

MORE THAN STRIPES

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MASTER OF ARTS

BY REX N. HUFFMAN

DR. JENNIFER PALILONIS – ADVISOR

BALL STATE UNIVERSITY

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Abstract**CREATIVE PROJECT:** More Than Stripes**STUDENT:** Rex N. Huffman**DEGREE:** Master of Arts**COLLEGE:** College of Communication, Information and Media**DATE:** December 2022**PAGES:** 28

This creative project explored and analyzed the issue of a decreasing number of officials in High school athletics. Scholarly literature review explored during research revealed that the verbal and physical abuse high school officials experience during their career along with low pay and compensation have led to an increase of younger officials leaving the field. Empathy interviews with high school officials revealed that a lack of support from school administrators and athletic directors was also a major issue that needed to be addressed. Through the lens of awareness, this project addressed these issues by developing a toolkit with assets focused on improving sportsmanship and athletic director engagement. Each of the assets can be viewed within the Toolkit Assets file submitted with this project. Content and messaging created for schools to use in external facing social media channels and at the event was tested with stakeholders using surveys. To further extend the use of the toolkit assets, content would be adjusted for schools of different grade levels and the adjustment of the content delivery for travel organizations.

Keywords: Athletics, Officiating, Design Thinking, Empathy Interviews

Introduction

High school athletic programs in the United States provide nearly eight million students the opportunity to participate in sports each year. Athletic programs also provide students the opportunity to improve their health and build skills that will benefit them later in their lives and careers. High school athletic directors often work hard to coordinate schedules with other schools, provide the physical spaces necessary for games, and hire qualified referees. However, the decreasing number of available referees across the nation is making it harder for schools to provide these opportunities, which poses a threat to high school athletics in the coming years.

Men and women often begin their officiating careers because they love a sport, want to make an impact inside their communities, and enjoy earning a little extra cash. But, studies reveal there are more officials over the age of 60 than 30 and under, which means the gap in age makes it difficult to cycle in new bodies (Davidson, 2019). Currently, there are 300,000 - 350,000 available referees in the United States. According to a recent survey, more than 50% of these referees are over the age of 55; and 45% of officials report that they have less than six years remaining in their careers (Officially Human, 2020). Respondents also identified verbal abuse from fans and coaches as the top two reasons referees are quitting. These results are echoed across the country by youth organizations like the South Carolina Referee Association, which reports that 70% of rookie officials quit after one season (Barnhouse, 2018). Likewise, the New York State Public High School Athletic Association has lost 160 referees in two years (Barnhouse, 2018); and the Iowa High School Athletic Association saw a 12% drop in registered officials across seven different sports (Barnhouse, 2018).

High school sports and other athletic organizations have also recognized sportsmanship issues and have begun to address them through the publication of articles and videos on

sportsmanship, campaigns similar to the NCAA's RESPECT campaign, and the development of VR experiences that allow people to make game-time calls through the eyes of a referee.

However, these efforts don't focus on the official; instead, they focus on the personal decisions made by athletes, coaches, and fans, as they relate to sportsmanship. This creative project engages with high school officials to collect their perspectives about these challenges and works to create a solution that addresses concerns, including the decreasing number of officials across the United States.

This creative project also explores two of the major issues high schools and their athletic programs face: 1) the effects of verbal and physical abuse that high school officials experience before, during, and after a game, and 2) how to retain young officials and keep them from quitting early in their officiating careers. This project is informed by the following guiding questions:

1. How might we use design thinking principles to empathize with officials, refine the problem space, and create awareness about the shrinking number of officials?
2. How might we improve an official's work environment through awareness?

Ultimately, this project is intended to help school administrators, athletes, parents, fans, and coaches see officials as individuals, to establish an environment for officials to feel comfortable while working, and to protect youth athletics by retaining younger officials.

Literature Review

This literature review is informed by scholarship in the following areas: 1) the importance of athletics and officials, 2) why officials are quitting, and 3) solutions to the shortage.

