

Becoming *Their People*: The impact of a Faculty and Staff Mentor Program to Improve Sense of Belonging and Persistence Rates of DIII First-Year Football Student Athletes

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Due to its emphasis on academics and exclusion of athletic scholarships, the NCAA's Division III (DIII) is often praised by coaches, media, and higher education leaders for offering the purest form of collegiate athletics. However, the academics-first philosophy and higher graduation rates the NCAA celebrates for most of its sports are not reflected in outcomes for football, the division's sport involving the most student athletes (SAs) and one in which Black men are overrepresented. Retention and graduation rates of DIII football SAs and Black football SAs in particular, have long trailed other student populations. This mixed-methods research study used Improvement Science to test the impact of a faculty or staff mentor program on first-year football SAs' integration outcomes and sense of belonging at a small, private, DIII college located in Western, Pennsylvania. The sample for this study (n=47) was paired with a faculty or staff mentor as part of a PDSA (Plan, Do, Study, Act) cycle. Multiple data points were collected through pre- and post-intervention surveys, institutional records (e.g., fall semester GPA, involvement in organizations other than football, and first-to-second semester retention), and focus groups. Results of the study suggest the first-year football SAs who participated in the mentoring program benefited from the intervention, realizing higher sense of belonging at the institution, averaging higher GPAs and higher levels of engagement outside of football, and persisting at the institution at significantly higher rates than football SAs who did not participate. Black or African American participants also realized better integration outcomes than Black or African American football SAs

who did not participate, but did not benefit to same degree as White football SA participants. Findings from this study will assist college leaders as they respond to the need for improving retention and graduation rates of football SAs and Black men. Strengths, limitations, implications, and suggested improvements to the intervention are included to strengthen the impact of the intervention for potential future iterations.

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Preface

First, I would like to express my deepest gratitude to my mentor, advisor, and dissertation chair, Dr. Jill Perry, for her continual support, guidance, and encouragement throughout my EdD journey. Words cannot express how grateful I am to have had the opportunity to learn and grow under your mentorship. I would also like to offer my sincerest thanks to the other members of my dissertation committee, Dr. Tom Akiva and Dr. Elizabeth “Liz” Frombgen. In addition to learning so much from Dr. Akiva in the courses he taught throughout my program, his feedback and guidance during my dissertation process was invaluable. Dr. Frombgen is someone who I had the great privilege of working closely with and learning from as a colleague at my institution, and I certainly consider myself very blessed to have had that opportunity.

Next, I would like to extend my sincere thanks to Dr. Susan Traverso for not only encouraging me to enroll in the EdD program, but also for her unwavering belief in me along the way. Likewise, special thanks go to many others who’s help made completion of my program and dissertation possible: my colleagues on cabinet; the student life team; the football coaches; the members of the faculty and staff at my institution who generously volunteered their time serving as mentors as part of my study; and the student athletes who participated in the program.

Finally, I would like to thank my wife and daughters for all of the sacrifices they made to ensure my success. To my amazing wife Erin, please know that this accomplishment is as much yours as it is mine. Without your love, care, and the extra work you put in to make sure I was able to focus on my program, this would have been an impossible endeavor. To my daughters, Hannah and Hailey, you are and will always be my biggest sources of pride and inspiration. I love and thank you all!

1.0 Naming and Framing the Problem of Practice

Due to its emphasis on academics and exclusion of athletic scholarships, the NCAA's Division III (DIII) is often praised by coaches, media, and higher education leaders for offering the purest form of collegiate athletics. The NCAA (2019) declares the prioritization of academic success over sports in its DIII philosophy statement and boasts higher graduation rates for students participating in its sports. However, the academics-first philosophy and higher graduation rates are not reflected in football, the division's sport involving the most student athletes (SAs). Retention and graduation rates of DIII football SAs have trailed other student populations for at least as long as the NCAA has officially been keeping track, which is a little more than ten years (Burnsed, 2018). According to the NCAA's most recent academic success report (2020-a), football's 6-year federal graduation rate was lower than all other NCAA men's sports and at least ten percentage points lower than most (see Figure 1). Each year, almost half of the approximately 25,000 football SAs enrolled at DIII institutions are leaving their institution before graduating (Hartung, 2019). This outcome has lasting consequences for the football SAs who leave, and the institutions that fail to retain them.

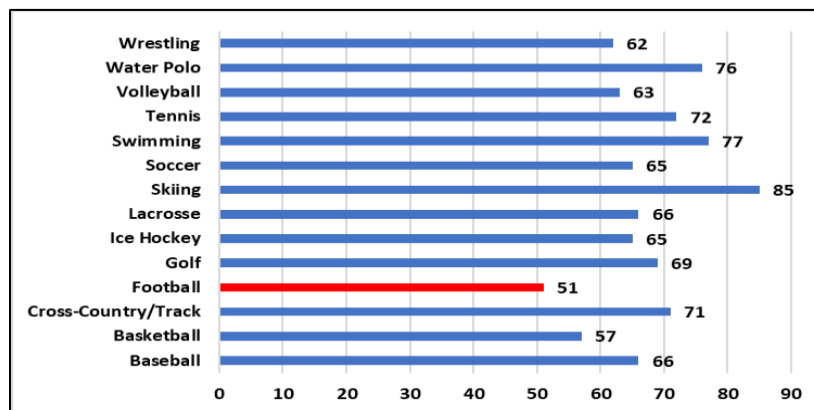


Figure 1 12020 Federal 6-Year Graduation Rates by NCAA DIII Men's Sports

For institutions, the most obvious and immediate consequence of football attrition is the lost revenue from tuition and fees. Given that the average DIII football team involves 110 SAs (Jump, 2018) and approximately 50% of those SAs do not graduate from their college (Hartung, 2019), that represents an annual institutional loss of hundreds of thousands of tuition and fee dollars even after accounting for the non-athletic scholarships and financial aid the SAs receive. Additionally, there are other less obvious and/or longer-term costs like personnel investments, facility expenses, and the negative impact on morale and reputation that factor-in (Schuh & Gansemer-Topf, 2012). Nevertheless, high attrition of football SAs leaves many DIII schools in need of solutions, especially tuition-driven institutions using football as an enrollment driver (Jump, 2018).

The student group affected most by this problem are Black men, a population overrepresented in football. Black DIII football SAs graduate at lower rates than all other race/ethnicity groups studied by the NCAA (Hartung, 2019). As seen in Figure 2, federal 6-year graduation rates of Black football SAs are at least ten percentage points lower than their Black peers (athlete and non-athlete alike), twenty percentage points lower than their White peers, and half the rate of the overall SA population. Many of these students end up leaving college with no degree, making them less competitive in the job market and holding significant debt from their limited enrollment in college. These students also miss out on other benefits and outcomes that often come with a college degree, such as higher lifetime earnings, better quality of life, and greater societal contributions (Ma et al., 2019; Mayhew et al., 2016; Pascarella & Terenzini, 1991, 2005). The long-standing practice in higher education of recruiting disproportionate numbers of Black men to represent institutions through participation in football, and the industry's continued failure

to support their academic success, serves to perpetuate inequities and attainment gaps (Cooper, 2016; Harper, 2018).

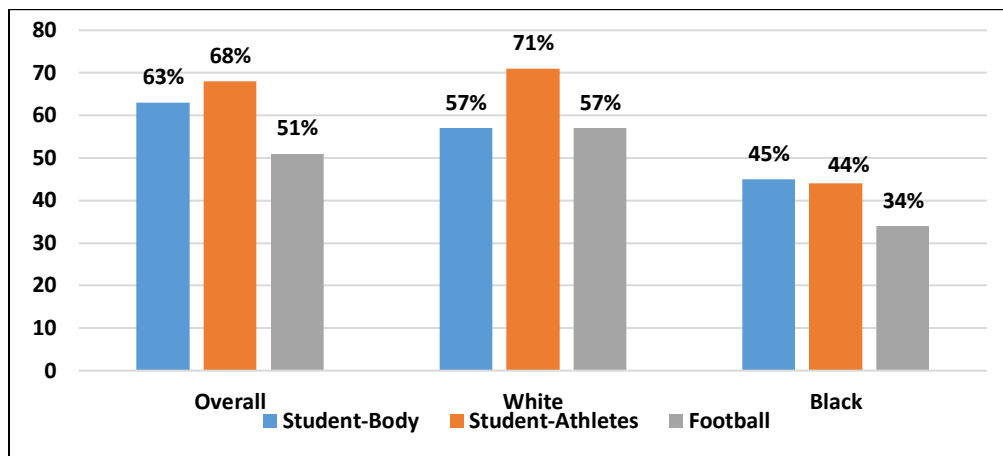


Figure 2 Comparison of Federal 6-Year Graduation Rates by Student Group (NCAA, 2020-a)

At the institution where I am employed and the inquiry setting for this Dissertation in Practice (DIP), issues from the broader problem space take shape at the local level. Retention and graduation rates of football SAs are much lower than other populations, and Black football SAs are experiencing similar attainment gaps as they are at the national level. In some ways the problem is greater at my institution, which serves as the motivation behind my work.

1.1 Organizational System

I serve as the Vice President for Student Life (VPSL) at a small college located in Western Pennsylvania. Given the size of my institution and in the interest of confidentiality for the stakeholders involved in this DIP, I will refer to the institution by the pseudonym of WestPenn College. WestPenn is an independent liberal arts, sciences and professional studies institution

founded more than 100-years ago as a coeducational and church affiliated college. WestPenn is accredited by the Middle States Commission of Higher Education and offers more than sixty undergraduate majors and minors, several graduate programs, and has more than twenty varsity sports competing at the NCAA DIII level. WestPenn is also a tuition-driven institution with a relatively modest endowment to support student financial aid and general operating costs.

Since at least the early 2000s and until 2015, the College's enrollment had been between 1000 – 1300 full-time undergraduate students. According to ACT, Inc. (2018), WestPenn's admissions selectivity falls between the *traditional* and *liberal* classifications, serving a student population approximately 55% male, 23% domestic students of color, 5% International, 48% Pell grant eligible, and more than 50% first-generation (WestPenn College, 2019). Beginning with the 2015-16 academic year, WestPenn's enrollment gradually decreased from 1,074 full-time undergraduate students to 736 in the fall of 2020 (a decrease of approximately \$7.5M in revenue). Contributing to this issue is the combination of declining demographics, high turnover in admissions leadership, and low retention rates of existing students.

As VPSL at WestPenn College, one of my responsibilities is to identify and lead efforts to improve student retention and graduation rates. Until recently, formal responsibility for retention was assigned solely to me and my division. Recognizing that retention is impacted by all areas of the student experience and requires a holistic approach for success, WestPenn's president spread responsibility for retention across numerous units at the College with academic affairs and student life partnering to coordinate and lead efforts. Through the implementation of new strategies targeting first-year students, WestPenn increased overall first-to-second year retention by more than ten percentage points in the fall of 2020 and maintained a higher rate in the fall of 2021.

First-to-second year retention is the logical starting point for improvement because WestPenn loses the highest portion of students during their first year. Prior to 2020, the previous 5-year average attrition rate of students in their first year was 36%. Meaning, more than a third of new first-time, full-time students did not return for a second year. After the first year, the average rate of attrition drops to 11% and 3% in the second and third years respectively. WestPenn students are much more likely to persist through graduation if they continue for a second year.

Despite recent success improving overall first-year outcomes, retention of some sub-populations like football SAs still lag. For example, first-to-second year retention of football SAs at WestPenn was more than 20% lower than the retention of their non-football peers. First-year retention rates of football SAs have been so low that the previous 5-year average (i.e., 44%) is lower than the national 6-year graduate rates for all DIII football SAs (i.e., 50%). Thus, WestPenn is losing more football SAs in their first year of college than most DIII schools lose over the course of 6-years.

Consistent with the NCAA's (Hartung, 2019) DIII data, WestPenn's football program also has disproportionate racial representation on the team. From 2017-2019, WestPenn's football program averaged a make-up of 51% Black or African American students compared to an average of approximately 23% (including football SAs) among the broader student body (WestPenn College, 2019). This is relevant because the College struggles to retain and graduate students of color, and Black football SAs make-up a significant portion of that population.

To identify potential causes for lower retention among football SAs, empathy interviews were conducted with current and former players, coaches, and other faculty and staff. Six themes surfaced during the empathy interviews as likely root causes for higher rates of attrition among football SAs at WestPenn, and all are included in the fishbone diagram in Figure 3 below. The

most commonly identified root causes across all groups were reasons associated with the players' negative experience(s) with the team, poor academic and social integration at the institution, and conflicts related to their identity as SAs. Health and wellness issues, lack of family support, and finances were also identified by some stakeholders, but with less frequency.

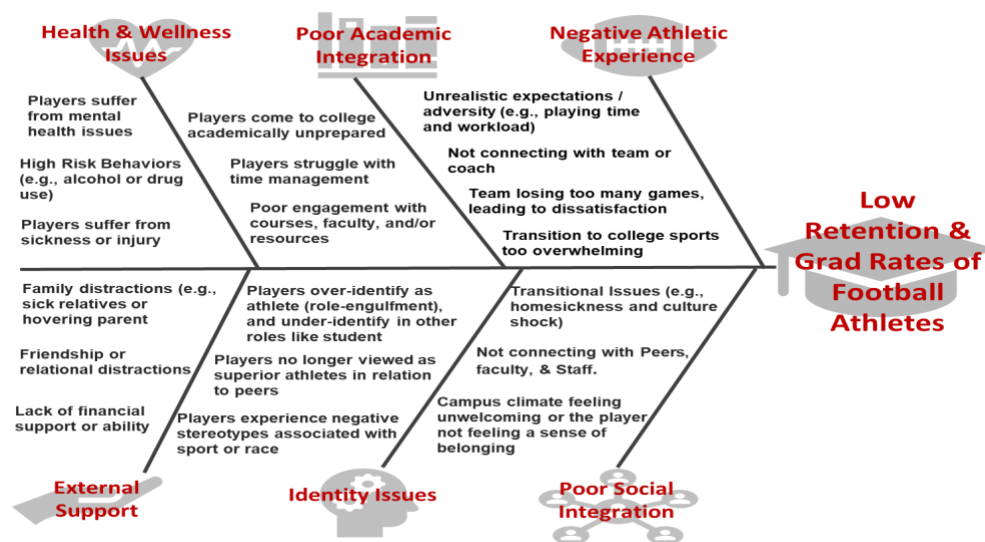


Figure 3 Fishbone Diagram of Potential Root Causes for High Attrition of WestPenn Football SAs

Although athletics does not fall under my purview of supervision, I believe I am well positioned to influence improvement based on my professional experience focused on student retention and my relationships with stakeholders in this space. I am member of and work closely with the president's cabinet who are responsible for the overall management of WestPenn College. I supervise the staff within student life who oversee programs and services that help shape students' experiences and success at WestPenn. Student life also works collaboratively with members from the division of academic affairs who share similar goals related to student success and retention. Finally, I have spent the past two years cultivating a close working relationship with the head football coach who arguably has the most influence on football retention.

1.2 Positionality Statement

I approach this work as a White, heterosexual, Christian male, who was raised in a two-parent, heterosexual, working-class household in a community with very little racial diversity. In my family it was expected that I attend college, and as such, I received an education in the Western tradition while attending WestPenn College (i.e., the inquiry setting) as an undergraduate. As a student at WestPenn, I benefitted from more racial diversity than I had ever been exposed to. I was also a member of the football team at WestPenn and viewed the impact of football attrition through that lens. Through a decolonizing viewpoint, I now strive to understand my own biases, power, and privilege, and challenge the dominant perspectives and systems in which I was raised and am working within. My long history at the College and previous membership on the football team provide both advantages and biases that I must remain aware of during this work.

