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## Incorporating Growth Mindsets to Attain Athletic and Academic Success.

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## **Incorporating Growth Mindsets to Attain Athletic and Academic Success.**

### **About the Author(s)**

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### **Keywords**

Growth Mindset, Academic Success, Student Athletes, Motivation



## **Incorporating Growth Mindsets to Attain Athletic and Academic Success**

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### **Abstract**

Higher education and intercollegiate athletics promote discovery processes that uncover boundaries of potentials in human development. The research associated with the academic progress of student athletes coincides with the general student population literature in the fact that student athletes also utilize effective study skills and achieve higher GPAs when implementing growth mindset (Joshi et al., 2022). The purpose of this study is to investigate the experiences of student athletes prior to college, through athletic careers, and through graduate school. Qualitative, ethnographic case study research methods rationalized the purpose of this study to advance theory, answer the research questions best, and analyze the data that emerged. The findings in this study revealed how growth mindset, growth-oriented behaviors, and growth-oriented approaches evolved toward goal attainment. This study provides descriptive insights to the demands of student athlete life while enrolled in the university system and participation in intercollegiate sport.

*Key Words:* Growth Mindset, Academic Success, Student Athletes, Motivation

### **Introduction**

The socio-environmental contexts of higher education and intercollegiate athletics promote ongoing discovery processes that uncover infinite boundaries in human development (Murray & Chuan, 2020). The required demands for successful incremental progression within these contexts influence engagement in intensive self-reflection and the critique of malleable abilities (Bonte, 2015; Bonte et al., 2014; Heitmann et al., 2022). The reward of intensive engagement also increases self-fulfillment in achievement and performance across life domains (Bonte et al., 2014; Valenta, 2014).

Research suggests that growth-oriented behaviors benefit students and student athletes in competitive college settings academically and athletically (Ikeda, 2022). Research has also shown that growth-oriented behaviors influence cognitive development, skill recognition, and

skill refinement (Han, 2022; Kaplan & Maehr, 2007). In addition, intensity during task related behaviors and actions help determine conscious malleability in abilities which influences internal variables such as self-belief (Lin, 2021). This is critical in successful transgressive approaches toward goal attainment and life outcomes (Heitmann et al., 2022). As a result, increased self-belief often births volitional factors such as commitment, persistence, discernment, and experience integration that increase purpose, focus, goal worth, and skill refinement (Brady & Alleyne, 2017). These factors influence the construction of growth mindsets that entice positive well-being, self-fulfillment, performance, and decision making (Brady & Alleyne, 2017; Golby & Wood, 2016). Furthermore, growth mindsets surface when desire, willingness, and commitment merge together to produce behaviors that lead to successful goal attainment (Dweck, 2010a; Kroeper et al., 2022). Research also shows that individuals who utilize growth mindsets readily accept challenging tasks of interest and approach task completion with growth-oriented behaviors (Dweck, 2010a, 2010b; Hochanadel & Finamore, 2015; Shamim et al., 2017).

### **Theoretical Framework**

#### **Growth Mindset**

Brady & Alleyne (2017) describe implicit beliefs, motivations, and volitional efforts that lead to intelligence, abilities, and personalities as mindset. Because mindset is dynamic and helps determine static or malleable self-belief in decisions, behaviors, and efforts that apply to task completion and life outcomes, positivists in the fields of psychology and human development often use growth mindset to critique human behaviors that lead to goal attainment (Kroeper et al., 2022; Vandewalle, 2012). The positive psychological discovery of ability that emerges when self-belief maximizes influences resilience, aspirations, metacognition, and internal satisfaction (Yeager & Dweck, 2012; Yik et al., 2022).

Research that focuses on growth mindset identifies behaviors in achievement situations as task engagement actions that vary in intensity (Dweck, 2006; Kroeper et al., 2022). In addition, several studies demonstrate consistent progression in skill and task development in areas of interest which increase confidence, malleability, and task engagement intensity (Brady & Alleyne, 2017; Dweck, 2006; Gupta & McCarthy, 2021; Jowett & Spray, 2013). The decision to exhibit growth mindsets and increase intensity during tasks is based on volitional phases that facilitate principles, consciousness, and abilities that influence the approach to task completion

(Yik et al., 2022). In addition, consistent, visible, and incremental progression influence goal attainment, psychological identity, and cognitive processes (Gollwitzer & Keller, 2016; Sahagun et al., 2021).