The importance of athletics and officials

Athletic programs prepare students for successful careers, improving their health, and making them better members of their communities. In a survey of CEOs and members of the Legislative Assembly, 80% indicated that athletics significantly, extensively, or moderately complemented their careers or academic successes (Berrett, 2006). Another study showed that 75% of students would like to become more active by participating in sports during or after school (Corder et al., 2013). Furthermore, student-athletes are even more likely than their counterparts to volunteer, vote, and watch the news (Lopez & Moore, 2006).

However, athletics programs across the country are experiencing a shortage of officials and referees, which could affect the ability to maintain sports leagues and programs. Men and Women have many reasons why they want to become referees, including staying in shape, giving back to their communities, or making a little extra cash. However, according to a recent survey by the National Association of Sports Officials (NASO, 2017), more than 70% of officials say they do it for the love of sports. For many of these individuals, it started with an ask. Thirty-four percent of NASO respondents said they were either approached about being a referee or consulted with a coach or official about becoming one. More than 75% of these respondents started at a sub-varsity level (NASO, 2017).

Why officials are quitting

Across the country, there has been a decline in the number of available officials. In 2018, it was estimated that there are only 300,000-350,000 high school, athletic officials, across the country for all athletic programs. In Tennessee and Nevada alone, there was a decline of almost 700 registered officials from 2016 to 2018 (Ohio University, 2018). With 70% of current officials participating for the love of sports, there is a concern as to why officials are quitting.

Currently, 67% of officials work full-time jobs, and 20% are already retired (NASO, 2017). These officials do not necessarily need additional income. Rather, many enjoy participating in athletic events, making an impact on student lives, and staying in shape. However, 22% of officials quit because of low pay, and 66% of referees believe they are not fairly compensated. Nearly all of those who say the pay is too low also believe they should receive a 10% pay increase and 63% would welcome non-cash compensation methods (Officially Human, 2020). Currently, the average annual income for a high school official is \$28,940 (U.S. Bureau of Labor and Statistics, 2021). However, with this salary, a family of two would be on the cusp of Medicaid eligibility as it relates to the National Poverty Level, and a family of three would qualify. Thus, this is an insufficient salary for an individual trying to support a family, especially when you consider that athletics can be a hostile environment for officials.

Poor sportsmanship, verbal abuse, and even physical abuse also play a major role in why individuals are quitting, and it's only getting worse. NASO (2017) reported that 57% of officials believe sportsmanship is worsening, and 57% of respondents reported they believe the parents and fans are the most at fault, while 29% of officials believe the coaches are the ones causing the most problems (NASO, 2017). Fans and parents often appear to have a free pass to yell at officials. In fact, I recently witnessed verbal abuse on two separate occasions at youth sporting

events. During the first game I attended, after a bad call a fan yelled out “Hey Ref!”, and the entire fan section yelled out, “You SUCK!” Additionally, a parent yelled at an official from the third row for three straight minutes. During this time, the fan yelled insults about the official’s family, health, and mental capacity. Neither of these incidents led to individuals being ejected for poor sportsmanship or inappropriate comments. However, 64% of officials report that they have ejected a fan or parent for poor behavior (NASO, sporting behavior) that is at the very least, inappropriate, and even worse, possibly hurtful or vulgar. Observational research has shown that fans and parents do not empathize with officials; they expect perfection and do not account for the sacrifices an official may have made to officiate the game (Pierce et al., 2021). According to one Rockland wrestling official, a parent threatened to kill him and a week later was sitting in the front row of another event. The ref reported that when he asked the school’s athletic director why the fan was still allowed to be in the venue, the Athletic Director brushed it off saying they wouldn’t do it again (Zacchio, 2017). Instances similar to this official’s experience can both drive people away from their job and affect their lives and mental health for a significant period of time. Being on the receiving end of verbal abuse can cause a person to question their own intelligence, value, or self-worth (Huizen, 2019).