1.3 Stakeholders

Stakeholder identification and analysis has served as an important step in understanding football SA attrition at WestPenn College. Attention to the needs, wants, power, interests, and relationships of the various stakeholders has not only provided additional context, but has also been vital in my thinking about how to best mobilize the system for improvement. Figure 4 provides an example of Eden's and Akermann's (1998, p. 122) power versus interest grid with stakeholders at my institution arranged within the grid. The placement of each stakeholder is based on information gathered through empathy interviews, scholarship, professional experience, and observations related to football attrition at WestPenn.

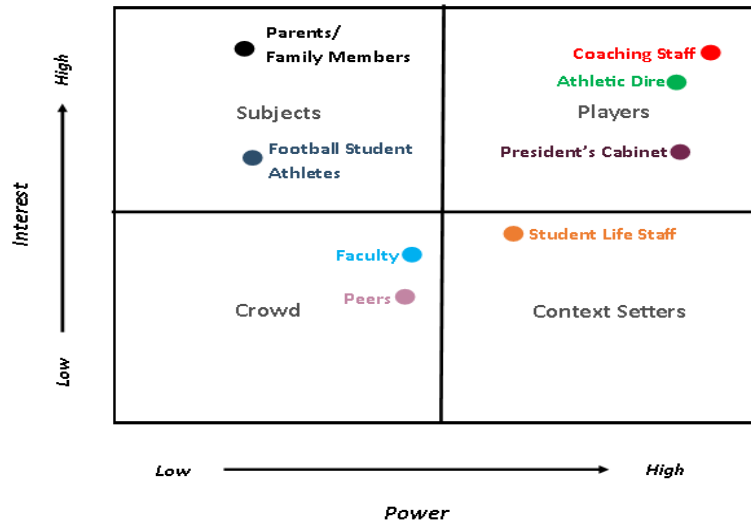


Figure 4 Power vs. Interest Grid for Football Attrition at WestPenn College

1.3.1 Football Student Athletes (SAs)

The stakeholder group impacted most by football attrition are the football SAs. Football SAs have a high level of interest related to their success in college and with football, but short of individual motivation and work ethic, they have little power in this problem space. The football SAs group can also be divided into three different sub-groups; 1) SAs who withdraw from the College prior to graduation, 2) SAs who persist and continue playing football, and 3) SAs who persist at WestPenn but no longer participate on the football team. The perspectives, characteristics, and experiences of each group are important to explore when trying to understand how they are impacted by high levels of football attrition.

The football SAs who attend WestPenn and withdraw prior to graduation often leave with significant financial debt, in poor academic standing, no degree to show for their investments, and the inability to continue participating in the sport that has been a large part of their identity leading up to college. Many of these students are Black men who come from lower income families and

are less academically prepared for college as compared to their peers. The inequities Black male athletes face in education are well documented in the research (Comeaux & Harrison, 2011; Cooper, 2016; Harper, 2018), and the challenges can be even greater for this population at predominately White institutions like WestPenn College (Melendez, 2008). Furthermore, given that this subgroup withdraws and disassociates with WestPenn, they are a stakeholder group that is much more difficult to access and gain perspectives.

The students who remain enrolled at WestPenn and continue to play football are also impacted by this problem. Each year they lose teammates and friends and must duplicate the time, effort, and commitment they invested with their former teammates with new waves of first-year SAs. The team is less competitive as a result of having to field younger and inexperienced squads, often making football less satisfying for those who stay. The cycle contributes to negative attitudes, low morale, distrust in the program, and a lack of positive team culture.

Finally, another important faction within this stakeholder group are the football SAs who discontinue participation in the sport but persist at the institution. Since participation in football is typically the primary driver for deciding to select and attend WestPenn, understanding the factors leading to their decision to discontinue participation and remain enrolled is informative for the development of intervention strategies. Through empathy interviews and observations, I found that many of these students have formed other meaningful connections to WestPenn outside of football. The connections discussed included friendships with other students, relationships with faculty and staff, and/or involvement in other programs (including other sports).

1.3.2 Coaches

The stakeholder group with arguably the most power, interest, and influence is the coaching staff. Led by the head coach, the coaching staff is typically the SAs' first and primary point of contact at the institution. Once SAs attend the institution, the coaches have a tremendous amount of power and influence over their experience, making them an important group to collaborate with when trying to improve retention. Coaches shape their SAs' schedules outside of classes (and sometimes related to classes), determine how much playing time they will have in the sport, set rules for their behaviors, influence who they socialize with, and more.

The racial composition of the coaching staff also factors-in when analyzing their relationship with the football SAs stakeholder group. In recent years, the football program averaged a make-up of 51% Black or African American students compared to an average of approximately 23% (including football SAs) among the broader student body (WestPenn College, 2019). Whereas, most of the coaches are White and identify as men. Current culture and power dynamics related to race have the potential of making it more challenging for the White coaches to form deep relationships with their Black male athletes, while the formation of deep and personal relationships with the coaches has been a consistent factor described in empathy interviews with SAs who persist at WestPenn and on the team.

Finally, the coaches have competing commitments as it relates to improvement of this area. On one hand, the coaches are responsible for recruiting and filling their roster with SAs who they believe have the talent needed to establish a winning program. On the other hand, the institution also expects them to attract a certain number of SAs to help realize institutional enrollment goals. If their SAs do not persist, they are then expected to recruit large first-year classes to backfill their roster and maintain enrollment numbers. According to the NCAA, larger recruitment classes can

be linked to lower retention and graduation rates (Hartung, 2019), which may set the program up for failure before the students even enroll. Their commitments to success on the field, large enrollment goals, and goals for retaining the SAs sometimes intersect and/or work against each other.

1.3.3 President's Cabinet

The President's Cabinet at the institution is another stakeholder group with differing levels of interests and power related to the retention of SAs involved in football. For example, the president and athletic director (AD) have the power of setting program priorities for the coaches, which include goals associated with recruitment and retention and overall program success (i.e., win and loss record). The prioritization of each of those goals and level of resource investments in the program can influence outcomes in different ways.

Other leaders like the vice president for academic affairs and vice president for student life (i.e., the position I hold at the institution), have high levels of interests as it relates to SA persistence. Likewise, each vice president also has high levels of power over the faculty and/or staff stakeholder groups working to support SA success. These leaders have the formal authority to support interventions aimed at improving football retention, and the ability to allocate or reallocate resources in this space.

1.3.4 Faculty and Student Support Staff

The faculty and student support staff stakeholder groups are made-up of employees from academic departments and other service departments within areas like student life, academic

affairs, and financial services. These groups are classified as having high levels of power, and medium-to-low levels of interest related to football attrition. Consistent with the other non-student stakeholder groups (apart from the “parent/family” group), these groups consist primarily of White employees (i.e., less than 7% from minoritized groups), potentially serving as a barrier to connecting with and engage students of color within the football program.

Although the faculty and student support staff have significant power in how the SAs experience college, there is little evidence of direct interest in improving football retention. Many individuals in these groups are involved in retention efforts, but very few have been involved in the creation or implementation of retention strategies or services specific to SAs or Black men. All interface with the SAs through the classes they teach and/or services and programming they provide, and there is an opportunity to deliver those classes, services, and programs in ways that better meet the specific needs of the SA stakeholder group. Football SAs who participated in empathy interviews also indicated an interest in spending more time with these stakeholders outside their normal classroom or office environment.

1.3.5 Peers

The peer stakeholder group has been classified on the analysis grid as having low levels of interest, and low levels of power. Although peers could have higher levels of power and influence, many of the SAs have limited exposure to their peers prior to withdrawing from the institution. The limited exposure is due to the demands placed on the SAs related to their sport. However, the coaches and other stakeholder groups could facilitate more opportunities for interaction and increase levels of influence for the “peers” group. Since interaction with peers has been linked to

positive developmental and educational outcomes (Gayles & Hu, 2009), this type of power distribution could be useful for improving retention.

1.3.6 Parents/Family Members

The final stakeholder group considered to be central to football retention is the parents/family members group. Parent and family members have high levels of interest as it relates to the success of their SA, but their power seems to be much more peripheral. With the possible exception of few parents/family members who continue to have significant influence over their SAs while in college, much of this stakeholder group's power diminishes once the SAs begin college. The decrease in power sometimes happens naturally between the parent/families and football SAs stakeholder groups, and in other ways is encouraged by WestPenn's policies and practices aimed at supporting student independence and development. Nevertheless, there are opportunities to cultivate stronger relationships and partnerships between the parents/family members and other stakeholder groups.

1.4 Statement of the Problem of Practice

Only 56% of the football SAs who matriculated at WestPenn in the fall of 2019 continued at the institution for a second year, compared to 78% of their non-football peers. Likewise, the national DIII six-year graduate rates for football SAs is 51% (NCAA, 2020-a). WestPenn is losing more football SAs in their first year of college than most DIII institutions lose throughout six

years. Given this disparity, the problem of practice I have chosen to address in this Dissertation in Practice is low first-to-second year retention of football SAs at WestPenn College.

From an institutional perspective, first-to-second year retention has been a persistent challenge negatively impacting WestPenn's graduation rates, morale, reputation, and financial stability. Magnifying this issue is the recent decline of new high school graduates. In the past, although not ideal, WestPenn and other institutions recovered from inadequate retention numbers by recruiting larger cohorts of new students. However, the recent decline in high school graduates, rising costs of education, and other factors have made the admissions market much more competitive for many small, private institutions including WestPenn. To make matters worse, demographic projections reflect a decrease of 15% of high school graduates in this part of the country by 2031 with the most dramatic drop beginning in 2026 (Grawe, 2018). Given the saturation of colleges and universities in this region, WestPenn must adjust strategies to realize sustainable enrollment numbers. Since more than 20% of WestPenn's recent incoming classes have been football SAs, improved retention of football SAs is a worthwhile approach for the institution to increase enrollment and better serve its students.

1.5 Supporting Scholarship and Professional Knowledge

This review examines several strands of scholarship and professional knowledge to establish a conceptual understanding of the ways in which SAs experience college. Given the dearth of research specific to DIII football SAs, elements of literature focused on all college SAs, football SAs from all three of Divisions of the NCAA, and Black men are synthesized to formulate a deeper understanding of how DIII football SAs experience higher education. Next, a combination

of conceptual models and approaches for supporting college SAs' success will be explored to understand existing strategies in this problem space. Finally, I will conclude with a summary of how this review of scholarship and knowledge has informed my thinking and understanding about retention of football SAs at my place of practice/inquiry setting. Together, these sections will create a conceptual foundation for addressing this problem of practice, which again is improved first-to-second year retention of football SAs at WestPenn College.

1.5.1 College Student Athletes

Student athletes engage with, experience, and in some cases, are affected by college differently than the general student body, creating a need for practitioners and policymakers to understand them as a distinct population (Bell, 2009; Comeaux & Harrison, 2011; Gayles, 2009; Gayles & Cradall, 2019). The differences for SAs begin as early as the recruitment and selection process and continue throughout their transition to, and enrollment in college. In addition to the trials associated with transitioning to higher education and balancing the academic and social demands that all students face, SAs must also balance and manage a substantial added layer of demands specifically related to athletics (Comeaux & Harrison, 2011; Gayles, 2009; Gayles & Crandall, 2019; Jolly, 2008). For example, SAs must learn and navigate special sets of rules and regulations governing their participation in collegiate sports (Gayles & Baker, 2015). Likewise, involvement in college athletics also requires SAs to invest considerable time and energy towards practices, trainings, competitions, and other commitments, potentially serving as a barrier to opportunities and services that other students benefit from (Bowen & Levin, 2003, Gayles & Hu, 2009; Jolly, 2008; Wolverton, 2008). Finally, the ways in which SAs view themselves and are treated within the campus community also play a role in their experience. A deeper understanding

of the nuances related to SAs' college experience creates a foundation to support this research project.

1.5.2 Rules & Expectations for Student-Athletes

Unlike the autonomy which most students encounter upon entering higher education, SAs are subjected to an abundance of rules and expectations shaping almost every aspect of their experience in college. The rules and expectations dictate interactions with certain college officials, standards for enrollment, academic eligibility, support services, and even their day-to-day schedules once enrolled at an institution (Jolly, 2008; NCAA, 2019). The rules for SAs are so plentiful that the NCAA produces an annual 30-40 page guide to help students and families understand them, and separate manuals for each of its three divisions with policies filling hundreds of pages and requiring institutions to have dedicated personnel to ensure compliance (NCAA Eligibility Center, 2018). Likewise, individual institutions and conferences also have their own policies SAs must understand and navigate, and coaches set and enforce their own expectations as well. Even though the NCAA (2019) and other stakeholders assert the rules are in place to protect the wellbeing and educational experience of the SAs, scholars have questioned the equity and impact of the policies and governance structures on SAs' educational experiences and outcomes (Comeaux & Harrison, 2011; Cooper, 2016; Harper, 2018).

Some of the most critical reviews of intercollegiate athletics suggest that the system in place creates a negative campus subculture where SAs perform worse academically, are less likely to graduate, cluster in certain majors, and socially segregate from the campus community (Bowen & Levin, 2003; Shulman & Bowen, 2001). Although subsequent research contradicts many of these assertions about SAs as a whole (Gayles & Hu, 2009; Rettig & Hu, 2016; Umbach et al.,

2006), the current rules and structure of NCAA athletics have been found to disadvantage subgroups like SAs in high profile sports (like football and basketball), especially Black men (Harper, 2018). These subgroups are graduating at lower rates, performing worse academically, self-segregating from other campus populations, and making fewer developmental gains as compared to other students (Gayles & Hu, 2009; Rettig & Hu, 2016; Umbach et al., 2006).

Likewise, the constant pushing and pulling SAs experience from the numerous rules and expectations sometimes create divides between their academic and athletic experience, and SAs are stuck trying to fulfill the demands in both realms. College coaches command a great deal of commitment to their sport (Comeaux & Harrison, 2011) and the system of American higher education places greater emphasis on SAs' athletic abilities versus academic abilities (Harrison et al., 2009). The median time football SAs spend on athletics ranges from 28.5 hours per week at the DIII level to 34 hours per week at the DI level (NCAA, 2016), leaving very little time for non-athletic activities including academics. The NCAA's requirement of institutions to provide support services is meant to help address academic challenges and time management for SAs, but advising and support services often focus more on the minimum standard of maintaining eligibility and ignore other important educational goals and outcomes (Bell, 2009; Broughton & Neyer, 2001). Thus, two well intended policies like academic eligibility requirements and the requirement of institutions to provide support, conflict with one another ultimately failing the stakeholders they are meant to serve.

Nonetheless, many faculty, administrators, and members of the general public expect better outcomes (Bowen & Levin, 2003; Shulman & Bowen, 2001). Thus, a heavy burden is placed on SAs to balance rules and responsibilities associated with athletic participation with the demands of the academic experience. While doing so, they are also expected to achieve similar learning and

development gains as their non-athlete peers (Gayles & Baker, 2006; Gayles & Crandall, 2019). The interplay between the rules, expectations, and commitments of SAs (some doing more harm than good) play an integral role in their overall college experience and warrant consideration when working with this population.