It is important to note that the psychological cognitive process associated with growth mindsets occur before and after completed tasks and behaviors (Aksoy & Bayazit, 2022). Commitment to fulfill task requirements have a relativistic nature and negotiates feasibility and desirability (Gollwitzer & Keller, 2016; Wei et al., 2021). Psychological cognitive processes also highlight skill recognition as an important factor that demonstrates commitment to value systems (Sahagun et al., 2021). These value systems identify necessary courses of action which lead to successful goal attainment and persistence through challenges (Wei et al., 2021). Growth mindsets also encourage growth-oriented behaviors such as reflection exercises which benefits future goal attainment through increased critique intensity to refine skills (Sahagun et al., 2021). Research also shows that reflection helps individuals evaluate, review, and critique task engagement more efficiently (Gollwitzer & Keller, 2016).

Psychology research has numerous mechanisms that measure and predict higher levels of success in achievement situations, however, metacognitive practices demonstrate effectiveness in the ability to increase desired outcomes through task engagement intensity. Research shows that these practices trigger malleability and self-belief in abilities to accomplish tasks and reach goals (Gollwitzer, 2012; McGuire, 2015; Sahagun et al., 2022). The literature also demonstrates that these practices influence life trajectory, development, and learning (Burnette et al., 2013; Yu et al., 2022).

### **Growth Mindset, Student Athletes, and Higher Education**

The literature suggests that the general student population and student athletes effectively maintain focus on goal attainment, goal worth, and positively respond to the situational and changeable nature of higher education and intercollegiate athletics (Dweck, 2006; Evans & Fin, 2017). In addition, students and student athletes that utilize growth mindsets believe that practice, focus, and self-belief cultivate and develop malleability in abilities (Hochanadel & Finamore, 2015; Martin et al., 2022).

Furthermore, growth mindsets directly apply to higher education because of the embedded mechanisms that influence incremental progression toward specific goals (Joshi et al.,

2022; McGuire, 2015). Progressive markers such as matriculation, retention, curriculum, standards and accreditation, and progress towards degree (PTD) often comprise traditional markers of successful progression (Joshi et al., 2022; Rutledge, 2019). Researchers have found that growth mindsets also influence achievement levels in areas such as grade point average (GPA) and degree completion time (Brady & Alleyne, 2017; Gupta & McCarthy, 2021). In addition, research shows that college-level students with growth mindsets implement effective study habits, withdraw from stressful situations, and have positive relationships with university personnel and peers (Jang et al., 2020; Jowett & Spray, 2013). Mueller & Dweck (1998), Hattie & Timperley (2007), and Bureau et al., (2022) conducted studies and found that students who received feedback on intelligence viewed abilities as natural and unchanging. This study also revealed that these students rejected challenging tasks and preferred tasks that did not threaten perceived intelligence (Bureau et al., 2022). Students who received feedback for effort exertion, however, believed that intelligence incrementally develops (Sabarwal et al., 2022). These students remained focused on learning for longer time periods (Bureau et al., 2022). These students also preferred challenging tasks, increased self-belief, enjoyed tasks, and performed better than other groups (De Meester et al., 2022). In addition, Haimovitz & Dweck (2017) found that students who implement growth mindsets to prepare for tests received higher scores than those that implemented static behaviors. The results of this study also show that these students increased task engagement intensity in the preparation process (Bureau et al., 2022). In addition, the achievement-based nature of intercollegiate athletics entices growth mindset (Coakley et al., 2021; Rutledge, 2019).

Within this, the infrastructure of intercollegiate athletics reinforces exceeding normative limits to produce consistent results (Coakley et al., 2021). Research has shown, however, that the combination of physical and mental development associated with intercollegiate athletics participation influences growth-oriented behaviors that benefit them in them athletically and academically (Rutledge, 2019, 2020). Studies have also shown that student athletes who display positive personal qualities more frequently utilize growth mindsets and perform better academically (McGuire, 2015). The research that is associated with the academic progress of student athletes coincides with the general student population literature in the fact that student athletes also utilize effective study skills, increased task engagement intensity in academic

demands, and achieve higher GPAs when compared to student athletes with an imbalance between academic and athletic identity (Miller & Kerr, 2002; Sabarwal et al., 2022). In addition, student athletes with greater levels of self-belief willingly commit to new goals more consistently and persist through challenges and obstacles than their peers (Coakley et al., 2021; Sabarwal et al., 2022). Additional qualities that surface include goal attainment, leadership experience, practical decision-making skills, positive career trajectory, resource utilization, networking, and philanthropic engagement (Gupta & McCarthy, 2021).