Officials put themselves at risk of injury and physical abuse every time they officiate a high school athletic event. Fifty-seven percent of officials have had to break up a fight during an event (NASO, 2017) that involved athletes, coaches, and/or fans. Thirteen percent of respondents also said they have been physically assaulted by an athlete, coach, or fan. And in 2014, John Bieniewicz of Michigan tragically lost his life while officiating an adult league soccer game in Detroit. When looking down at his notes after making a call, the individual responsible for the foul punched him, delivering a fatal blow that he never saw coming (Anderson, 2014). Incidents

like this and other stories of physical abuse have led 46% of officials to report they have felt unsafe or feared for their safety due to poor administrator, player, coach, or spectator behavior. Similarly, physical abuse can have lasting effects on an individual's life.

Victimized people commonly develop emotional or psychological problems secondary to their abuse, including anxiety disorders and various forms of depression. They may develop substance abuse disorders....Posttrauma victims' attempts at avoidance of trauma-related things can push them towards impulsive actions that less frantic people would avoid. PTSD victims commonly abuse drugs, for instance, and this drug use is thought to begin as a means of coping with trauma (Effects of Abuse, n.d.).

Both poor pay and hostile work environments have led to a shortage of officials. Officially Human (2020) reports that 50% of respondents are older than 50, and 45% believe they have less than six years left. As a result, within six years, there will be 135,000 - 157,500 officials who have stepped away from their jobs. If we continue to not support officials in their desire for more pay and safer work environments, there will be a major shortage of officials for high school athletics across the country. According to the executive director of the Texas Association of Sports Officials, "You can't play the game without us. If you turn on the lights and there aren't any officials, what are you gonna do?" (Global Sports Matter, 2019).

Solutions to the official shortage

Of all the officials who participated in the Officially Human survey, 55% reported they believe codes of conduct will help promote good fan behavior and 50% believe venue signage promoting the positive treatment of officials can help reduce abuse (Officially Human, 2020). Currently, the National Federation of State High School Association (NFHS) has a

sportsmanship toolkit for sale on its website. This toolkit is designed to improve sportsmanship in a community and its schools. According to the manual description, the campaign focuses on respect and responsibility by helping people shift their mindsets to improve behavioral choices. Individuals who are interested in using the NFHS toolkit must purchase the content for \$19.95. Officials (77%) also believe that coaches and parents are going to be most responsible for improving sporting behaviors (NASO, 2017). With such an overwhelming number of officials in agreement about the problematic nature of their job, this project seeks to improve how parents and coaches interact with officials and children who are participating in these events. Secondly, focusing on fan engagement and education will also improve the safety and work environment for all high school athletic officials.

Project Design

This project uses a human-centered approach to develop a library of assets (toolkit) for school administrators to use when working to improve an official's work environment to further explore the effects of verbal and physical abuse that high school officials experience. After completing the literature review showing how abuse and pay affect officials' desire to work, interviews were conducted with five high school basketball officials from Indiana. Although there are thousands of officials for many sports across the United States, this project focuses specifically on high school basketball officials in Indiana. During the empathy interviews with these stakeholders, I sought to better understand how abuse from fans impacts their life, their perception of the support they receive during a game, how they would like to address fans, and their desire for additional compensation. Following the interviews, rapid prototyping was used to create sketches, explore campaign visuals, messaging, and cohesiveness. Once a direction for visuals and messaging was defined, prototypes of the toolkit assets were created. Stakeholders were asked to provide feedback on the prototypes through a survey. Feedback from the survey was taken into account when producing the final assets for the toolkit.

Design Thinking

Design thinking is a human-centered approach used for creative and practical problem-solving. During this process, designers seek to understand their audience, challenge assumptions, redefine the problem space, and begin to test and refine their solutions. The five stages of design proposed by Hasso-Plattner Institute of Design at Stanford University include five steps: empathize, define, ideate, prototype, and test. This project embodied the design thinking principles as follows:

1. **Empathize:** Empathy interviews were held with Indiana high school basketball officials to understand how they would like help combating abuse during events and improving pay.
2. **Define:** Information collected from the empathy interviews helped inform the tactics and audiences for a toolkit.
3. **Ideate:** Insights from the empathy interviews helped shape the tactics selected for the toolkit. Rapid ideation in the form of sketches helped form the shape and visual directions for the campaign.
4. **Prototype:** Drafts of toolkit visuals and messaging were built for testing.
5. **Test:** Stakeholders participated in a survey where they provided input on the toolkit assets. The results from the survey allowed for adjustments before finalizing assets for the toolkit.