1.5.3 Student Athlete Engagement

Research on college student success has consistently supported the claim that students who are actively engaged in educationally purposeful activities, both inside and outside of the classroom, are more likely to persist through graduation and achieve other positive outcomes like better academic performance and developmental gains (Mayhew et al., 2016; Pascarella & Terenzini, 1991, 2005). Based on this understanding and the time constraints and other commitments associated with intercollegiate athletics, scholars have been concerned about whether involvement in athletics limits or prevents SAs engagement in educationally purposeful activities (Bowen & Levin, 2003, Gayles & Hu, 2009; Wolverton, 2008). Recent studies dispel some of these concerns finding that SAs are largely as engaged in educationally purposeful activities, or in some cases more engaged, than their non-athlete peers (Rettig & Hu, 2016; Umbach et al., 2006). Other studies have also connected SA engagement to gains in learning and communication skills and other personal, developmental, and practical competencies (Gayles & Hu, 2009; Rettig & Hu, 2016), which suggests that SA are benefiting from engagement in similar ways as their non-athlete peers. However, discrepancies in the outcomes and levels of student engagement in high-profile and low-profile sports exist (Gayles & Hu, 2009; Rettig & Hu, 2016; Umbach et al., 2006), potentially helping to explain lower success rates among specific populations like football.

Given the positive impact that engagement has on student success outcomes, the consistent gaps in retention and graduation rates of football SAs compared to other students are likely influenced by their limited engagement opportunities outside of football. In studies comparing engagement outcomes of students participating in high-profile sports (i.e., football and basketball) to those in low-profile sports, students in the high-profile category experienced less developmental gains than their counterparts (Gayles & Hu, 2009; Rettig & Hu, 2016). Likewise, the students in high-profile sports also reported significantly less interaction with peers outside of their sport, which is linked to positive self-concept, positive cultural attitudes, and reported gains in learning and communication skills for the SAs in low-profile sports (Gayles & Hu, 2009). Researchers suggest these differences may have to do with the added time commitments and pressures associated with high-profile sports (Gayles & Hu, 2009; Rettig & Hu, 2016), preventing them from the benefits and outcomes of engagement beyond athletics (Harper, 2018). In other words, much of the engagement high-profile SAs are reporting is happening in isolation from other members of the campus population, which could be preventing them from success outcomes like better academic performance and graduation.

Finally, the composition of athletes on high-profile teams may also help explain why their engagement levels and outcomes are different than other groups. Since students of color are overrepresented in high-profile intercollegiate sports (Hartung, 2019; Harper, 2018) and literature supports disparities in access to, and inequities related to the benefits from engagement opportunities for students of color (Brownell & Swaner, 2009; Kuh, 2008; Museus et al., 2019; Seifert et al., 2014), the racial composition likely plays a role in the outcomes for football. Thus, the composition of high-profile sports warrants engagement strategies that address both the cultural needs and backgrounds of its participants, and the unique dynamics of the specific sport.

1.5.3.1 Role Engulfment and Stereotype Threat

The composition of athletes on high-profile teams also factors-in when considering how the SAs perceive and experience their roles in higher education. The emphasis and demands of high-profile sports can result in SAs struggling to balance their dual roles of “student” and “athlete” (Gayles & Crandall, 2019). This struggle can lead to role engulfment - the over-identification with athletic roles and responsibilities at the expense of academic roles and responsibilities (Adler, 1991) – which is most prevalent among Black male athletes (Harrison et al., 2009; Killeya-Jones, 2005; Sturm et al., 2011). Some scholars have attributed the role engulfment of Black male athletes to their socialization from a young age to value sports over academics (Beamon & Bell, 2006; Benson, 2000). Regardless, this is problematic because SAs identifying more as athletes have been found to earn lower GPAs and become disengaged academically on their campuses (Bimper, 2014; Killeya-Jones, 2005), potentially leading to their early withdrawal and/or suspension from college.

Another reason for the higher instances of role engulfment and lower academic success rates among Black SAs might be the stereotype threat they face in college. Stereotype threat is defined as a psychological threat that presents when one is doing something for which a negative stereotype about one’s group applies (Steele & Aronson, 1995). Stereotype threat has been found to create tensions in individual’s cognitive processes, which can impair their ability to operate to their full potential in certain domains (Stone et al., 2012). In the case of SAs, the impairment can occur while performing academic activities due to the “dumb jock” stereotype. The dumb jock stereotype held by some faculty and peers categorizes SAs as having low academic motivation, low intelligence levels, and as being illegitimate students (Gayles & Crandall, 2019; Harrison et al., 2009; Simmons et al., 2007; Stone et al., 2012). Encountering this stereotype in the classroom

may influence SAs to focus more of their attention on their athlete role, a role in which they are accustomed to being perceived more favorably.

By nature of their roles as both athletes and Black men, Black SAs contend with the dumb jock stereotype and the racial stereotype of being “intellectually inferior” afflicting students of color (Bimper et al., 2013; Griffin, 2017; Harper, 2018). The impact of stereotype can also be felt within the context of the Black SAs’ athletic program. For example, Black SAs at a Predominantly White Institution (PWI) reported that the negative stereotypes and perceptions associated with their race resulted in feelings of isolation, rejection, and mistrust toward their teammates and peers, and being unfairly judged by members of the campus community (Melendez, 2008). Undergoing experiences with stereotype threat may be influencing SAs to cope by foreclosing their student-identity and over-identifying with their athlete-identity (Griffin, 2017), which can lead to academic disengagement and ultimately their attrition from college.

1.5.4 Conceptual Models for Student Athlete Success in College

The unique demands, experiences, needs, and outcomes of SAs as compared to the general student population have prompted some scholars and organizations to create conceptual models to better facilitate positive educational and developmental outcomes for SAs. The following sections will review the NCAA’s Challenging Athletes’ Minds for Personal Success (CHAMPS)/Life Skills program (NCAA, 1999), Model of Academic Success for Student Athletes (Comeaux & Harrison, 2011), and the Excellence Beyond Athletics (EBA) approach (Cooper, 2016). Offered in the chronological order of their development, each preceding model implicitly or explicitly builds-upon components and seeks to address limitations of the previous model(s). The linking of these models to the previously reviewed scholarship will provide a conceptual foundation for

establishing interventions aimed at improving or addressing my problem of practice, low first-to-second year retention of football SAs.

1.5.4.1 CHAMPS Life Skills Program.

The Challenging Athletes' Minds for Personal Success (CHAMPS)/Life Skills program was developed by the NCAA in the early 1990s to support development initiatives of SAs and help enhance their college experience. The fundamental belief driving its development was that "excellence is the result of a balanced life including academics achievement, athletic success, and personal wellbeing" (NCAA, 2020-b, para. 2). Oversight of the program came from the NCAA, but members institutions were responsible for implementation at their own campuses. Programming through CHAMPS included academic services, a wide range of personal development programs, career development, community service, and athletic related initiatives. The NCAA supported membership institutions with assessment tools to evaluate the needs of their athletes, program and curriculum guides to help cover the developmental programs, training for athletic staff implementing the programs, and supplemental resources (NCAA, 1999).

CHAMPS is an example of a broad-based programmatic attempt to serve the needs of SAs as a subgroup of the general student body. Some of the program topics and themes are similar to the next two models covered in this review, but the broad nature of CHAMPS also limits its abilities to address the specific needs of sub-populations of SAs. This limitation may have contributed to the NCAA's recent decision to partner with the National Association of Academic Advisors for Athletics to offer oversight and operation of the NCAA's life skills programming. Nevertheless, the CHAMPS program provides insight on what an earlier model for supporting SA success sought to address and strategies used for accomplishing its goals.

1.5.4.2 Model of Academic Success for Student Athletes.

The Model of Academic Success for Student Athletes recognizes the unique characteristics and involvement patterns of SAs and offers a culturally inclusive approach for their success (Comeaux & Harrison, 2011). The model is built upon the hypothesis that “a SA’s academic success will be based primarily on a set of individual characteristics and dispositions, with effects from the social and academic systems” of the college the SA is attending (Comeaux & Harrison, 2011, p. 237). Influenced by Tinto’s (1993) concepts of social and academic integration the model posits integration into the social and academic systems is strongly linked to the SA’s academic success.

Likewise, the model includes the Scholar-Baller (SB) paradigm which uses culturally relevant curriculum and engagement activities to help student-athletes balance and affirm their roles as students and athletes (Comeaux & Harrison, 2011). The model suggests that SAs’ precollege characteristics will interact and influence their goals and commitments to their sport and institution. Then their interactions with the academic and social systems will determine their level of integration, and in turn, influence their goals and commitments. The SB paradigm is implemented as part of the academic and social systems to increase the likelihood of SAs’ integration and academic success (Comeaux & Harrison, 2011).

The SB curriculum seeks “to bridge the gap between education, sports, and pop-culture to help create a new mindset among SAs in terms of their perceptions about education, sports, and career aspirations” (Harrison et al., 2010, p. 860). It also involves the experiences, values, and cultural orientations of SAs to create a learning environment where students can reflect on their lived experiences and engage in consciousness-raising discussions. The program’s focus on balancing student and athlete identity, emphasis on academic and critical literacy development,

and culturally engaging activities seeks to address some of the known challenges cited in the literature on SAs.

1.5.4.3 Excellence Beyond Athletics (EBA).

The Excellence Beyond Athletics (EBA) framework consists of a series of best practices and recommendations for improving the academic achievement and holistic development of Black male SAs (Cooper, 2016). Driving EBA are the goals to empower, educate, and inspire students of color (athletes and non-athletes) to reach their full potential as holistic individuals. EBA is influenced by Tinto's (1993) student integration, Astin's (1993) student involvement, the model of academic success for SAs from Comeaux and Harrison (2011), and critical race theory (Bell, 1980, 1992; Delgado & Stefanie, 2001; Freeman, 1977).

EBA posits that the quality and nature of Black male SAs' experiences and outcomes in college are predicated on three factors: (1) conditions, (2) relationships, and (3) expectations (CRE). The EBA approach does not consider the current gap in educational attainment between Black men and other students as an achievement gap. Rather, it suggests there is a gap in CRE for Black men as compared to their White peers, which creates the conditions for current educational outcomes. Therefore, EBA strategies were developed to change institutional conditions to be more supportive of Black male SAs' holistic development and empowerment (Cooper, 2016). Also, recognizing that the nature and quality of relationships greatly influence identity salience, self-efficacy, general knowledge acquisition and access to opportunities for personal and professional development, EBA strategies attempt to strengthen Black male SAs' relationships with key academic and social role-set members to prevent athletic role engulfment (Cooper, 2016). Likewise, EBA involves the promotion and institutionalization of high expectations for Black male SAs' academic performance and engagement in educationally purposeful activities.

EBA's key components include: (1) self-identity awareness, (2) positive social engagement, (3) active mentorship, (4) academic achievement, (5) career aspirations, and (6) balanced time management (Cooper, 2016). The framework provides a series of practices and recommendations to enhance Black male SAs' experiences, development, and outcomes within the six key components of the model. EBA also puts the onus on the institution to change the nature of conditions, facilitate more positive relationships for community-building and sense of belonging, and enhance academic and educationally purposeful engagement expectations for Black male SAs (Cooper, 2016). The EBA model was developed based on literature and research about Black male SAs, and can be modified and adapted to serve any population based on their specific needs.

1.6 Summary of Review of Scholarship and Professional Knowledge

In addition to the institution experiencing negative consequences due low first-to-second year retention of football SAs, a substantial number of SAs also experience significant setbacks as a result of this issue. Due to their overrepresentation in the sport, Black men are found to be impacted most. The convergence of scholarship, professional knowledge, improvement tools, and institutional context have helped to identify SA engagement and integration, cultural considerations, and issues related to SA identity (i.e., role engulfment and stereotype threat) as potential launching points for interventions aimed at addressing this problem. Likewise, the exploration of existing conceptual models provide insight related to potential intervention strategies.

Research also illuminates existing structures and commitments that serve as barriers for SAs in high profile sports (especially Black men) to experience some of the programs, services, and opportunities that their non-athlete peers benefit from in college (Gayles & Hu, 2009; Rettig & Hu, 2016; Harper, 2018). More specifically, involvement in high-profile sports tends to comprise of more time associated with their sport, and less time spent on academic activities and engagement with students, faculty, and other stakeholders from outside the sport. Time spent on academic activities and engagement with other stakeholders are both linked to positive outcomes like higher academic performance, persistence, and graduation (Mayhew et al., 2016; Pascarella & Terenzini, 1991, 2005), which may create a disconnect for the SAs involved on the football team at WestPenn College.

Nevertheless, the structures and commitments that football SAs, and Black men in particular face, are rooted in the long-established systems of higher education and the NCAA and are not likely to change in the immediate future. Therefore, interventions need to be developed and implemented within the existing constraints, including strategies that connect and involve faculty and non-football peers to existing or new activities of the football team. Together, the scholarship, professional knowledge, and institutional context inspire the following theory of improvement and accompanying change ideas.

2.0 Theory of Improvement & Implementation Plan

Since WestPenn experiences the highest levels of attrition during the football SAs' first year of college, my theory of improvement aims to improve first-to-second year retention of that population. If successful in improving first-to-second year retention, the institution will have more time with the SAs for additional interventions aimed at supporting them through graduation. Therefore, the long-term lagging outcome of increased graduation rates is broken down into shorter-term aims like improved first-to-second year retention, second-to-third year retention, and so on. Once accomplished, each aim stretches to the next level of work.

Given that retention is multifaceted and involves countless variables and potential root causes, my theory of improvement targets drivers believed to have the greatest potential to impact change and is strengthened by concurrent improvement in multiple driver areas. The goal for concurrent improvement in multiple driver areas also suggests the scope of the project requires a team of stakeholders working together to design and implement interventions. A team approach creates additional intervention points, shared workload, and numerous perspectives during Plan-Do-Study-Act (PDSA) cycles. Involving more stakeholders also increases the likelihood of shifting campus culture, increasing awareness of the problem, and widening the sphere of influence in this problem space.

My theory predicts that improvements related to the SAs' holistic identity development, social integration, and academic integration will strengthen their sense of belonging at the institution and increase their likelihood of persisting. The use of the labels "social integration" and "academic integration" does not imply that the students are failing to integrate into the existing cultures. Instead, my theory is an anti-deficit approach (Harper, 2012) and is meant to suggest that

the current system is failing to support the football SAs' sense of belonging in the two institutional sub-systems (i.e., social and academic systems). The following driver diagram (Figure 5) and narrative explain my theory of improvement in more detail.

