hc 4. D sc 5. C
<ol> <li>Time away fro</li> <li>Too much time registered</li> <li>Do not know</li> </ol>	sts nent from coaches m family e to become who to contact to	pl. 6. D st 7. A 5p 8. D 8. D 8. Ti
become regist	ered	10.

rongly Agree or Agree Lack of respect for officiating vorfession Time away from obbies/interests Do not know who to contact to schedule games/events Conflict with post graduation Jans Contract with post graduation Jans Do not like stress/pressure/responsibility Abuse/harassment from spectators Do not know who to contact to become registered Time away from family Time away from family Not enough pay

## 1. Lack of respect for officiating Lack of respect for o profession Time away from jobs/responsibilities Time away from hobbies/interests 4. Conflict with post graduation plans plans 5. Do not know who to contact to schedule games/events 6. Not enough pay 7. Too much time to become registered 8. Do not like stress/pressure/responsibility 9. Time away from family 10. Do not know who to contact to become registered

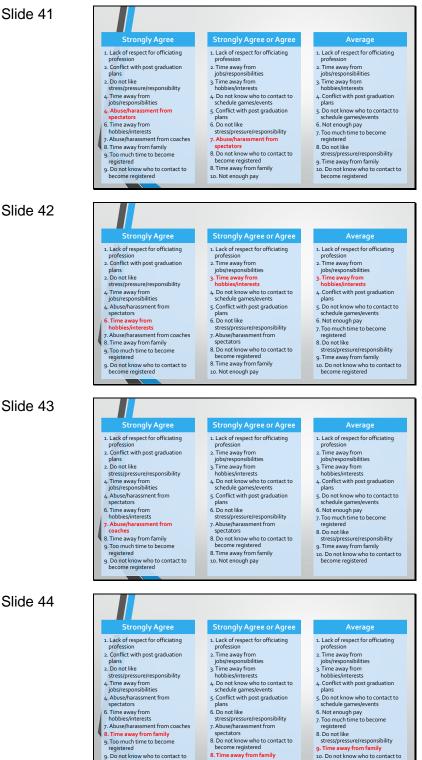
#### Slide 40

## Strongly Agree or Agree 1. Lack of respect for officiating profession 2. Time away from jobs/responsibilities 3. Time away from hobbies/interests 4. Do not know who to contact to schedule games/events 5. Conflict with past graduation plans 6. Do not know who to contact to become registered 8. Time away from family to. Not enough pay Strongly Agree Strongly Agree or Agree Strongly Agree 1. Lack of respect for officiating profession 2. Conflict with post graduation plans 2. Do not like stress/pressure/responsibility 4. Time away from jobs/responsibilities 4. Abuse/harassment from spectators 6. Time away from hobbies/interests 7. Abuse/harassment from coaches 8. Time away from family 9. Too much time to become

- Too much time to become registered
- 9. Do not know who to contact to become registered

# Lack of respect for officiating profession Time away from jobs/responsibilities J. Time away from hobbies/interests Codification 4. Conflict with post graduation plans plans 5. Do not know who to contact to schedule games/events 6. Not enough pay 7. Too much time to become registered 8. Do not like stress/pressure/responsibility 9. Time away from family to Do not how who to contact to

10. Do not know who to contact to become registered



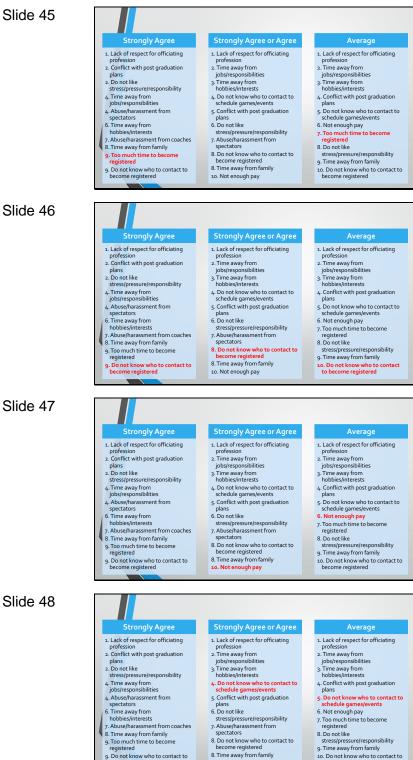
Slide 42

8. Time away from family 10. Not enough pay 9. Do not know who to contact to become registered

#### 62

8. Do not like

9. Time away from family
10. Do not know who to contact to become registered



5. Conflict with post graduation 6. Do not like

Do not like stress/pressure/responsibility
 Abuse/harassment from spectators
 Do not know who to contact to become registered
 Time away from family
 Not enough pay

### 9. Do not know who to contact to become registered