Design Procedure

High school athletic associations are seeing a decrease in registered officials across all sports and a high percentage of officials quitting after their first year (Barnhouse, 2018). Of those surveyed, 66% of officials believe they are not fairly compensated and 57% of officials believe sportsmanship is worsening (NASO, 2017). This project is designed to help people establish sporting environments in which officials feel comfortable while working. It is also intended to protect youth athletics by providing assets for officials to be used in their efforts to recruit and retain officials. To build the toolkit, this project was informed by empathy interviews with officials to better understand their perceptions of abuse, pay, and official recruitment and retention.

Empathy Interviews

Interviews were conducted with five Indiana high school basketball officials. Each of these officials had more than 10 years of experience officiating basketball and five years of officiating high school basketball. The interviews were designed for two purposes. First, to refine our understanding of how verbal or physical abuse and compensation impacts an official's desire to continue officiating sports. Second, to understand how we can improve an official's experience and retain new officials through an awareness campaign. Each of these interviews lasted 30 - 60 minutes and individuals were asked a series of questions about work history, work environment, pay and compensation, and retaining officials. The questions were not limited to, but included:

Personal

1. How long have you been an official?
2. Why did you want to become an official?
3. Are you as passionate about being an official as you were when you started?
4. How much longer do you believe you will continue officiating?

Pay and Compensation

1. Do you feel you receive fair compensation for your position?
2. Would you like to receive compensation outside of monetary compensation?
3. Have you considered quitting because of your pay?
4. How would you like schools to improve your pay?

Work environment

1. Do you feel safe when arriving or leaving a venue?
2. How does it make you feel when (fans, coaches, or players) verbally abuse you during a game?
3. Have you ever been, or do you fear being physically assaulted?
4. How does the abuse impact you outside of work?
5. Have you considered quitting because of the environment?
6. What would you like to see schools do to improve an official's work environment?
7. How can schools work to retain the younger officials?
8. If you could speak to (fans, coaches, or players) prior to a game, what would you say?

Survey

Stakeholders who participated in the survey were asked a series of questions to test an individual's willingness to engage with the content and the impact at which it is received. For this survey, engagement is defined as reading and/or sharing the content. The measurement of impact is gauged by how likely the content is to change the individual's outward/spoken response to a

situation. Content created for awareness outside of school walls required participants to answer questions about both their willingness to engage and its impact. Content that was created to be seen and heard inside of school walls only required participants to answer questions about its impact. Questions used to measure the engagement and impact of content are as followed:

Willingness to Engage

1. If you saw (awareness piece), would you read all of the content?
2. If you saw (awareness piece), would you share it with someone you know?
3. If you saw (awareness piece), would you share it on your social media channel?
4. If you received (awareness piece), would you read all of the content?
5. If you received (awareness piece), would you share it with someone you know?
6. If you received (awareness piece), would you share it on your social media channel?

Impact of Content

1. How likely are you to yell at a ref if you saw/heard (awareness piece) prior to a bad call?
2. How likely are you to have a new attitude towards officials after seeing/hearing (awareness piece)?
3. How likely are you to encourage others in good sportsmanship after seeing/hearing (awareness piece)?

Empathy Interview Results

During the interviews, officials expressed how they loved being on the court, participating in the events, and building relationships with the students and coaches. When asked about how much longer they would continue officiating, no one responded with a time in the near future. One official even went as far as to say, “I still love what I do and I love the kids. I’m going to continue until my body can’t keep up with the speed of the game.”