The purpose of this study is to investigate mindsets and behaviors that lead Division I (DI) National Collegiate Athletic Association (NCAA) student athletes to pursue graduate degrees. This study also employs exploratory methods that examine growth mindsets as an analytical tool to advance best practice within higher education. Lastly, this study enlightens practitioners and student athletes by expanding the current discourse of the relationship between education and sport conceptually and methodologically (Adeyemo, 2022; Donnor, 2005).

### **Methods**

Qualitative, ethnographic case study research methods rationalized the purpose of this study to confirm and advance theory, topics of discussion, answer the research questions best, analyze, and saturate the data that emerged in the study (Fusch & Ness, 2015). This method of inquiry also merges ethnography and case study methods to uncover the experiences of student athletes vividly and descriptively (Marshall & Rossman, 2016). Inductive processes enrich data collection to build concepts, hypotheses, and theories (Warkineh et al., 2018). These methods also display perceptions, interactions, and contexts that create multiple constructions and interpretations of reality (Fusch et al., 2017). Culture, social interaction, feelings, beliefs, and narratives that include specific descriptions about activities, personal relationships, and group interpretations increase transparency (Brady & Alleyne, 2017).

The case study mechanism within this study increased consistency, trustworthiness, and interdisciplinary data (Warkineh et al., 2018). Robust data then emerged through the rigors of qualitative inquiry that uncovered anthropological, sociological, and pedagogical interpretations of analysis (Fusch et al., 2017). In developing an understanding of how student athletes utilize growth mindsets, this study investigated the student athlete experiences prior to college, through athletic careers, and through graduate school. As the researcher in this study, I used ethnographic

case study methods to create subjects to generate knowledge about how growth mindset applies to the student athlete population (Rutledge, 2019).

### **Participants**

Purposeful sampling facilitated the process to identify the participants. Figure 1.1 demonstrates the criteria for selection. In addition, each participant received pseudonyms to maintain anonymity. Table 1 gives the background of the participants followed by a brief description of the participants.

Warrick is a former intercollegiate football player from Dallas, Texas who was a four-year starter, won one conference championship, and led his conference in interceptions his senior year of college. He later graduated with a juris doctorate from a top ten law school in the United States. Najee is a former intercollegiate football player from Ft. Worth, Texas. Najee was a three-year starter for the number one ranked defense in his conference and won a conference championship his junior year of college. Najee later graduated with a baccalaureate degree in physics and earned his Master of Science in math. Nico is a former intercollegiate football player for a top 20 intercollegiate football team. He was all-state in high school and led his district in interceptions his junior year. JaNorris is a former 800-meter track runner from San Antonio, Texas who participated on an intercollegiate track team that ranked number one in the nation during all his years of intercollegiate competition.

### **Research Questions**

The participants received informed consent forms prior to the interview process and once signed, I conducted 45-90-minute interviews that covered four guiding research questions. The research questions include:

1. In what ways do intercollegiate student athletes describe how sport participation influenced growth mindsets?
2. In what ways do intercollegiate sport influence how growth mindsets apply to academic and professional attainment?
3. In what ways do intercollegiate student athletes describe the nutrients that sustain a growth mindset?
4. In what ways do intercollegiate student athletes describe growth-oriented behaviors?

## Data Collection

The 27-question interview protocol comprehensively covered childhood, adolescent, and adulthood athletic and academic experiences. The following sample questions demonstrate the depth of investigation necessary to display their experiences athletically, academically, and socially.

1. How would you describe the athletic background of your family?
2. How did graduate faculty influence your persistence through graduate school?

Each participant expressed life experiences and how they executed growth mindsets throughout their experiences. The average interview time was 68 minutes. I also used a reflexive journal to collect field notes during the data collection process to illustrate personal feelings and statements that support the research. Sangasubana (2011) suggests that this practice helps the researcher identify personal bias that may impact data interpretation through reflection during the days away from the site. The reflexive journal also assists the researcher in illustrating perspectives and interpretations of the culture (Ben-Ari & Enosh, 2011). After completing the interview process, I transcribed data through the Atlas T.I. software system which produced 64 pages of transcripts and 45 data units (Hwang, 2008). I conducted follow-up interviews to clarify original responses. I then saturated and analyzed the data and investigated the transcripts, notes, and validated the authenticity of statements during the interviews.