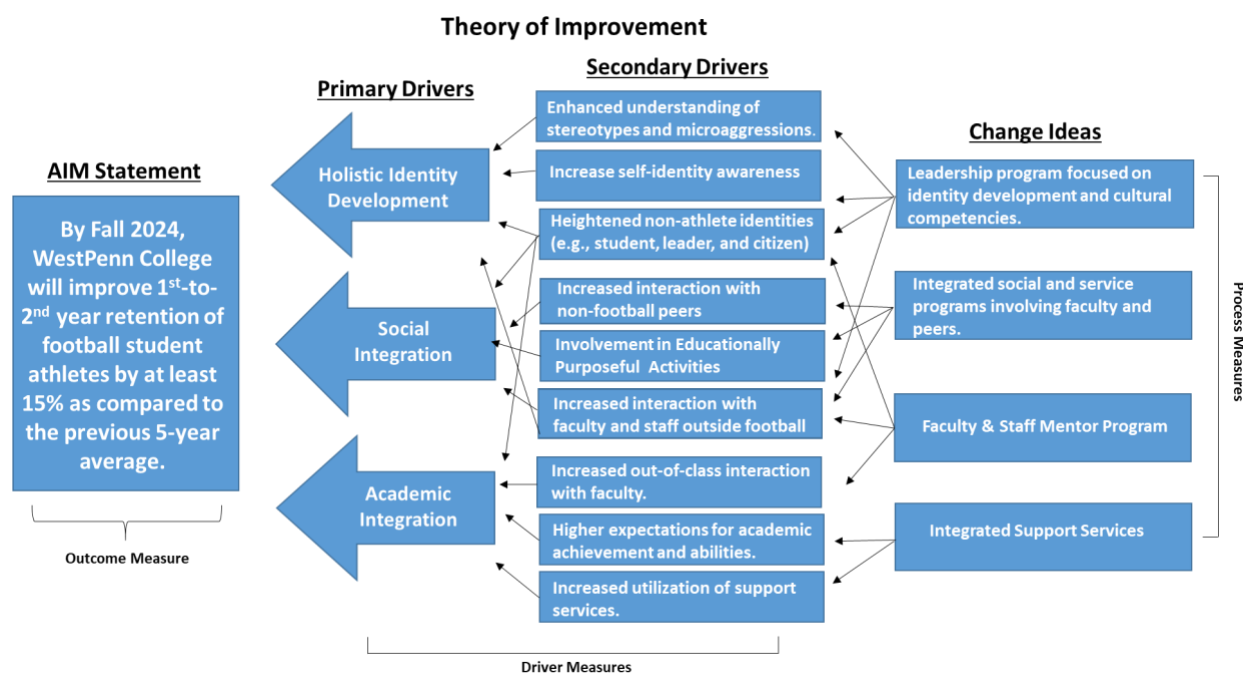


Figure 5 Driver Diagram for the Theory of Improvement on Improving Football SA Retention

As depicted in the box on the left side of the driver diagram in Figure 5, the theory of improvement aims to increase first-to-second year retention of football SAs at WestPenn College by at least 15% as compared to the previous five-year average. The timeframe for the aim is set based on implementation of a change idea and PDSA cycle in the fall 2021 semester, with additional PDSA cycles being implemented in subsequent semesters. As the diagram is read from left to right, the primary and secondary drivers come next and the change ideas follow. The diagram starts with the outcome or aim statement in mind and maps back to leverage points and activities that make-up the improvement theory. Undergirding the change ideas and drivers is the need for culturally relevant interventions, which are considered throughout the design process and measured throughout implementation (i.e., how can we be sure the interventions are relevant to

the population at hand?). Finally, I believe the change ideas associated with the improvement theory are best positioned within the SAs' experience on the football team. Meaning the head coach will endorse and support the interventions as being part of the football program at WestPenn, and the interventions must align to his goals for the team.

2.1 Primary Drivers

Scholarship, research, and improvement science tools have influenced me to identify holistic identity develop, social integration, and academic integration as the three primary drivers for achieving my aim. Although each driver alone can help advance the system towards achieving the aim, improvements in all three categories would likely yield the greatest results. Given some overlap among the three drivers, change ideas can also be developed to impact multiples driver areas.

2.1.1 Holistic Identity Development Driver

The holistic identity development (HID) driver involves building SAs' understanding of multiple aspects of their identity, how their identities intersect, and how they relate to larger communities and/or others. Fostering holistic identity development should help to counter SA role engulfment, – the over-identification with athletic roles and responsibilities at the expense of academic and other roles and responsibilities (Adler, 1991) – which is most prevalent among Black male athletes (Harrison et al., 2009; Killea-Jones, 2005; Sturm et al., 2011). Some scholars have attributed the role engulfment of Black male athletes to their socialization from a young age to

value sports over academics (Beamon & Bell, 2006; Benson, 2000). Current local and national outcomes suggest the existing macro- and micro-systems are likely reinforcing or failing to prevent athletic role engulfment and associated negative outcomes.

HID should enhance football SAs' holistic consciousness (Cooper, 2016). By doing so, the football SAs will be empowered to view themselves and engage in multiples roles within the campus community and better connect or integrate with the social and academic systems within WestPenn. As part of their engagement with different identity roles, football SAs will be encouraged to set goals and identify activities for strengthening each role. The HID interventions should also help football SAs recognize barriers to their goals and determine strategies to eliminate or navigate those barriers. Examples of strategies for addressing barriers include taking advantage of support services, engaging in help-seeking behaviors, and planning experiences to build upon their individual strengths and interests.

2.1.2 Social Integration

The *Social Integration* driver is focused on the football SAs' sense of belonging within the social system of WestPenn and beyond football. Creating conditions where football SAs develop meaningful interpersonal relations with other campus stakeholders (e.g., non-football peers, faculty, and staff) should create additional "hooks" or connections to the institution. The connections serve as a layer of protection for both the student and institution if the SA's experience with football is not satisfying and/or is terminated for some reason (e.g., due to injury, suspension from the team, or voluntary discontinuation). By forming relationships with other stakeholders, the SAs benefit from additional networks of support and involvement within the system. Social

integration also involves the football SAs feeling supported and valued by the campus community and recognizing their role and position within the social system.

In turn, positive social integration should result in strengthening football SAs' commitment to the institution and its community. By strengthening their commitment to the institution, the football SAs' motivation to remain enrolled at the institution is heightened, which increases the likelihood of realizing the aim. Social integration is also closely connected to the third driver, academic integration, and improved integration within each sub-system (i.e., social and academic) can be accomplished using similar strategies.

2.1.3 Academic Integration

The *Academic Integration* driver involves the football SAs' perceived connection to the academic system of the College. Academic integration includes understanding paths towards degree completion, setting goals, and working towards goals to make academic progress, utilizing support services needed to succeed academically, and/or having meaningful interactions with faculty and staff inside and outside of the classroom. Creating conditions that help football SAs feel a sense belonging in the academic system will likely increase their performance and commitment towards degree completion. In turn, improvement should help to achieve the aim by reducing suspensions or withdrawals due to low academic performance or interest, and by establishing relationships with stakeholders outside of the football program.

2.2 Secondary Drivers

The secondary drivers in Figure 5 include elements needed to achieve improvement in the primary driver areas. The secondary drivers are isolated components of the primary drivers that have the most potential for impact. Like the primary drivers, each secondary driver alone can impact change, but impact is more profound when multiple secondary drivers are achieved.

2.2.1 Holistic Identity Development (HID) Secondary Drivers

The secondary drivers for HID infer that increasing football SAs' self-identify awareness, enhancing their non-athlete identities (e.g., student, leader, and citizen), and enhancing their understanding of stereotypes and microaggressions will increase their holistic identity development. You can also see from the arrows on the driver diagram in Figure 5 that the secondary drivers can also impact more than one primary driver in the theory of improvement. For example, heightened non-athlete identity can improve the social integration and academic integration drivers along with the HID driver.

2.2.2 Social Integration

The secondary drivers for social integration are focused on the football SAs' social relationships and experiences. Consistent with the literature on student engagement and success, the secondary drivers infer that interpersonal relationships with non-football peers, faculty, and/or staff will improve their social integration. Likewise, specific experiences like educationally purposeful activities (e.g., service learning or student-faculty or student-peer interaction on

substantive topics) have greater potential for positive outcomes (Mayhew et al., 2016; Pascarella & Terenzini, 1991, 2005).

2.2.3 Academic Integration

The secondary drivers for academic integration also include out-of-class interaction with faculty (a secondary driver for two primary drivers), higher expectations for academic achievement and abilities, and utilization of support services. If improvement is achieved in these areas the football SAs will have formed interpersonal relationships with faculty or staff members, demonstrate an understanding of what is required to progress academically and ways to achieve it, and/or engage with support services when necessary or helpful.

2.3 Change Ideas

The driver diagram includes several change ideas believed to be the most likely to have a more immediate impact on the various drivers. Given the time constraints associated with SAs' involvement in football and my inability to reduce those commitments, I believe it is best to position the change ideas within the football program itself. The faculty and staff mentor program for example, is required and supported by the head coach. The program builds-upon the coaches existing practice of having his SAs interview faculty and staff members in an effort to help build connections between the players and other stakeholders. Interactions between the SAs and mentors are also encouraged to take place during a campus-wide community hour, which was developed as a designated time each week throughout the academic year where no classes, large meetings,

and/or events are scheduled to allow for individual or small group interactions between students, faculty, and staff. This approach engages students within the program they are already motivated to be engaged (i.e., football), is encouraged to take place during a timeframe already open for the SAs and mentors, and supports all three of the secondary drivers in the theory of improvement.

2.4 Improvement Systems Measures

Numerous systems measures are needed to ensure progress towards the lagging outcome measure or aim (i.e., improved first-to-second year retention). Appendix A of this DIP provides a table of process and driver measures for each change idea. In considering the faculty and staff mentor program, a mentor session worksheet was used for the first meeting as a process measure to be sure the interventions is being implemented and received as expected. Whereas driver measures include pre- and post-surveys, focus groups, and institutional data such as grade reports, involvement records, and semester retention results. The driver measures inform us whether the system is moving in the right direction as a result of the interventions. If successful, the change idea will accomplish the outcome measure, which is improved first-to-second year retention of football SAs at WestPenn College.

Finally, it is important to track balance measures for all interventions. These measures gauge the impact on the overall system to be sure the interventions do not create other issues or imbalances to the system. Balance measures for the following change idea will include satisfaction questions on the post-survey and during the focus groups for SAs to determine whether they see value in the activities associated with the intervention and semi-structured interviews with faculty

and staff mentors. In addition to knowing how the change idea is received by the football SAs, I want to be sure the faculty and staff feel their time and resources are being used effectively.

2.5 Proposed Intervention/Change Idea

The change idea implemented for this DIP was a faculty and staff mentor program that paired each first-year football SA with a member of the WestPenn's faculty or staff who was recruited and trained to serve as a mentor. This intervention enhanced the existing practice implemented by the head coach, which requires the SAs to interview current members of the faculty and staff to help build relationships with stakeholders outside of football. The faculty and staff mentor intervention was created to continue to accomplish the benefits of the initial interaction and interview already occurring as part of the football program, while also increasing the frequency of interactions to develop deeper relationships between the SAs and mentors over time. The mentor program also involved prompts for the mentors to encourage behaviors and activities aimed at strengthening football SAs' engagement and integration at the College (e.g., campus involvement, utilizing campus services, and connecting with non-football peers, faculty, and staff). The faculty and staff mentor program was implemented as a PDSA cycle for this DIP.

2.6 Plan-Do-Study-Act (PDSA) Cycle

As illustrated in Figure 5, the faculty and staff mentor program change idea was conceived with the primary purpose of impacting the *Social Integration* and *Academic Integration* drivers.

By improving social and academic integration, the SAs should also perceive an increased sense of belonging at the institution and outside of football. Although not measured as part of this DIP, it is also likely that the interactions with the mentors will positively impact the *Holistic Identity Development* driver. For the purpose of this DIP however, the following inquiry questions were formulated to understand how the faculty and staff mentor program influences sense of belonging, how much the football SAs value a relationship with a faculty or staff mentor, and whether outcomes of the program differ among sub-populations of football SAs.

1. How receptive will football SAs be to having a mentee-mentor relationship with a faculty and staff mentor who is not a coach?
2. To what extent will football SAs' perceived sense of belonging at the institution change after working with an assigned faculty or staff mentor?
3. To what extent will football SAs' social and academic integration behaviors and outcomes differ based on their level of engagement with an assigned faculty or staff mentor?
4. To what extent will football SAs feel that it was helpful to have a faculty or staff mentor who is not a coach, and feel that their mentor genuinely cares about their success?
5. In what ways do outcomes from the mentor program differ between students who identify as Black or African American and those who identify as White?

2.6.1 Plan Phase

Working with the head football coach, ten faculty and staff mentors were recruited to participate as mentors. The mentors received a brief training that included an introduction to the various topics shared in the previous review of scholarship and professional knowledge,

institutional and national data related to the problem of practice, and learnings from the empathy interviews and root cause analysis. Upon completion of the training, the mentors were paired with a group of 4-6 football SAs to serve as their mentor. Next, mentors were asked to meet with their mentees 1-2 times a month, follow prompts provided by me, and behave in ways typical of a mentor-mentee relationship. The mentors were also asked to attend at least one of the football SAs' competitions and/or athletic activities and engage with their mentees in other ways if possible (e.g., have lunch with them, introduce them to other stakeholders, and attend campus together).

All first-year football SAs were encouraged by their coaches to participate in the mentor program as part of their involvement on the team. Football SAs were provided an initial worksheet with questions to help them to begin establishing a relationship with their mentor during their first meeting, and asked to submit their worksheets to their coaches after the first mentor meeting. Coaches were also asked to engage in a dialogue with their SAs about their interactions with their mentor.

The first mentor session focused on the mentors and mentees getting to know each other and beginning to establish their relationship. Learning from the head coach's previous practice of requiring football SAs to interview a member of the faculty or staff, mentors were encouraged to meet with two mentees at a time for the initial mentoring session(s). The practice of meeting with two mentees at a time was encouraged to help the SAs feel more comfortable by having another SA who they already knew involved in the initial relationship-building process with their mentor. Meeting with multiple mentees for some of the sessions also reduced the time commitment of the mentors, making the project more manageable in relation to their other work. After the first 1-2 sessions, mentors were encouraged to schedule individual sessions with the SAs if they felt sufficient rapport was established and if their work schedule allowed for individual meetings.

By creating space within the football experience for SAs to engage with stakeholders outside of football, being intentional about what happened during those interactions, and assisting SAs with the process of forming mentor-mentee relationships, the mentor program sought to create conditions that better support the SAs' integration into the social and academic sub-systems at WestPenn. In turn, improving the SAs' social and academic integration was supposed to strengthen their sense of belonging at WestPenn, and increase their likelihood of persisting.

2.6.2 Do Phase

All first-year football SAs who were currently on the team served as the sample group for this DIP (n=47) and were divided-up and paired with a faculty or staff mentor. Mentors were paired with 4-6 mentees. The SAs were asked to participate in a pre-survey and received a mentor session worksheet with prompts to ask questions about their mentor's position, hobbies and interests, and personal background, and instructed to reach out to their mentor to schedule an introductory meeting/mentor session. All SAs and mentors were encouraged to meet during the institution's community hour whenever possible (Tuesdays between 11am – 12pm). The community hour is a time the College has free of classes and large meetings each week throughout the semester, which provides opportunities for faculty, staff, and students to engage in other activities during that time.

After the first mentor session, SAs and mentors were instructed to schedule at least 1-2 mentor sessions a month (at least four total) throughout the remainder of the fall semester and through the first two months of the spring semester (i.e., an approximate 90-day iteration period). SAs and mentors were provided worksheets with prompts for the first session, and SAs were asked to complete and submit their worksheet within a week following their first meeting. SAs were also encouraged to go to their mentor for help with any aspects of their experience at WestPenn.

Mentors were encouraged to attend at least one of the SAs' athletic competitions or activities, and engage with the mentees in other ways (e.g., share lunch together, invite them to a campus event or activity, or introduce them to other stakeholders or support offices). Appendix B of this DIP includes a sample of the first mentor session worksheet provided to the football SAs, and Appendix C includes a sample of the prompts provided to the mentors for their first meeting(s) with their mentees and for the first meeting once the mentees arrived back from winter break.

Based on the timeframe for the overview and IRB processes for this DIP, the intervention began after 70% of the team's competition was complete. Important for understanding the context of the intervention, the team had not won a single game the entire season. Additionally, the head coach resigned after the season and during the intervention, which resulted in me working with three different head coaches during this iteration of the intervention (i.e., previous head coach, interim head coach, and new head coach). Finally, the iteration period was also extended further into the spring semester due the College delaying the start of the semester for health and safety reasons related to the COVID-19 pandemic; meaning the intervention began in late October and concluded in March.