Pay and Compensation

Even though these official’s expressed a strong desire to continue officiating, some expressed frustrations about the compensation they receive for their time and effort. In the state of Indiana, there isn’t a set fee schools must pay an official. Each school sets its own pay, and officials must agree to do that game at that cost. During the interviews, officials identified their pay ranging from \$70 - \$130 for a single game. Officials reported this is frustrating because they

aren't always working at a location close to their homes. At times, they must travel two hours round trip, to work a single game. The sentiment across the board was that each game should be a minimum of \$100. The location and pay of the event often influenced the official's decision to take a game when deciding between two different locations. When asked about receiving additional compensation, officials expressed that they were not against items like mileage and concession coupons, but would prefer the extra cash.

Abuse

When asked about their experiences with verbal abuse while officiating, participants were quick to point out that they're good with "dealing with it." One participant stated that it's "part of the gig, I might think about something someone said on the way home. But, it doesn't impact my performance on the court or emotional health when I get home." As these officials reflect on the negative comments they received during a game they'd play back the scenarios and decide if they could have made a better call or determine if they were correct. This process helped them to be a better official through personal improvements and allowed them to form an opinion of the abuser. Creating a narrative about why the abuser was hurling insults at them helped produce empathy or forgiveness. However, officials noted that, at times, the insults become personal and cause hurt and frustration. When people attending the sporting event go as far as making personal insults, the officials expressed their desire for school administrators to step up and help support them and de-escalate the situation.

Work Environment

Throughout the interviews, officials expressed a lack of support from athletic directors and school administrators. At a minimum, when arriving at the school, these officials preferred to be met at the door, given a place to change or shower, and have conversations with the school

administrators who would be attending the games on the sidelines. From their experiences, these introductions and accommodations create a better work environment and help them feel supported. It also gives them an opportunity to identify who they can look to for help when needing to handle rowdy fans. A few officials went as far as to provide examples of their best experiences working with school employees. One official said, “If a fan is getting too vocal during a game, I’ll quickly talk to the school administrator who greeted me during a timeout and ask them to speak with and sit next to the fan for a few minutes. This really calms the situation and keeps the fan in check.”

Retaining Officials

During the interviews, officials expressed their concerns about the impact verbal abuse, compensation, and school administrators have on retaining younger officials. It’s difficult to go into an environment and receive hostile comments based on your performance. Being able to consistently perform as an official at a high standard requires support from a team and thick skin. Knowing that you have people on your side makes the job much more enjoyable. Speaking about their positive experiences, some officials noted that after officiating a season or two for the same schools you begin to build relationships with the coaches and players. Supporting these individuals and the community through sports is a positive experience and one that can have a lasting impact. One official was even recently asked to be the official for a former athlete’s wedding ceremony.

More Than Stripes Toolkit

Results from empathy research informed the development of the *More Than Stripes* toolkit, a set of materials school administrators can use to improve sportsmanship, reduce abusive actions toward officials, and recruit student-athletes to become officials. The *More Than Stripes* website speaks to school officials, coaches, players, and fans about the effect losing officials may have on future generations. It also provides additional resources and information for individuals to use in their schools at sporting events and online.

Empathy interviews led to the identification of three key goals: 1) build support for officials among schools and administrators, 2) reduce abusive actions directed at officials by event participants and fans, and 3) recruit student-athletes to be officials in the future. Current programs like The National Association of Sports Officials (NASO) *Say Yes to Officiating* campaign, the National Federation of State High School Associations' (NFHS) sportsmanship toolkit, and Indiana High School Athletic Association's (IHSAA) sportsmanship program work to address some of these issues. However, none of them encompass all three areas of need while providing tools necessary to reach each target audience. NASO's *Say Yes to Officiating* campaign is the closest program to providing all of the necessary information and tools to address each of these issues. While some content and assets focused on recruiting and retaining officials are not available, you can find links on NASO's website to landing pages for social media assets, recruitment tools, and information about becoming an official to be created in the future. The *More Than Stripes* toolkit is different from current tools and materials by providing information and assets specific to school administrators. These individuals are able to influence the actions of fans or parents and have consistent contact with both the officials and student-athletes. Messaging about compensation and improving an official's work environment are

intended to build empathy for officials by presenting them as valued members of the community who are working to the best of their ability to provide a safe and fair environment for our children to compete. Toolkit assets for recruiting new officials target current and recent student-athletes. These messages are intended to be distributed and used in schools and on their digital platforms.