2.7 Methods

Utilizing a mixed-methods approach, qualitative and quantitative data was collected throughout and following the implementation of the mentor program using a variety of tools to measure both leading and lagging outcomes. Quantitative data are presented primarily using what Schuh et al (2016) identify as descriptive statistics. Qualitative data was coded, organized into

relevant categories, and presented accordingly. The following sections include a description of the participants and the various data collection, analysis, and presentation methods for this DIP.

2.7.1 Participants

All first year SAs who were currently involved on the WestPenn football team served as the participants in this study. The size of the sample group was 47 participants. The sample group is primarily male students (with exception of one female participant) with ages ranging from 18 – 20 years and the average age being 18 years. The average high school grade point average of the participant group is 3.09. The racial/ethnic demographics of the team include approximately 53% of participants identifying as White, 33% Black or African American, 5% two or races, 2% American Indian or Native Alaskan, 2% Hispanic, and 4% whose race/ethnicity is unknown. In addition to studying whether the intervention worked for the entire participant group, this first iteration also focused on outcomes for Black or African American first year football SAs as compared to their White peers.

2.7.2 Faculty and Staff Mentors

The faculty and staff mentors who participated in this study were all full-time employees of WestPenn College. The mentor group included three full-time faculty members, three staff members who also serve as adjunct faculty members, and four staff positions (one of whom serves as a member of the College's executive leadership team). Of the ten mentors, six identify as White men, three as White women, and one as a Black woman. In addition to trying to recruit a diverse group of participants, the faculty and staff mentors were also recruited based on their previously

demonstrated abilities to develop close working and/or mentorship relationships with diverse student populations, experience working specifically with student athletes, and/or other characteristics that aligned well with the intervention goals. I also consulted with other leaders at the institution to identify potential mentors who have a good disposition for mentoring students.

Prior to serving as a mentor, each participant met individually or in small groups with me to receive training about the mentor program. The training included a description of improvement science methodology, the framing of the problem of low football retention and graduation rates (emphasizing its impact on Black men in particular), findings from my investigation of the problem (in the macro and local systems), the change theory, and a description of the mentor program/change idea for this DIP. I also discussed minimum and desired expectations for each mentor, and provided examples of potential strategies for helping with social and academic integration at WestPenn.

2.7.3 Pre-Survey for Football SAs

Prior to participating in the mentor program, all first-year football SAs were asked to complete a pre-survey. Of the total sample group of 47 participants, 46 completed the pre-survey. The pre-survey questions found in Appendix D included a series of 5-point Likert questions measuring SAs' receptiveness and commitment to having a faculty or staff mentor who is not a coach and their current sense of belonging at the institution. The survey was developed using Qualtrics®, and the sense of belonging scale imbedded in the survey comes from a scale developed by Imperial College London (2021), which is an adaptation of the Harvard-Panorama Student Perception Survey Scale on Sense of Belonging (Gehlbach, 2015) and Yorke's (2016) sense of belonging in higher education. Results from the pre-survey were later compared to post-survey

data to determine the extent in which mean responses to questions about receptiveness and commitment to having a mentor and/or to the sense of belonging scale changed after the intervention. The pre- and post-survey data and analysis are used to answer Inquiry Questions 1 and 2 for this DIP, and used in combination with other data to help answer Inquiry Question 3.

In addition to the Likert questions, the survey also asked participants to indicate which race/ethnicity they most identify with. The race/ethnicity question allowed me to analyze the data for differences in outcomes among different populations. The analysis of data based on race/ethnicity is used to answer Inquiry Question 5.

2.7.4 Post-Survey for Football SAs

After participating in the mentor program, all first-year football SAs currently involved on the team were also provided a post-survey to complete. Of the sample group of 47 participants, 21 completed the post-survey. The post-survey questions found in Appendix E included the same questions as the pre-survey, and additional 5-point Likert questions to understand the SAs' relationships with their mentors, frequency of interactions with mentors, and perceptions of the overall mentor program. The post-survey also includes two open-ended qualitative questions to allow for additional feedback related to their relationship with their mentors and their perceptions of the mentor program. As a result, both quantitative and qualitative data were collected from the post-survey. The additional questions about the football SAs' relationship with their mentor along with some of the qualitative data is used to help answer Inquiry Question 4 (as described in more detail in the data analysis section of this DIP).

2.7.5 Focus Groups with Football SAs

Three focus groups involving a total of 17 football SAs (i.e., 3 for the first group, 9 for the second group, and 5 for the third group) were conducted after the first iteration of the mentor experience was completed. The focus groups lasted approximately 40-50 minutes, and each was recorded, transcribed, and coded into relevant categories. Focus group questions were developed to better understand football SAs' perceptions of their relationship with their mentor, frequency of interactions with their mentors, and feedback on the overall mentor program. Data from the focus groups are used to help answer Inquiry Questions 1-4.

2.7.6 Institutional Data

Institutional data in the form of grades, social participation levels, and retention records were also used to determine levels of academic and social integration of football SAs, and measure potential impact of the intervention. The institutional data collected for this DIP are quantitative and were collected through the institution's student information system (Power Campus). The institutional data were used to help address Inquiry Questions 3 and 5.

2.8 Data Analysis Plan

All quantitative data were entered and arranged into an excel spreadsheet with individual data linked to each participant first using the participants' institutional student identification number to match and organize data across collection tools, and later recoded to protect the

identities of participants. The data were then organized and analyzed using descriptive statistics. The survey data are presented in tabular form in the results section of this DIP with pre- and post-survey frequencies, means, standard deviations, and differences between the two scores for each survey item. I also used Cronbach's alpha to measure internal consistency for the pre- and post-intervention scales.

Institutional quantitative data are also presented in the results section of this DIP using tables and figures to compare mean GPA scores, percentages of students involved in organizations other than football, and percentages of students who persisted at the institution from their fall-to-spring semester. This information was analyzed to determine whether or not there are differences between students who participated in meeting with their mentors and students who didn't. For example, the data were analyzed to determine if there is a correlation between engagement in the mentor program and higher 1st-to-2nd semester persistence rates, higher fall semester GPA, and participation in non-football campus clubs or organizations.

Qualitative data were collected through open-ended and reflective questions from the football SA post-survey and focus groups, and transcribed for analysis. The transcriptions underwent initial rounds of *in vivo* coding to condense excerpts into smaller meaning units that preserved the spoken language, main concepts, and perspectives expressed by participants (Saldaña, 2015). After establishing the condensed meaning units, codes were developed for each meaning unit, and related codes were grouped together based on content and context to form categories and themes. Table 1 includes examples of how initial meaning units were coded, categorized, and themed. I also performed a round of pre-coding, to identify and organize participant quotes that the researcher may decide to call-out in the DIP (Layder, 1998). Assertions

about the data are described separately and in combination with the quantitative data to establish and present a richer understanding and response to Inquiry Questions 1-4 of this DIP.

Table 1 Examples of How Meaning Units Lead to Themes

Meaning Unit	Code	Category	Theme
"Mentors recommending that we use support services really helps."	Encouraged Support Services	Mentor Integration Actions	Mentors connected football SAs to campus.
"It was nice to have someone outside of everything [football and classes] to go to"	Someone to Go to	Mentor Impact	Mentors became "their people"
"Mentors should keep following-up if their students don't respond to their first attempts [at scheduling a meeting]"	Be Persistent	Student Advice	Mentors should not give-up on trying to form a relationship

2.9 Predicted Outcomes

Because the intervention was supported by coaching staff and implemented as part of the football program, I predicted the majority football SAs would indicate that it is "important" or "very important" to have a faculty or staff mentor who is not a coach, and that they are "very committed" or "extremely committed" to building a mentor-mentee relationship with the faculty or staff member who is paired with them. I also believed the majority of football SAs who regularly participated in the mentor program would report on the post survey that they “agree” or “strongly agree” that it was helpful to have a mentor who is not a coach, that their mentor genuinely cared about their success, and that they value spending time with their mentors. Likewise, that football

SAs who participate in the focus groups about the mentor experience would also identify specific actions or behaviors their mentors did to express their care for their mentees.

In terms of the football SAs' sense of belonging, I predicted that the mean scores from the sense of belongingness survey questions (or overall sense of belonging) would increase after the intervention. Accordingly, I also believed that at least 60% of football SAs who regularly participate in the mentor program will indicate that they are "quite happy" or "extremely happy" with their choice to be a student at WestPenn College.

Likewise, I believed that the football SAs who regularly participate in the mentor sessions would also be more likely to engage in behaviors and accomplish outcomes that reflect higher levels of integration into the social and academic sub-systems of the College. This was measured by the institutional data on grades, social involvement, and retention. I predicted that the football SAs who more regularly engage in the mentor sessions (i.e., attend the sessions and interact with their mentor) were also more likely to achieve a higher first semester GPA, participate in activities and organizations outside of football, and persist from their first-to-second semester at a higher rate. Based on this intervention taking place during the football SAs' competition season when demands on their time from the sport is greatest, I also predicted participation in social activities and organizations outside of football would be impacted the least of all the integration categories.

Finally, in comparing outcomes between different populations of football SAs based on their racial identity, I believed there will be differences in outcomes between football SAs who identify as White and football SAs who identify as being Black or African American. Although I believed the mentor program would help to improve social and academic integration and sense of belonging for both groups, I predicted there would still be a gap in outcomes for Black or African American football SAs as compared to their White teammates. Since WestPenn College is a

predominately White institution and the racial demographics of the mentor population (i.e. faculty and staff) do not align with team demographics, I believed higher levels of integration and sense of belonging would be more difficult to achieve with the Black football SAs. The data analysis provided the opportunity to test that hypothesis, and identify future implications.

3.0 PDSA Results (Study Phase)

The purpose of the study phase for this DIP was to measure how receptive football SAs are to having a faculty or staff mentor who is not a coach, and how the faculty and staff mentor program influences integration behaviors and outcomes, sense of belonging, and whether outcomes of the program differ among football SAs who identify as Black or African American and those who identify as White. Using pre- and post-intervention survey, focus group, and institutional data, the following inquiry questions were analyzed:

1. How receptive will football SAs be to having a mentee-mentor relationship with a faculty and staff mentor who is not a coach?
2. To what extent will football SAs' perceived sense of belonging at the institution change after working with an assigned faculty or staff mentor?
3. To what extent will football SAs' social and academic integration behaviors and outcomes differ based on their level of engagement with an assigned faculty or staff mentor?
4. To what extent will football SAs feel that it was helpful to have a faculty or staff mentor who is not a coach, and feel that their mentor genuinely cares about their success?
5. In what ways do outcomes from the mentor program differ between students who identify as Black or African American and those who identify as White?

3.1 Football SAs' Receptiveness to Mentorship

Football SAs' pre- and post-intervention survey data related to receptiveness and commitment to a faculty or staff mentor who is not a coach is shown in Table 2 below. Data from the survey are coded with 5 representing the highest level of survey responses (i.e., 5 is the highest level of importance and commitment respectively), and 1 representing the lowest levels of responses. Based on the means of participant responses, football SAs' feelings towards the importance of having a mentor increased from a "neutral" level (i.e., 3.0 range) of importance to the level of "very important" (i.e., 4.0 range) after the intervention. The "neutral" level of importance from the pre-survey results was lower than I predicted. However, as I predicted, level of commitment to the mentor relationship was high or "very committed" (i.e., 4.0 range) at the onset of the intervention and also increased slightly after the mentor program had been implemented.

Table 2 Football Student Athlete Pre- and Post-Intervention Mentor Questions

Question Category	Pre-Intervention Data					Post-Intervention Data					
	N	Min.	Max.	Mean	SD	N	Min.	Max.	Mean	SD	Change
Importance of having a mentor	46	1	5	2.98	1.09	21	1	5	3.43	0.93	0.45
Level of commitment to mentor relationship	46	1	5	3.33	0.94	21	1	5	3.67	0.97	0.34

Additional qualitative data supporting receptiveness and commitment to having a faculty or staff mentor who is not a coach surfaced through focus groups and the post-survey open-ended responses. In discussing whether or not to continue the faculty or staff mentor program, 100% of focus group participants suggested that WestPenn continue the program. The majority of participants verbally suggested program continuation (10 occurrences) and all others nodded in

agreement with their peers' sentiments. When asked for suggested improvements to the program, two football SAs who participated in the focus groups suggested that WestPenn extend the mentor program to more students (beyond first-year football SAs), and as captured in the following comment, others expressed a desire to have their mentor throughout their entire time at WestPenn. "I think that the only thing that would really make it [the mentor program] better, is that that we stay in these randomized groups and stay with these mentors...throughout our whole time here."

3.2 Football SAs' Sense of Belonging

Football SAs' pre- and post-intervention survey data related to the belongingness scale are shown in Table 3 below. Overall belongingness scores were relatively high at the onset of the intervention, and increased (represented by a 0.73 change) after the intervention. In checking for internal consistency, the pre-scale shows strong internal consistency with a Cronbach's alpha of .861 and the post-scale shows acceptable consistency with a Cronbach's alpha of .712 (with no improvements by dropping any single item for either scale). The alpha coefficient is likely lower for the post-scale because there were fewer cases. An exploratory factor analysis was also conducted to see if scales appear to represent a single factor. The pre-scale appears to have a single factor. The post-scale shows potentially two factors, with items two and three (how connected do they feel to faculty and staff and how welcoming they have found the college) loading separately from the others. However, the possible difference is not worth pursuing given such a small dataset. Consistent with the my predictions, the overall pre-to-post change was substantial and in the expected direction.

Table 3 Football Student Athlete Pre- and Post-Intervention Belongingness Questions

Question Category	Pre-Intervention Data					Post-Intervention Data					Change
	N	Min.	Max.	Mean	SD	N	Min.	Max.	Mean	SD	
How well do people understand you?	46	1	5	2.76	1.1	21	1	5	3.57	0.87	0.81
How connected to you feel to the faculty and staff?	46	1	5	2.83	0.9	21	1	5	3.48	0.75	0.65
How welcoming <u>have</u> you found the college?	46	1	5	3.83	0.9	21	1	5	4.43	0.60	0.60
How much respect do students show towards you?	46	1	5	3.39	0.9	21	1	5	4.00	1.05	0.61
How much respect do faculty and staff show towards you?	46	1	5	3.54	0.9	21	1	5	4.24	0.77	0.70
How much do you matter to others at the college?	46	1	5	3.09	1.1	21	1	5	3.57	0.68	0.48
How happy are you with your choice to be a student here?	46	1	5	3.48	1.3	21	1	5	4.10	1.00	0.62
Overall Belongingness	46	1	5	3.27	0.7	21	1	5	4.00	0.50	0.73

Qualitative data from focus group interviews and open-ended survey questions also confirm faculty and staff mentors were speaking with football SAs about their transition to college, meeting stakeholders outside of the football program, and utilization of social and academic support services. The mentors were also encouraging students to get involved in other activities in addition to football. Transcript data included 22 occurrences of football SAs describing conversations with their mentor and/or the actions their mentors took to help the SAs with their social and/or academic integration at WestPenn, leading to an overall theme of “mentors connected students to campus” surfacing from the data. One student expressed, “My mentor was interested

in my academic success, encouraged me to use resources, and offered me help” while sharing about meetings with his mentor. Another stated that the “mentor is a bridge to the rest of the school.”

3.3 Football SA Integration Behaviors and Outcomes

Inquiry Question 3 of this DIP sought to determine the extent in which football SAs’ social and academic integration behaviors and outcomes differed based on their level of engagement with an assigned faculty or staff mentor. As a result, I used institutional data to determine fall semester GPAs, involvement in clubs or organizations other than football, fall-to-spring retention with the football program, and fall-to-spring retention at the institution, and compared this data between students who participated in the mentor program and those who didn’t. I also used data collected from the post-survey and the faculty and staff mentors to determine the students’ levels of engagement in the mentor program.

Of the 47 students who originally agreed to participate in the program, 31 (approximately 66%) followed through with meeting with their mentors. For the purpose of data analysis and reporting, the sample subgroup of 31 who participated with their mentors are referred to as “participants” and the 16 who did not participate are referred to as “non-participants” in subsequent tables and reporting. A comparison of the samples’ average fall semester GPA is shown in Table 4 below. On average, participants in the program earned a GPA of 0.7 points higher than non-participants.

Table 4 Mean Fall GPA Comparison

Population	Mean Fall Semester GPA
Participants	2.8
Non-Participants	2.1
Difference	-0.7

Data related to the students' involvement in campus clubs or organizations other than football was also gathered and compared between football SAs based on their participation level with the mentor program. Table 5 shows a comparison of the percentage of the participant and non-participant groups involved in at least one other campus club or organization according to the available institutional data. Students who participate in the mentor program were 2.5 times more likely to join a campus organization other than football.

Table 5 Comparison of Football SAs' Involvement in Clubs or Organizations other than Football

Population	% Involved in a Campus Club or Organization
Participants	30%
Non-Participants	12%
Difference	(-18%)

I also looked at data related to participant and non-participant fall-to-spring retention at the institution and with the football program. The cluster column chart in Figure 6 provides a comparison of first-to-second semester retention rates for participants and non-participants at the institution. Consistent with my predictions, students who participated in the mentor program continued at the institution for their spring semester at a rate of 81%, compared to a 56% retention rate for non-participants (25% difference). In terms of retention to the football program, the percent remained at 81% for the participant group while declining to 50% for the non-participant group.

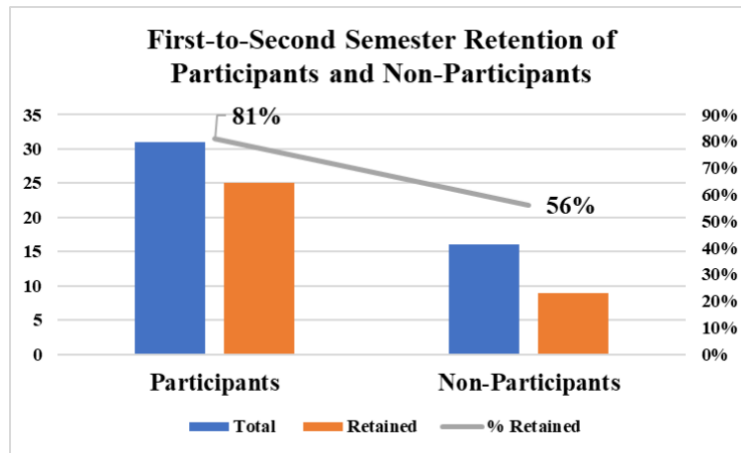


Figure 6 Comparison of Participant and Non-Participant Retention Rates at the Institution

Since theory of improvement's aim is to increase first-to-second year retention of football SAs by at least 15% more than the previous 5-year average at WestPenn, I also collected football SA first-to-second year and semester retention data from that timeframe. Table 6 provides the percentage of students who retained from first-to-second semester and first-to-second year for the past five cohorts (i.e., 2016-2020), first-to-second semester retention of the cohort from this study (i.e., cohort 2021), and a 5-year average for each category (excluding the cohort 2020 results because they have not yet been determined). The participant group in this study realized a first-to-second semester retention rate of 72%, one percentage point higher than the previous 5-year average. While not illustrated in the table because their second year has not yet begun, 62% are registered to return to campus for their second year.

Table 6 WestPenn Previous 5-Year Football SA Retention Data

Cohort	% Persisting to 2nd Sem.	% Persisting to 2nd Year
2016	60%	28%
2017	78%	36%
2018	60%	42%
2019	83%	58%
2020	73%	54%
2021	72%	TBD
5-Yr. Ave.	71%	44%

3.4 Football SAs' Perceptions of their Mentor

Inquiry Question 4 sought to determine the extent football SAs felt it was helpful to have a faculty or staff mentor who is not a coach, and felt their mentor genuinely cares about their success. Three Likert-type statements about how helpful football SAs found it was to have a mentor who is not a coach, their perception of whether their mentor genuinely cares about their success, and whether they valued spending time with their mentor were included in the post-intervention survey. Data from the football SAs who completed the questions is shown in Table 6 below. Mean scores for all three statements indicate high levels of agreement with the statements, with majority of survey participants responding with “agree” or “strongly agree” for each statement. This finding is consistent with the researcher’s predictions, and supported by qualitative data from this study.

Table 7 Post-Intervention Survey Responses to Questions about Football SAs' Perceptions of their Mentor

Likert-Type Statement	N	Min.	Max.	Mean	SD
It was helpful having a mentor who is not a coach.	16	1	5	3.65	1.25
My mentor genuinely cares about my success at the college.	16	1	2	4.50	0.52
I value spending time with my mentor.	16	1	5	3.75	1.13

While sharing about their experience with their mentors in the focus group interviews and on the open-ended questions as part of the post-intervention survey, students commented frequently about how “nice” it was having a mentor. Students shared comments like “it was good having a person you can talk with and open-up to on-campus” and “it was nice to have an adult on-campus to go to and talk to if you have an issue.” Statements about how much the football SAs appreciated their mentors emerged to form the theme “Mentors became *their people*.” The use of the words “their people” to describe the students’ relationship with their mentor comes from a term that the institution’s Vice President for Academic Affairs often uses to describe individuals who students form the closest relationships with and will go to for support. One student described his mentor by saying “my mentor has become one of my closest friends on campus,” and another by sharing “the mentor was a safe space for me.” The word cloud in Figure 7 illustrates statements the football SAs made about their relationship with their mentors, presenting words used more frequently in larger font size.

compared to football SAs who identify as White. I predicted that the mentor program would help to improve social and academic integration and sense of belonging for both populations, but a gap in outcomes would remain for Black or African American football SAs as compared to their White teammates. Institutional data, post-intervention survey data, and participation reports from the faculty and staff mentors were used to respond to this question.

The first piece of data I looked at related to this inquiry question was participation rates in the mentor program. Participation rates with the program was viewed as an indicator of receptiveness to having a faculty or staff mentor who is not a coach, and I predicted that receptiveness would be negatively impacted for Black or African American football SAs due to the lack of representative racial diversity among the faculty and staff mentors. As shown in Table 7 below, 53% of football SAs who identified as Black or African American participated in meetings with their mentors as compared to 69% of their White football SA peers (a difference of 16%). The lower participation rates among Black or African American football SAs support my initial prediction.

Table 8 Participation Comparison between Black or African American and White Football SAs

Racial Identity	Participant	Non-Participant	Total	% Participation
Black or African American	8	7	15	53%
White	18	8	26	69%
<u>Difference</u>	<u>10</u>	<u>1</u>	<u>11</u>	<u>16%</u>

Next, I analyzed the fall semester GPA results of Black or African American football SAs in comparison to those of their White peers. As shown in Table 8, I compared the differences in GPA results between participants and non-participants within each population, and the differences between participants and non-participants across the two populations. Participants within both populations achieved a higher GPA than the non-participants in their identity population by

approximately 0.5 points. However, participants and non-participants who identified as White achieved on average more than 1.0 points higher than their peers in the Black or African American population.

Table 9 Comparison of Fall Semester GPA Results for Black or African American and White Football SAs

Racial Identity	GPA of Participants	GPA of Non-Participants	Difference
Black or African American	2.00	1.53	0.47
White	3.11	2.55	0.56
Difference	-1.11	-1.02	-0.09

In analyzing involvement data, I compared percentages of students involved in a campus club or organization other than football. Differences in the percentage of participants and non-participants involved and not-involved within and across each racial identity population are shown in Table 9 below. Involvement outcomes were higher among football SAs who participated in the mentor program for students in each racial identity population, and significantly higher for Black or African American football SAs. The overall involvement outcomes were consistent with my predictions, but the outcome for Black or African American football SAs was not. Involvement outcomes for Black or African American football SAs was substantially greater than the outcome for White participants.

Table 10 Comparison of Football SAs' Campus Involvement in Organizations Other than Football

Racial Identity	% of Participants Involved	% of Non-Participants Not Involved	Difference
Black or African American	38%	0%	38%
White	22%	13%	9%
Difference	16%	-13%	29%

Finally, I analyzed institution retention data to determine whether outcomes differed among participants and non-participants of Black or African American and White football SA identity groups. As shown in Table 10 below, the overall fall-to-spring semester retention rates of

all Black or African American football SAs was 17% lower than the fall-to-spring semester retention rates of all White football SAs. In analyzing retention rates of participants in each group, White football SAs retained at a rate 26% higher than the Black or African American participants (i.e., 89% and 63% respectively). Also, the differences in retention rates of participants and non-participants from each racial identity group were significant with White participants persisting at a rate 39% higher than White non-participants and Black or African American participants persisting at a rate of only 6% higher than Black or African American non-participants. These findings are consistent with my prediction that both populations would benefit from the intervention, but White participants would benefit more than the Black or African American participants.

Table 11 Retention Comparison between Black or African American and White Football SAs

Racial Identity	Retention of Participants	Retention of Non-Participants	Difference	Overall Retention
Black or African American	63%	57%	6%	60%
White	89%	50%	39%	77%
Difference	-26%	7%	-33%	-17%

4.0 Discussion, Next Steps, and Implications

The purpose of this study was to pair first-year football SAs with a faculty or staff mentor to increase SAs' sense of belonging and retention at the institution by facilitating higher levels of engagement and improving integration within the social and academic sub-systems of the college (Tinto, 1993). This study used improvement science to implement a Plan-Do-Study-Act (PDSA) cycle that tested the mentor program as one change idea within a broader change theory aiming to increase retention and graduation rates for football SAs. The study also sought gain insight about how the change idea impacted the experience and outcomes for Black men at a Predominately White Institution (PWI), a population who is overrepresented within the football program and underserved within the context of both the micro- (WestPenn College) and macro-systems (higher education).

4.1 Discussion of Key Findings

4.1.1 Receptiveness to and Participation in the Mentor Program

The faculty or staff mentor program PDSA cycle began after being introduced to the first-year football SAs as part of a team meeting in late October (after 70% of their competition season was completed and more than half-way through their first semester of college). My intent for introducing the intervention as part of a team meeting and within the football program was to avoid creating the sense that the program was an “extra” institutional requirement and to take advantage

of coaches' support given their higher levels of influence over SAs as compared to other institutional actors (Cooper, 2016). Given the added layer of demands on football SAs' time due to participation in the sport (Comeaux & Harrison, 2011; Gayles, 2009; Gayles & Crandall, 2019; Jolly, 2008), football SAs' receptiveness to the program was necessary for the intervention's success. At the time the intervention was launched, all 47 football SAs (100%) agreed to participate in the program with 46 completing the pre-intervention survey.

Pre-intervention survey results indicated on average the group was "neutral" as it related to the importance of having a faculty or staff mentor who wasn't a coach, and "very committed" to a mentee-mentor relationship with a faculty or staff member at WestPenn College. By the end of the study, 31 (approximately 66%) SAs participated in the program by following through in meeting with their mentors, which is arguably the better reflection of commitment level. Post-intervention survey results showed an increase in the football SAs' feelings about the importance of having a mentor and an increase in their commitment to forming a mentee-mentor relationship with a faculty or staff member. Those findings were also supported by feedback from football SAs who participated in focus group interviews. All (100%) of football SAs who participated in the focus groups were supportive of continuing the mentor program, and many commented on the benefits of having a mentor and/or the desire to meet more frequently with their mentor.

Focus group discussions also supported my strategy of embedding the intervention within the football program to create a sense that the mentor experience was part of the program and not an added institutional requirement. Shortly after the intervention was launched, the head football coach abruptly resigned from his position. During focus group discussions about whether or not the head coach's transition impacted participation in the program, the majority of respondents indicated that it "reduced student participation." They discussed not knowing whether the program

would continue “because the coach was gone,” and not knowing whether they would continue participating in the football program as a result of the transition (motivating some not to continue or begin meeting with their assigned mentor). Despite the coaching transition negatively impacting football SA participation during this iteration, these findings support the potential benefits of embedding the intervention into the football program to increase participation in potential future iterations of the program.

In terms of participation across different racial identity populations on the team, results showed Black or African American football SAs were less likely to engage with their faculty or staff mentor as compared to their White teammates. Of the football SAs in this study who identified as Black or African American, 53% participated in the mentor program compared to 69% of the population who identified as White. This finding was consistent with my predictions going into the study, and will be discussed later in this section of the DIP.

4.1.2 Sense of Belonging and Integration

Volumes of research on college student success has consistently supported the claim that students who are actively engaged in educationally purposeful activities (including forming connections with faculty and staff outside of the classroom), are more likely to persist through graduation and benefit in other ways (Mayhew et al., 2016; Pascarella & Terenzini, 1991, 2005). The faculty or staff mentor program was designed with the goal of connecting football SAs with a faculty or staff mentor to help increase their sense of belonging and academic and social support, and ultimately improve their odds of persisting at the institution (Comeaux & Harrison, 2011; Tinto, 2006-2007). Although pre-intervention survey results indicated a relatively high overall perceived sense of belonging among football SAs during the onset of the intervention, results in a

few question categories were more neutral. More specifically, when responding to the questions about how well people understand them, how connected they feel to the faculty and staff, and how much they matter to others at the college, football SAs' responses were weaker.

In comparing the aforementioned question categories with the other questions on the belongingness scale, the responses indicated on average the football SAs felt welcomed and respected by other members of the campus community but not to the point where they were forming deeper connections. Thus, the social and academic subsystems of the institution were being perceived positively, but many of the football SAs were likely still in Tinto's (1993) transition stage and integration into the academic and social systems had not yet been realized. Nevertheless, football SAs responded on average as being "quite happy" to be at the institution.

As part of the mentor intervention, faculty and staff mentors encouraged and supported behaviors that promote educationally purposeful activities (Mayhew et al., 2016; Pascarella & Terenzini, 1991, 2005). Football SAs who participated in focus group interviews reported that their mentors talked with them about and/or helped them with their transition to college, meeting people outside of football, engaging in academic and social support services, and getting involved in activities other than football. While the quantitative data collected in this study did not represent a statistically strong correlation between participation and integration outcomes, the correlation combined with other data and factors is strong enough to warrant further study. Football SAs who participated in the mentor program finished their first semester of college with a GPA 0.7 higher than those who didn't participate, were 2.5 times more likely to participate in a club or organization other than football, and had a fall-to-spring retention rate 25% higher than football SAs who did not participate. Also, 85% of the first-year football SAs currently enrolled at the institution also registered for classes for the fall 2022 semester.

Results from the sense of belongingness scale from the post-intervention survey also confirmed an increased perceived sense of belonging at the institution after participating in the mentor program. Increases were realized in all seven question categories. The most significant increases occurred in the question categories asking about how well people understand them, how respected they feel by faculty and staff and how connected they feel to the faculty and staff, which include two of the three categories that scored the lowest in the pre-intervention survey. These results suggest increased or strengthened levels of integration with the academic and social sub-systems of the institution, and deeper connections with other stakeholders.

Football SAs who participated in focus group interviews specifically called out or referenced ways in which their mentors helped to better connect them with campus, supported their academic success, and increased their comfort level at the institution. The mentors were described as a “bridge to campus” connecting students to support services and social activities, while also serving as a welcome campus connection “outside of football and classes.” Football SAs also talked about the program exposing them to “different backgrounds and parts of campus” that they would not have otherwise interacted with if not for the mentor program.