The tactics and assets created for this project rely on direct contact (online and in-person) with each of our audience segments while providing focused messaging. The use of multiple tactics are intended to provide a broader reach and increase the frequency with which messaging is received. A website (see Figures 1-3) was created to host the toolkit and provide messaging support for officials within a school system. The website features a write-up about the important role school administrators play in protecting high school athletics, as well as a call for administrators to make a difference by downloading and using the toolkit assets. The first section (see Figure 1) encourages school officials to support officials by downloading and using the toolkit. Next, the content (see Figure 2) shifts to the abuse officials may experience while participating in a high school athletic event. The final section (see Figure 3) encourages individuals to continue participating in the sports they love and highlights some of the benefits of becoming an official. Each section also informs administrators about how they can make a difference and directs them to download the toolkit for use within their school systems.

Figure 1. A landing page that highlights the opportunity everyone has to make a difference and protect the future of high school athletics. The Support Your Officials section specifically speaks towards school leaders and provides downloadable assets.

Figure 2. This landing page highlights the opportunity everyone has to make a difference and protect the future of high school athletics. The Be a Good Sport section specifically addresses event attendees and provides easy opportunities for them to show good sportsmanship.

Figure 3. This landing page highlights the opportunity everyone has to make a difference and protect the future of high school athletics. The Become an Official section of the website specifically speaks to student-athletes about becoming an official and provides links to additional resources.

Building Support for Officials

During empathy interviews, officials often spoke about their desire for school administrators to improve their work environments. When asked about how a school could improve, officials often spoke about the need for them to be good hosts, to help handle abusive actions during events, and to improve compensation. Based on this insight, the landing page includes direct actions (see Figure 1) administrators can take to be a better host, handle rowdy fans, and improve compensation for officials. To further help improve environments beyond that initial contact, a survey (see Figures 4 and 5) was created for school administrators to distribute to officials after a sporting event so officials can provide feedback about the experience in the form of a postcard. Providing each official through the year with a pre-stamped survey on a postcard allows them to provide anonymous feedback at any time and give honest reviews of their experiences with suggestions for future improvements.

Figure 4. Officials can provide feedback via postcard by rating their experiences 1-5 and sending it back to school administrators.

Figure 5. On the back side of the survey, officials can provide feedback for school administrators by providing direct requests or comments in the gray section and sending them back to school administrators.

Reduce Abusive Actions

Each official that participated in the empathy interviews stated they had been the target of personal insults. Two stated they had been in a situation in which they felt uneasy about the state of the audience and believed they might have been physically assaulted. To help reinforce good sportsmanship and prevent these abusive actions by student-athletes, coaches, and event attendees, prior to an event, three social media posts (see Figures, 6, 7, and 8) were created for the toolkit to build empathy for officials. The first of the three posts (see Figure 6) presents officials as members of the community. The second post (see Figure 7) provides a direct quote from the empathy interviews about the officials desire to provide a fair and safe environment for children to compete. Finally, the third post (see Figure 8) allows schools to make a statement of support for the officials who sacrifice part of their lives to have a positive impact on their students. By presenting officials as valued members of the community who are focused on providing positive opportunities for our children, we can help people understand that officials are human and should be treated as such. This message is reinforced by a statement from the school about the importance of treating their officials as their neighbors.

Figure 6. This social post is to be used by school administrators on the school's Facebook or Instagram account. The post highlights how officials are often members of your own community working a different full-time job and we should view them as positive influences for the student-athletes.

Figure 7. This social post is to be used by school administrators on the school’s Facebook or Instagram account. The post highlights the importance of everyone being a good sport.

Figure 8. This social post is to be used by school administrators on the school’s Facebook or Instagram account. The post allows school officials to maintain a unified stance and sportsmanship at high school sporting events.

School administrators have a special opportunity to reinforce sportsmanship at their events. Their access to event announcements and location signage allows for a pre-game announcement and posters focused on sportsmanship to be hung in the facility. Using this access, a poster (see Figure 9) was created to build empathy for the officials and improve sportsmanship by parents and fans. The following announcement was also written to remind parents and fans they’ve gathered to support the student-athletes and everyone is doing their best to provide a fair environment for the competition.