4.1.3 Football SAs’ Perceived Impact

Given the existing structures and commitments serving as barriers to football SAs (especially Black men) experiencing some of the programs, services, and opportunities their non-athlete peers benefit from in college (Gayles & Hu, 2009; Rettig & Hu, 2016; Harper, 2018), it was important that the football SAs valued their relationship with a mentor to motivate continual participation and engagement with that mentor. Both quantitative and qualitative data from this study support a perceived sense of value for the mentor program among the majority of football

SAs who participated. Mean scores from the post-intervention survey reflected that the participants “agree” it was helpful having a mentor who is not coach, and they value spending time with their mentor. The mean score for the Likert-type statement addressing whether or not their mentor genuinely cares about their success at the college reflected that the football SAs “strongly agree” that the mentor does, with 100% of participants either selecting “agree” or “strongly agree” as their response to that statement.

The qualitative data collected about the football SAs’ perceptions of the mentor program provided a richer account of how they experienced their mentors. The football SAs expressed an appreciation for having someone on campus to “help” and “go to for anything.” They described conversations with their mentors related to their academic performance, issues they were facing, campus involvement, football, family, and life in general. The mentors focused on their holistic identity development (Cooper, 2016), and not just one of their roles at the institution (i.e., student or athlete). They also spoke about the “care” the mentors showed them, using descriptors like “closest friend” and “family away from home” to explain their relationship with their mentor. The sentiments from the football SAs were captured and organized by me using the theme “Mentors became *their people*,” a term of endearment alluding to the individuals on campus a student forms the closest relationship with and will seek for help and guidance on anything.

Another theme emerging from the focus group conversation was “A need for someone to talk about football.” Many of the football SAs shared that it was beneficial to “have someone to talk with about football who isn’t a coach.” These SAs discussed the benefits of having someone to express their concerns, criticisms, and to “be brutally honest with” about their athletic experience without fear of it getting back to members of the program. The ability to talk with someone about football seemed to be especially important to the SAs during the coaching

transition that took place during the intervention. Football SAs were able to process the impact of the coaching changes with their mentors in healthy and constructive ways.

4.1.4 Intervention Impact for Black Men

To the extent possible within the inquiry setting (WestPenn College), I sought to change what Cooper (2016) posits as the three factors predicating college experiences and outcomes for Black men: (1) conditions, (2) relationships, and (3) expectations (CRE). In other words, the mentor intervention intended to improve institutional conditions, facilitate relationships with key academic and social role-set members, and ensure high academic performance and engagement expectations for Black or African American football SAs involved in the study. While the intervention was not designed to serve only Black or African American men, my change theory and intervention was designed to be culturally relevant and is rooted in research on Black male SAs.

Although results from this study did reveal stronger academic and social integration outcomes for Black or African American SAs who participated in the program as compared to Black or African American SAs who didn't, there were significant gaps in outcomes compared to their White peers. First, the Black or African American SAs were less likely to participate in the mentor program, preventing them from some of the potential benefits and outcomes from engagement in a mentor program and beyond athletics in general (Blackwell, 1989; Harper, 2018; Kimbrough et al., 1996). I predicted this outcome based on the lack of representative racial diversity among the faculty and staff mentor group, which was due to the faculty and staff demographics at WestPenn College. According to Hinderlie & Kenny (2002), low numbers of African American faculty can also contribute to limited access to faculty for support and

mentoring. The inability to pair Black or African American SAs with mentors with the same racial identity was likely a barrier to Black or African American football SAs' participation in the mentor program.

Fall semester GPAs were also analyzed as part of this study, and on average Black or African American football SAs who participated in the mentoring program also earned higher fall semester GPAs than Black or African American SAs who didn't participate. The mean fall semester GPA for Black or African American participants was 2.00, and the mean for Black or African American non-participants was 1.53 (a difference of 0.47). However, in comparing the mean scores and differences between the Black or African American participant and non-participant groups with those of the White participant and non-participant groups, on average White participants earned a fall semester GPA 1.11 points higher than the Black or African American participants. Likewise, the White non-participants earned a fall semester GPA 1.02 points higher than the Black or African American non-participant group. The difference between participants and non-participants within each population was similar (approximately 0.50 points higher for participants versus non-participants).

While the GPA data didn't indicate a statistically strong correlation between participation in the mentor program and a higher fall semester GPA, the data does illuminate a significant gap between the GPAs of Black or African American and White football SAs. Given that the mentor program was introduced more than half-way through the students' first semester of college and continued throughout the first half of their spring semester, GPA data from the spring semester should be collected and analyzed to better understand the potential impact of the intervention. Nevertheless, the data supports the need for continued institutional action to better support the academic integration of Black or African American football SAs.

In terms of social integration, data related to football SAs' involvement in campus organizations other than football were also collected and analyzed. Again, outcomes for football SAs who participated in the mentor program were higher in both racial identity groups as compared to their non-participant counterparts within the same population. However, a significantly higher percentage of Black or African American participants joined another campus organization other than football as compared to White participants. Likewise, Black or African participants also joined at a substantially higher rate than the Black or African American non-participants (38% of participants compared to 0% of non-participants).

While the involvement findings seem promising as it relates to the social integration of Black or African American participants, all of the organizations the participants became involved with other than football were additional athletic programs at the institution. Thus, the results might be an indication of athletic role engulfment of the Black or African American SAs (Harrison et al., 2009; Killeya-Jones, 2005; Sturm et al., 2011), a phenomenon some scholars attribute to the socialization of Black men at a young age to value sports over academics (Beamon & Bell, 2006; Benson, 2000). Therefore, more data and analysis are needed to better understand the impact of the intervention on social integration.

The final driver measure I studied was first-to-second semester retention of Black or African American football SAs compared to White football SAs. Again, football SAs who participated in the mentor program from both racial identity groups retained at the institution at higher rates than the non-participants within their population. However, the overall retention rate for Black or African American participants (63%) was significantly lower than that of the White participant group (89%). Likewise, the difference in the retention rate between participants and

non-participants among the Black or African American population (6%) was also much lower than the difference between the participants and non-participants in the White population (39%).

The retention findings are consistent with my original predictions, but the gap of the outcome between the two racial identity groups (26%) is greater than anticipated. One factor likely contributing to these results is the timing of when the intervention was implemented. Predominately White institutions with the most success at retaining African American students intentionally identify these students and provide retention services within the first few weeks of the semester (“Features”, 2006; Jamelske, 2009; Robbins & Smith, 1993). Given that I was unable to implement the mentor program until most of the football SAs’ first semester was already completed, the opportunity for “early intervention” was missed.

4.1.5 Summary of Strengths and Outcomes of the Intervention

Through the implementation of a faculty or staff mentor intervention, the aim of the study’s intervention was to enhance academic and social integration outcomes, improve sense of belonging, and ultimately increase retention rates for first-year football SAs and Black or African American men in particular. The intervention was successful in engaging first-year football SAs in educationally purposeful activities that are linked to student success outcomes like persistence through graduation, better academic performance, and other developmental gains (Mayhew et al., 2016; Pascarella & Terenzini, 1991, 2005). On average, participants experienced better social and academic integration outcomes than their peers within the sample who did not participate in the program, including higher fall semester GPAs, higher levels of involvement in campus organizations other than football, and a significantly higher first-to-second semester retention rate.

Participants also expressed a greater sense of belonging at the institution than they had felt prior to the intervention.

Equally important to the intervention outcomes measured more through quantitative data, are the lived experiences described by the football SAs who engaged in the study and the actions taken by the faculty and staff who volunteered to serve as mentors. The football SAs talked about their mentors in a way that is best described by stating “Mentors become *their people*.” The mentors became someone they “could go to for anything,” someone who cared about more than just their “sports and classes,” and someone who served as their “bridge to campus.” The mentors were also viewed as someone who “helped” them and provided a needed outlet to talk about football, classes, and life without fear of being judged and/or their feelings being shared with other campus stakeholders. The football SAs held their mentors in such high regard that when they were asked what could be done to improve the mentor program, the most common responses included sentiments like “extend the program to other students” and “give us more opportunities to meet [with their mentor].” Likewise, every student who participated in focus group interviews suggested or agreed with others who suggested that I “continue the program.”

The mentor program also yielded positive outcomes for Black or African American football SAs who participated. Although the group did not realize outcomes to the same degree as the football SAs who identified as White, the intervention had a positive impact. It also provided the researcher and institution valuable information for strengthening the intervention, and implementation of other practices and interventions.

Finally, based on the nature and design of this study, the results cannot determine causality of the intervention. All my results could be based on self-selection effects, and/or timing of the data collection related to the pre- and post-intervention surveys. However, the purpose of the study

was to test a single change idea within an improvement science design. Therefore, the results are used to determine whether the intervention may help improve the problem of practice and/or warrant additional study. In the case of this study, most results were consistent with my original predications and lead me to recommend additional iterations of the intervention after making adjustments based on my learning from the iteration in this study.

4.2 Limitations of the Study

While there are many strengths and positive outcomes linked to the intervention and study, there were also several limitations. One limitation to this study was the timing of implementation. As a dissertation research project, I needed to participate in overview and IRB processes that delayed the launch of the intervention until more than half of the fall semester was complete. The delayed start date likely diminished the intervention's impact on integration outcomes, especially those related to the football SAs' initial transition to college. It also did not allow ample time for the football SAs to meet and engage with the faculty and staff mentors prior to beginning the intervention. As a result, many of the football SAs were meeting their mentors for the first time after having been paired with them. The broader change theory involves the mentors participating in a leadership program with the football SAs' during their fall camp, which also involved identity development and cultural competency activities. Future iterations of the intervention should involve an implementation start date within the first few weeks of the football SAs' arrival to the institution and/or start of their first semester, and in conjunction with the leadership development program change idea (to be tested simultaneously as another change idea).

Another limitation related to the timing of this study was it took place across two semesters with a lengthy break between each semester (the break was extended by the institution due to circumstances related to the global pandemic). Since the intervention took place at the end of one semester and the beginning of another semester, data related to integration outcomes (i.e., GPA, involvement, and retention) was incomplete and/or less useful to the researcher. Ideally, the integration data should be collected and analyzed at the end of a single semester and the lone semester in which the intervention occurred. Future iterations should be studied within the course of one semester to better understand its impact on integration outcomes.

A third limitation of this study was the transition of coaching staff that occurred during the PDSA cycle. Although participants benefited from added support from their mentors during the transition, it is also likely that the transition negatively impacted participation in the study. Focus group participants suggested that some students were unclear as to whether or not the mentor program was continuing because the head coach was no longer at the institution, and others decided not to participate because of other uncertainties related to the coach's transition.

The fourth limitation was the lower participation level of Black or African American football SAs. The change theory was developed to be to be culturally relevant and was rooted in research on Black male SAs, but only about 50% (8 students) participated in the program. Future iterations should focus on garnering higher rates of involvement among the Black or African American football SAs.

The study is limited by a small sample size. The total size of the sample was 47 football SAs, and 31 (66%) participated in meeting with their mentors. Findings from this study would be strengthened after testing multiple iterations and a larger volume of data.

Finally, the results from this study cannot determine causality. All results could be based on self-selection of participants and/or timing of the intervention. For example, the differences on the belongingness scales for the pre- and post-intervention surveys could have been due to the timing of the surveys. Likewise, the differences in outcomes between the participant and non-participant groups could have been selection effects. To strengthen the data, additional iterations should be implemented and studied over time.

4.3 Recommendations for Next Steps (Act Phase)

The intervention for this study was designed to address low retention rates among football SAs, which is a pervasive problem (especially for Black men) at my college and throughout the higher education and NCAA macro-systems. I conducted one PDSA cycle to test outcomes related to a faculty and staff mentor program that was introduced to all first-year football SAs and embedded within their experience on the football team. Findings from the study support the continuation of the mentor program, with programmatic improvements based on what was learned throughout the iteration.

While I am unsure whether the program will be implemented moving forward since there is a new head coach at the institution, the researcher can make a strong case for support based on the results of this iteration. Findings revealed on average participants' sense of belonging increased after involvement in the program, social and academic integration outcomes were higher than those of non-participants (including a significantly higher first-to-second semester retention rate), and the participants themselves were in favor of maintaining the program due to its benefits. The program was also successful in connecting football SAs with institutional stakeholders outside of

football, which is a recognized best practice related to student success outcomes (Mayhew et al., 2016; Pascarella & Terenzini, 1991, 2005). Connecting football SAs with institutional stakeholders outside of football also helps to breakdown a widely perceived barrier seen as isolating football programs from the rest of campus community.

Based on feedback received from participants (football SAs and the mentors) and other data from this study, I recommend several program modifications to enhance its potential impact. First, future iterations of the program should be launched during the football SAs' first weeks on-campus (ideally during their August football camp experience or within their first two weeks of classes). Beginning the program at the start of their first semester will provide additional support to the SAs during their transition to the institution, and increase the likelihood of their success ("Features", 2006; Jamelske, 2009; Robbins & Smith, 1993). This change will also allow for better data collection in assessing the program's impact.

Next, I recommend devoting adequate time prior to establishing the mentee-mentor pairing for the football SAs and mentors to meet and get to know each other. In doing so, the football SAs and mentors will have already begun forming relationships before their initial mentoring meetings. Program administrators could also make observations during the introductory activities to help inform the pairing of the mentees and mentors, and potentially avoid pairings of individuals who are less compatible.

Consistent with my broader change theory, it is also recommended that the institution launch and test the leadership development change idea during the football SAs' August football camp. The leadership development change idea focuses on holistic identity development and cultural competence, which should help to prevent or reduce athletic role engulfment and improve what Cooper (2016) describes as "conditions" for the Black football SAs. Additionally, White

football SAs would benefit from this development, especially considering the diversity at the institution and on the team in particular. Faculty and staff mentors could also participate in the leadership development change idea, creating more time for the football SAs to interact with them prior to being paired in the mentor program.

I also received valuable advice from the football SAs who participated in the mentor program to help improve communication between mentees and mentors, assist the mentors in developing strong relationships with the football SAs, and for potentially expanding the program. Since this study's inquiry questions focused more on the football SAs' perception of the program, the perceptions and feedback from the faculty and staff mentors was not addressed in this DIP. Informal feedback from the faculty and staff mentors was received throughout this iteration and used as process measures within the PDSA cycle, but more formal and complete feedback is needed. Next steps should include formal efforts to obtain faculty and staff mentor feedback for improving the program, including semi-structured interviews and/or focus groups.

Finally, I also recommend enhancements related to the recruitment, training, and incentivization of the faculty and staff mentors. For the program to be sustainable, the institution will need to recruit more members of the faculty and staff to serve as mentors. The program would also benefit from greater racial diversity among the mentors. While the institution's current faculty and staff demographics limit the ability to diversify the mentor group, there is still room for improvement in that regard. A potential tool in helping to recruit a larger and more diverse pool of mentors might be incentivizing the role. This could be accomplished by investing in small stipends or gifts for the mentors, prioritizing it in promotion and/or tenure processes, or providing other benefits and/or recognition. Lastly, using data from this study and other resources,

enhancements to the mentor training is also recommended. The additional time related to being trained also warrants further consideration for incentivizing the program.