“Tonight we are all here to witness and celebrate the hard work and commitment of athletes who are our students, friends, and children. As school administrators, our goal is to provide a safe and fair environment for these student athletes as they put their skills in action through competition. The officials for this game want to see both teams succeed and are focused on doing their best to provide fair and accurate calls but, at the end of this contest, there will only be one winner. However, we can all leave knowing the future of our sport and high school athletics is in good hands. Celebrate and support your team, respect the officials, and enjoy the game.”

Both the poster and announcement can be found inside the toolkit assets when downloaded.

Figure 9. This poster is to be used by school administrators on the school’s property. The poster emphasizes the need for positive and respectful attitudes at school sporting events.

Recruit New Officials

Through the empathy interviews, officials expressed their concern about the lack of young officials. When asked how we could make a difference, three of the five officials noted the need for a team recruitment effort from coaches, school administrators, and other officials.

To reach student-athletes and build a pool of future high school officials, three social posts (see Figures 10, 11, and 12), a poster (see Figure 13), and a handout (see Figures 14 and 15) focused on recruitment were created for the toolkit. Sharing social content on school channels not only informs students of an opportunity to become an official but is also visible to all audiences (parents, community members, etc.) that may be invested in the future of athletics. The first social post (see Figure 10) focuses on the impact an individual can make by being an official. Our second social post (see Figure 11) focuses on the personal gain an individual may receive while being an official. Lastly, the third social post (see Figure 12) discusses how becoming an official can keep you engaged with the sports you love. These posts are intended to hit three different messages that may resonate with a young individual.

Figure 10. This social post is to be used by school administrators on the school's Facebook or Instagram account. The post encourages students to explore being officials in the future.

Figure 11. This social post is to be used by school administrators on the school's Facebook or Instagram account. The post highlights three positive aspects of being an official.

Figure 12. This social post is to be used by school administrators on the school's Facebook or Instagram account. The post encourages student-athletes to join their new team by becoming an official.

To reach students inside the school walls, administrators can download and print a recruitment poster (see Figure 13) from the toolkit. This poster is intended to be hung within the school hallways and athletic facilities to reach students on a more consistent basis. The poster is beneficial to recruitment because it has a longer lifespan than a social media post, presents more information in a single location, and allows a student to quickly learn more about becoming an official through a QR code.

The final asset inside of the toolkit is a business card sized handout (see figures 14 and 15) school administrators can download and print. This card is focused on providing top-level information with quick access links for student-athletes who may already be interested in becoming an official. Creating this small handout allows school administrators to easily pass off to students who are interested or equip officials and coaches with a tool to provide students information as they learn of their interests.

Figure 13. School administrators can print and hang this post inside the high school and athletic facilities. Students who are interested in becoming an official can quickly get additional information by scanning the QR code.

Figure 14. The front of this business card sized handout provides a quick and accessible way for student-athletes to begin the process of becoming an official as their athletic careers end.

Figure 15. The back of this business card sized handout provides a quick list of reasons why a student athlete may want to consider becoming an official.

Discussion & Conclusion

When I began this project, I understood the total number of high school officials across the country had begun to decline. My perception of the problem was that abuse, verbal and physical, drove officials away from continuing their careers. This understanding had been shaped by a growing number of stories in the news about officials experiencing abuse and four years of experience officiating basketball and baseball games. With this knowledge, I began the project with two guiding questions:

1. How might we use design thinking principles to empathize with officials, refine the problem space, and create awareness about the shrinking number of officials?
2. How might we improve an official's work environment through awareness?

Through data collection, my perception of abuse driving officials away from their careers was confirmed. However, I learned that most officials were working a full-time job, believed they were underpaid, and continued to officiate games for the love of the sport.

With this knowledge, the project used the first guiding question to help shape empathy interviews with five Indiana high school basketball officials. Questions for the interviews were focused on the official's personal journey, pay and compensation, and perception of their work environment. It was important for this project to understand why everyone started their career to shape the messaging and tone of content when speaking about the opportunity to become an official in the future. Each individual's story was different but had an underlying theme of passion for athletics. As their stories progressed, new themes such as making a difference, staying in shape, additional income, and the flexibility to work on their own time emerged. This information was useful in the development of social media posts, flyers, and handouts focused on recruiting new applicants.

When asking about pay and compensation, it was important to identify how great of an impact this has on an official's desire to quit and how much more they believed their position was worth. It was noted by each individual that their pay was inadequate and often inconsistent across the schools. Depending on which school system you were working for these officials made \$75 to \$110 a game. When asked about the opportunity to receive additional compensation such as vouchers for the concession stand or gas cards they all preferred additional pay. However, all of the officials felt the pay they were receiving wasn't worth quitting over. With the understanding that the pay was less than preferred, but not low enough to quit, the project was able to refine the messaging of the toolkit to focus on recruitment and improving their work environment.

During the third phase of questions about the work environment, it was discovered that officials believed additional support from school administrators would have the greatest impact in addressing verbal and physical abuse. When school officials were actively addressing issues, being present, and supporting the officials during tense interactions with coaches, players and fans the outcome was better. One official noted if school administrators are participating in the event by standing on the court, language from the stands tends to be less offensive. Due to this finding, utilizing school administrators to participate in the spread of information about becoming an official and improving work environments for officials became a main focus of this project.

This project used the second guiding question to steer the creation of assets within the More Than Stripes toolkit. School administrators have full access to school social media platforms, sporting events, and direct contact with all event participants, capitalizing on this access, the toolkit includes social media posts, posters, and handouts. To reach school

administrators and host the toolkit, a website was created. The website doubled as an additional opportunity to promote sportsmanship with event participants and recruit individuals who may be interested in becoming an official. Once the toolkit has been downloaded from the website, school administrators have access to three social media posts, a poster and a handout focused on recruiting student-athletes to become officials after their athletic career has ended. While reviewing the assets, Indiana high school basketball official Bob Hicks stated, “(I) really love the look, tone, work, and thoughts you have put into these. One of the reasons I officiate is for the kids. I love the game and I love playing a part in setting the environment to help kids grow. It’s a win/win.” An additional three social posts, a poster and an anonymous survey focused on improving an official’s work environment can be found in the toolkit. Darren Waggoner, Indiana high school basketball official stated, “I love the anonymous feedback cards and highlighting officials as members of the community.” These toolkit assets provide administrators the ability to promote sportsmanship and recruit new officials on social media, at the school, and with personal relationships.

While this project focused on high school athletics and targeted school employees, there is a wide range of athletic programs that can utilize or adapt the content with the toolkit for their own use. Junior high, elementary, club and travel sports all face similar difficulties of fan, coach, and player abuse, while working to retain their officials. The schools can utilize the toolkit as intended with a few modifications. Rather than recruiting the athletes, recruitment handouts can be adapted and recruit parents to become officials in their local district. The social posts, event announcements, and flyers focused on improving the environment can be used as intended on different social platforms and at sporting events.

With some adaptations, travel and club athletics can utilize content within the toolkit. For teams with a social media presence, the images and post copy could be adjusted to fit their needs. Like the junior high and elementary schools, recruitment materials can be adapted to recruit parents to become officials within the travel system. However, for those who organize and run travel or club tournaments I would make a more drastic change to the execution of the content and create a video to be shared with coaches, players and parents attending the tournaments. Taking it a step further, an online quiz could be created to ensure that all participants have watched the video and reviewed all materials shared with them.

In conclusion, this project used design thinking as a human-centered approach to understand the audience, challenge assumptions, and address major issues high schools and their athletic programs are facing. For example, during the empathy interviews, officials challenged the assumption that reducing abuse would be the most impactful way to improve their work environment. By understanding the audience, the problem was redefined and addressed through the toolkit. Darren Waggoner ended his review of the final toolkit with this statement, “Well done, I think you have thoroughly covered the issues and have done a nice job with the toolkit.”

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