4.4 Implications from this Study

Although the faculty or staff mentor change idea was designed to improve outcomes for two specific populations (i.e., first-year football SAs and Black men) within a very specific institutional setting/system (i.e., WestPenn College), findings from this study have broader implications for practice and further research. First, the practice of embedding the mentor program within an existing engagement point/activity for students was successful in creating instant credibility for the program and likely increased participation. It also leveraged the added influence that coaches have on their athletes as compared to other members of the campus community (Cooper, 2016). Similar to more common requirements for college SAs like tutoring programs, participants viewed the program as a normal part of their existing activity (i.e., involvement in football) and participated based on that perception. Students involved in other college activities or athletic programs may respond to this practice in similar ways. Thus, embedding student success initiatives in existing programs in which students are already involved may increase their likelihood for participating and benefiting from such programs. At the very least, the practice warrants additional study.

Next, despite the inability to pair Black men with faculty or staff mentors who share the same racial identity, Black or African American participants reported similar benefits and quality of relationships as the White participant group. This provides hope for leaders at PWIs that struggle to recruit and retain persons of color in leadership roles (e.g., faculty, staff, and administration).

Although the absence of powerful African American role models can have a negative impact on Black students' learning, development, and identification with a PWI (Sedlacek, 1999), intentionally connecting them with and helping them to form meaningful relationships with mentors who they perceive as genuinely caring about their success can potentially weaken that impact. Leaders at PWIs should still prioritize strategies for realizing a more racially representative employee population, but the lack of diversity should not be a barrier to implementing student success interventions for underrepresented populations.

In that same vein, a smaller percentage of Black or African American football SAs participated in meeting with their mentors as compared to White football SAs from the sample group. Even though the Black or African American SAs who participated reported similar benefits as the White SAs, the gap in participation further advantaged the White SAs. Data from this study suggests the transition of the head coach negatively impacted participation, but another contributing factor may have been the lack of representative racial diversity among the faculty and staff mentors. Future iterations of the program should focus on increasing the diversity among the mentor group, and closing the participation gap among football SAs.

The football SAs who participated in the focus group interviews expressed the need for and the benefits of an “adult” on-campus who they could go to for help outside of classes and sports. While their coaches and academic advisors did discuss more than just football or classes respectively, the SAs perceived each stakeholder as having unique priorities as it related to their relationship with the SA. Whereas, the SAs understood their mentor as someone they could reach out to and talk about anything with. The SAs also found it helpful to be able to confide in their mentors about specific concerns related to football or their classes without fear of judgement or repercussions. These findings provide an insightful perspective on how the students view their

relationships with specific stakeholders, and may have implications on how those roles are structured and/or performed with students. For example, if the institution expects their coaches or advisors to work with SAs on their holistic development, the institution may need to find ways to reframe those roles to the students.

The learnings from this study can also be used when considering adding and/or improving other similar programs and interventions at WestPenn College, or even to identify strategic priorities. For example, the institution has long considered the idea of adding a new professional staff position to serve as “navigators” for first-year students and perform similar work as the mentors in this study. Findings from this study will be shared with institutional leaders as they contemplate that strategic investment. Likewise, the gap in outcomes for Black SAs can help frame the urgent need for a more racially representative employee population and additional interventions aimed at improving Cooper’s (2016) CRE for Black students at the institution.

Finally, a simple yet powerful lesson came from the students involved in this study when asked for advice I might share with future faculty or staff mentors. Several students offered the advice captured with two words, “don’t quit,” when referring to the mentors’ efforts to form a relationship with their mentees. The football SAs discussed some of their peers’ hesitation to meet with a faculty or staff member they didn’t know and/or being least trustful at the beginning of the PDSA cycle. However, they shared stories about their mentors continuing to reach out and demonstrating a genuine commitment to the SAs, and the SAs eventually leaning-in and benefiting from the relationship. That finding has implications for any professional working with and trying to build rapport with first-year college students.

5.0 Reflections

As a student affairs practitioner with approximately 20-years of professional experience, the improvement science methodology used for this study has been transformative as it relates to my personal leadership development. Having been blessed with a successful career in which more than half of it has been spent serving as the senior student affairs officer for my institution, I had fallen into a number of “leadership traps” that have impaired my continued growth as a leader. However, my involvement in this study and the learnings gained through the implementation of improvement science have been enlightening to me and will change the way I think and operate as a practitioner and leader moving forward.

As part of my improvement journey, it did not take long to realize I had been operating in a place where I was relying too heavily on the practices that had benefited me in the past, and without an appreciation for how the systems around me were changing. Improvement science tools and processes like root cause analysis, fishbone diagraming, stakeholder analysis, and semi-structured interviews helped me to engage more deeply into systems thinking. These processes allowed me to understand my problem of practice from different perspectives, to welcome and draw out new ideas and criticisms, to seek out available scholarship, and to build upon my sphere of influence, among many other things. As someone who has worked at the same institution for my entire career, thinking I knew a lot more than I actually did about its system and stakeholders, the methodology has pushed me to constantly challenge those assumptions.

I have also gained a much greater appreciation for the importance of capacity building. As a leader, I have always understood my role to develop capacity among the professionals I am supervising. However, improvement science has helped me to realize I was viewing capacity

building through far too narrow of a lens. This study expanded my perspective by seeing it as not only a goal for developing my employees, but also a tool for understanding and improving problems and strengthening systems. For example, while working to build capacity among stakeholders related to the problem of low retention and graduation rates of football SAs, the process also assisted me in framing the issue to individuals who otherwise might not have fully understood and/or been concerned about it. Now the institution has a network of faculty and staff who better appreciate how impactful this problem is on the students and the institution as a whole, and who feel a need and are motivated to help improve it.

My efforts to build capacity also helped me to shine light on systemic inequities, and invite institutional stakeholders to engage in thinking about how this problem is disproportionately impacting Black men at the institution and throughout the macro-system of higher education. I found this type of capacity building to be useful in helping to change how we view the issue and shift from a deficit lens to taking ownership and responsibility for the problem. The question about the problem moves from “Why aren’t more Black men succeeding at WestPenn?” to a focus on what WestPenn is or is not doing to engage and support Black men through graduation. Capacity building became an instrument for me to better frame the problem through an equity lens, create a sense of urgency among a diverse set of stakeholders, and empower a network of professionals to work collaboratively on improvement.

Related to capacity building was the process of enlarging my sphere of influence in this problem space. Prior to this study, poor retention and graduation rates of football SAs was a problem I was very much aware of, but also a problem I felt I had very little power to improve. Even though retention has always been an important part of my job, the football coaches (i.e., the stakeholders with arguably the most power in this problem space) report to another campus leader.

Despite my personal desire and passion to improve the problem, my lack of formal authority had me considering selecting another problem to address. Fortunately, instead of changing course, I chose to get to work on enlarging my sphere of influence within the problem space. Those efforts included things like weekly lunch meetings with the head coach to build rapport and expand his knowledge about retention efforts (specifically focusing on students of color), working with my president to embed language in performance goals and other strategy documents to make the problem an institutional priority, and partnering with the athletic director who supervises the football program.

As a leader who respects institutional hierarchy and who tends to always “stay in my lane” to ensure good relationships with my colleagues and other departments across the institution, I have learned that those hierarchies and “lanes” are part of the system producing the problem and sometimes need to be challenged to disrupt the status quo. Improvement science provided me a framework and tools to do so in ways that were not received as a threat to the individuals holding the formal authority. Instead, after working to build rapport with the key stakeholders, my involvement in the problem space was welcomed and supported by those whose lanes I was crossing into.

The iterative nature of improvement science has also changed the way I think about and approach improvement. Colleges and universities are known to be slow to change, skeptical of new initiatives, and quick to “write things off” before giving them a chance. The improvement science approach addresses complex problems with the realistic understanding that it will not be “fixed” through one initiative or one cycle of change. Instead, practitioners go into the work with a growth mindset and knowing that the growth will come through trials designed to be studied quickly and intentionally. In the case of this study, retention of football SAs has not been “fixed”

at the institution. Rather, retention of football SAs and Black men have become more of a priority. The institution has gained some valuable insight about how a mentor program might impact the problem, and it can use that information to guide future iterations of the mentor program and/or to inform other change ideas. It is a continual learning and improvement process that must adapt at a similar pace as the problems and systems themselves.

The continual learning and progress that come with improvement science also serve as a way to foster life-long learning among practitioners, and to avoid pushback or fatigue from stakeholders. In the case of this study, I shared an entire change theory with the faculty and staff who I recruited to serve as mentors. As part of my discussion about the theory, I explained that the mentor program alone was not going to accomplish the aim of the change theory. The problem of practice is too complex and the program was only designed to address certain aspects of the problem. By explaining those realities, I was also taking some of the pressure off the improvement team/mentors who would be voluntarily testing this initiative on top of their normal job responsibilities. As the “leader,” I was not asking them to fix everything about the problem and/or promising the delivery of a cure. Rather, I was inviting them to engage in a relatively short-term experiment in which no matter the result would help the institution get closer to improvement (either learning through success or failure). This approach was very well received with no faculty or staff declining the opportunity, and likely a much different “ask” than what they are used to when being recruited for a new initiative at the institution.

On a more personal note, this study has reinvigorated my love for learning and inquiry. One of the leadership traps I previously eluded to involves falling into is a false sense of knowing. As a higher education leader, I have always tried to keep-up on stories from *The Chronicle of Higher Education* and *InsideHigherEd.com* to stay abreast of current news and happenings related

to higher education. I also felt that my previous education combined with 20-years of experience would continue benefiting me in ways that would lead to more success. However, the joy and benefits I have experienced from dedicating time to research topics to see what new scholarship is out there has been inspiring to me. It has changed my attitude of valuing practical experience over scholarship, and generated an excitement to operate not just as a practitioner and leader, but as a scholar practitioner and leader.

Moving forward I foresee myself using improvement science not only for complex problems of practice, but also as a normal mode of operations for me and the employees I oversee. I plan to introduce my team(s) to this methodology and challenge them to engage in the process, invite them to enlarge my project related to football SAs and Black men, and expose them to the benefits that I have experienced in a relatively short period of time. Finally, I look forward to presenting about this study and the improvement science methodology with hopes of it spreading throughout my institution.

Appendix A Example Process and Driver Measures for Change Ideas

Change Idea	Process Measures	Driver Measures
Leadership Program	Pre- & post-survey Minute paper entries Career development inventories Program surveys	Pre- & post-survey Engagement behaviors Coded journal entries (AAC&U development rubric) Academic indicators (attendance and grades)
Integrated Social/Service Activities	Program completion data Participation numbers	Engagement survey results Campus engagement data
Mentor Program	Pre- & post-survey Mentor session worksheets/questionnaires Focus group	Integration behaviors (i.e., grade reports, involvement data, and 1st – to – 2nd semester retention report. Post-survey (i.e., belongingness scale, satisfaction with the mentor and program, and intentions for working with the mentor moving forward).
Integrated Support Services	Pre- & post surveys	Utilization numbers Academic indicators (attendance and grades) Satisfaction survey

Appendix B Sample Mentor Session Worksheet for Football SAs

WestPenn College Football Mentor Program - Player Worksheet #1

Player Name: _____ Session Date: _____

Player Student ID #: _____ Mentor Name: _____

Directions: Interview your mentor using the following prompts to guide your discussion. Takes notes on the responses you get for each question. Three questions are provided, and you should come up with a fourth question on your own. Then complete the brief reflection question and submit this form to your position coach. The form should be submitted within 2-days of the mentor session.

Q1: What do you do at the College and why do you do it? _____

Q2: What are your hobbies and interests? _____

Q3: Could you share a little about your background, family, and/or what it was like for you growing-up? _____

Q4: Choose a question: _____

Player Reflection – Please share what you enjoyed about your meeting with your mentor, and how your mentor might be able to help you while at WestPenn? (use reverse side as well)

Appendix C Sample Mentor Session Prompts for Faculty and Staff Mentors

WestPenn College Football Mentor Program – Mentor Worksheet #1

Sample Prompts for Initial Meeting(s):

- Help the mentee navigate their college experience.
- Introduce the mentee to other campus stakeholders and resources.
- Be there for the mentee if they have any questions or concerns related to their experience.
- Support them by attending at least one football activity and talking with them about it.
- Invite them to attend campus events with you.
- Help them to adjust to social and academic life at the College.
- Remind them about the significance of their roles as students, leaders, and citizens in addition to being members of the WestPenn College football team.

Sample Prompt for Spring Semester First Meeting:

Now that the players are in their off-season, this is a good time for them to branch out and get involved in other activities on-campus. If you are able to connect, please use the first meeting to check-in and see how they doing, ask about their break, and how they feel about their spring classes. I would also encourage you to have a conversation about their involvement on-campus outside of football, and emphasize the importance of taking advantage of other opportunities at WestPenn along with football (e.g., clubs and organizations, students activities, performing arts, learning commons, and career development).

As a reminder, if you would like to take them to lunch or dinner in the dining hall or at the Bistro, please feel free to do so and charge it to the student life office. Please just give me the heads-up after you make those charges. That way I will know what account number to charge the expense against.

Appendix D Football SA Pre-Survey Questions

Q1: Please enter your Student Identification Number. (comment box)

Q2: Indicate how you identify. (multiple choice)

Q3: How important is it to you to have a faculty or staff mentor who is not a coach? (5-point Likert scale ranging from “extremely important” to “not at all important”)

Q4: How committed are you to having a mentee-mentor relationship with a faculty or staff mentor who is not a coach? (5-point Likert scale ranging from “extremely committed” to “not at all committed”)

Q5: How well do people at WestPenn College understand you as a person? (5-point Likert scale ranging from “completely understand” to “do not understand at all”)

Q6: How connected do you feel to the faculty and staff at WestPenn College? (5-point Likert scale ranging from “extremely connected” to “not at all connected”)

Q7: How welcoming have you found WestPenn College to be? (5-point Likert scale ranging from “extremely welcoming” to “not at all welcoming”)

Q8: How much respect do the students at WestPenn College show towards you? (5-point Likert scale ranging from “a tremendous amount of respect” to “no respect at all”)

Q9: How much respect do the faculty and staff at WestPenn College show towards you? (5-point Likert scale ranging from “a tremendous amount of respect” to “no respect at all”)

Q10: How much do you matter to others at WestPenn College? (5-point Likert scale ranging from “matter a tremendous amount” to “do not matter at all”)

Q11: How happy are you with your choice to be a student at WestPenn College? (5-point Likert scale ranging from “extremely happy” to “not at all happy”)

Appendix E Football SA Post-Survey Questions

Q1: Please enter your Student Identification Number. (comment box)

Q2: Indicate how you identify. (multiple choice)

Q3: How important is it to you to have a faculty or staff mentor who is not a coach? (5-point Likert scale ranging from “extremely important” to “not at all important”)

Q4: How committed are you to having a mentee-mentor relationship with the faculty or staff mentor who you are paired with? (5-point Likert scale ranging from “extremely committed” to “not at all committed”)

Q5: How well do people at WestPenn College understand you as a person? (5-point Likert scale ranging from “completely understand” to “do not understand at all”)

Q6: How connected do you feel to the faculty and staff at WestPenn College? (5-point Likert scale ranging from “extremely connected” to “not at all connected”)

Q7: How welcoming have you found WestPenn College to be? (5-point Likert scale ranging from “extremely welcoming” to “not at all welcoming”)

Q8: How much respect do the students at WestPenn College show towards you? (5-point Likert scale ranging from “a tremendous amount of respect” to “no respect at all”)

Q9: How much respect do the faculty and staff at WestPenn College show towards you? (5-point Likert scale ranging from “a tremendous amount of respect” to “no respect at all”)

Q10: How much do you matter to others at WestPenn College? (5-point Likert scale ranging from “matter a tremendous amount” to “do not matter at all”)

Q11: How happy are you with your choice to be a student at WestPenn College? (5-point Likert scale ranging from “extremely happy” to “not at all happy”)

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