## Data Analysis

The participants received written summaries of their interviews which enabled data confirmation and we reviewed the 64 pages of transcripts for accuracy, trustworthiness, and validity to triangulate the data. This minimizes bias from the investigator and cross-examines participant integrity and responses (Turner, 2004). Member checking also occurred to ensure dependability, credibility, and transferability. This process consisted of formal and informal verification of data and interpretations collected during the interview process (Turner, 2004). The data analysis phase also consisted of the coding process which allows the researcher to construct ideas and statements that align to the research questions (Rutledge, 2019, 2020). Internal and external coding systems enabled a participant-centered analysis and included descriptions relevant to research in multiple academic disciplines (Rutledge, 2020). Within the coding process, I used charting to align the data to the theoretical framework. Mapping and

interpretation also identified associations, structures, and patterns of the dynamics and ranges of key themes (Backhouse et al., 2016; Rutledge, 2019, 2020). Triangulation confirmed reliability and validity and links data with evidence from a wide range of sources (Mays & Pope, 1995). The result of the coding process yielded 45 data units and 10 codes (Rutledge, 2020). After the coding process concluded, the codes were rechecked for consistency, reliability, and validity (Rutledge, 2020).

### **Findings**

Many student athletes that participate in intercollegiate athletics do not deny the importance of talent, however, many of these same individuals believe that more emphasis should be placed on effort, commitment, and acquiring the physical and psychological attributes needed to successfully balance the rigorous demands that must be given towards athletics and academics (Jowett & Spray, 2013; Martin et al., 2022). Accordingly, as this study sought to uncover how growth mindsets influenced the academic and athletic success of student athletes, the analysis of data clarifies and presents the data to the reader in a way that deconstructs how these mindsets influenced them athletically and academically. Thus, this section includes an in-depth analysis that creates new understandings and insights regarding how student athletes implement growth mindsets into daily behaviors and actions.

Six themes emerged from the coding process and data analysis (see figure 2.1). The definitive identification of growth mindset is in situated events that revealed themselves during the interview process. The data analysis also did not reveal that athletic performance and participation in intercollegiate sport impeded academic success and social interaction.

#### **“Know Your Assignment” (Academic Focus)**

This was the most variable and robust theme that emerged from the coding process. Twenty data units surfaced due to the richness of the data. The nature of being a student athlete influenced growth mindset because academic requirements intertwined with athletic responsibilities. This suggests that academic requirements influenced task engagement intensity across physical, mental, and socio-environmental contexts of the college experience. Goal worth was determined during the pre-decisional phase of the growth-oriented decision-making process (Gollwitzer & Keller, 2016; Yuan, 2021). In addition, goal worth and task engagement intensity increased simultaneously in academic tasks that aligned to interests. This includes utilizing study

materials, educational technology, schedules, planners, and time management practices. The data analysis also revealed that the participants knew assignment due dates prior to the deadline, made personal copies of class materials, participated in review sessions, and updated study materials during each study session. This coincides with McGuire (2015) and Sahagun et al. (2022) in the fact that metacognitive learning strategies benefit students in the learning process. The findings also suggest that metacognitive learning strategies sustained and increased knowledge in academics and areas of interest.

In addition, enforced and mandated NCAA eligibility and institutional academic requirements influenced academic progression. These mandates include Academic Progress Rates (APRs) and progress towards degree (PTD) eligibility requirements. The participants also had to maintain GPAs above departmental major requirements to remain in good academic standing with their respective institutions. In addition, goal worth increased to attain additional academic accolades. Three participants received NCAA Academic All-American and A/B Honor Roll awards. The findings associated with this theme also highlight the fact that visible markers of successful progression increased self-belief, confidence, and eased incremental matriculation through college. Experimental and longitudinal studies show that exposure to visible markers of positive trajectory in grades over time increase intensity in academic engagement (Chao et al., 2017; Paunesku et al., 2015).

The data analysis also revealed that socio-environmental contexts influenced growth mindsets. Coaches, parents, and peers reinforced academic focus to maintain eligibility, satisfy parental expectations, and increase relatedness across peer groups. This theme also identifies growth mindset through the utilization of academic resources and support staff. Consistent and positive academic performance influenced growth mindset, autonomy, and independence. Task engagement intensity in academic demands also influenced skill recognition in technological and university resources that sustained positive academic trajectory. Thus, this finding coincides with the literature in the fact that growth mindsets influence effective study habits and increase learning (McGuire, 2015; Sahagun et al., 2022). In addition, this study agrees with the student athlete literature that states student athletes that utilize academic resources have higher levels of self-efficacy and increased academic performance (Sahagun et al., 2022). In addition, the findings coincide with the literature in the fact that growth mindsets promote self-belief and

malleable abilities in goal attainment (Aronson et al., 2002; Blackwell et al., 2007; Yeager et al., 2022). Major choice, eligibility, and future occupational goals also influenced growth mindset. Graduate school experiences influenced growth-oriented behaviors due to increasingly rigorous classes. In addition, the findings in this theme agree with the literature in the fact that growth mindsets influence graduation completion time (Yeager et al., 2022). One participant graduated within three years due to increased task engagement intensity in academic tasks and goals. The contemplation period that influenced Najee to attend graduate school surfaced. He exercised choice in considering the best option to pursue. He stated:

So once that decision was made – ok I'm done with my math degree... do I want to double major or get a graduate degree... it was a no brainer for me... once you get out with a graduate degree, especially in physics... if you're going to a tech related field... that looks way better than a double major... so that's why I went for a graduate degree. It was better than a double major.

The comments of the participant coincide with the literature in the fact that growth mindsets and growth-oriented behaviors influence adaptive and beneficial responses to psychological, cognitive, and achievement outcomes (Yeager et al., 2022). The findings suggest that the psychological process associated with growth-oriented behaviors occurred in the pre-decisional and post-actional phases (Gollwitzer & Keller, 2016; Sahagun et al., 2021). Feasibility and desirability facilitated the decision-making process to engage in academic tasks. The data units associated with this finding also suggest that task engagement intensity increased as graduation, career termination, and transition into life post sport approached. The discovery that emerged from increased task engagement intensity occurred in the pre-action, action, and post-actional phases of growth-oriented behavior (Yeager et al., 2022). The desire to continue positive life trajectory also influenced the decision to attend graduate school.

### **“Being the Greatest Ever” (Athletic Focus)**

This theme produced six data units that confirmed sport participation naturally influences growth mindset. Goal-attainment within the athletic domain produced increased levels of commitment, desire, willingness, self-belief, and fulfillment. Most athletic experiences occurred within the action and post-actional phases of growth-oriented behaviors. The action phase consisted of elevated levels of feasibility and desirability which limited task completion

contemplation. The post actional phase consisted of elevated levels of self-fulfillment in approaches toward task completion and outward trajectory. In addition, the reflection process that influenced internal satisfaction included increased skill refinement and critique intensity (Sahagun et al., 2021). Prompts from coaches, situational adjustments during official competition, and preparation for official competition strengthened growth mindset, growth-oriented behaviors, and goal worth. The data analysis also revealed that the experiences that existed in the action phases of these domains increased because goal worth was high and non-negotiable. Nico noted:

We were held to a higher expectation than most... they expected more from us. We were put on a pedestal... so anytime we did anything – positive or negative – there was an awareness to it... they expected a lot from us because of tradition ... we were supposed to be successful... on the field and in the class.

Winning culture also influenced growth mindset and growth-oriented behaviors. This increased task engagement across unofficial and official intercollegiate sport competition. Activities such as weightlifting, rehabilitation, speed training, film study, and dieting required growth mindsets to sustain constant incremental success. In addition, athletic participation intensified goal worth. The result of intensified goal worth increased task engagement intensity in growth-oriented approaches to goal attainment. The self-fulfillment associated with winning also increased task engagement. The data analysis revealed that the range of championships won was one to eight and two participants received top performer honors in respective sports. This theme also revealed that experience integration, skill recognition, and skill refinement of athletic related tasks occurred over a period of 10-15 years. The data analysis also revealed that constant exposure to athletic event, tasks, personnel, family members, and peers increased goal attainment in P-12 and intercollegiate sport. This agrees with the literature in the fact that skill acquisition occurs through the combination of interest, goal worth, and task engagement intensity (Coakley et al., 2021; Ewald & Jiobu, 1985). This finding also suggests that task engagement intensity increased simultaneously with skill recognition. Positive feedback related to athletic performance increased confidence, self-belief, and malleability in abilities. In addition, incremental gains in quantitative athletic related criteria such as playing time and wins increased growth mindset, growth-oriented behaviors, and task engagement intensity. All student athletes in this study

reaffirmed strong self-belief in intercollegiate sport competition, results, possibilities, and longevity across peer groups. This confirms that the participants demonstrated confidence, self-belief, and malleability in ability towards athletic goal attainment.

This theme also agrees with the literature in the fact that skill recognition in athletic talent increased goal worth in athletic related tasks (Ofoegbu et al., 2022). Skill recognition occurred during informal and formal athletic performances, the recruiting process, and results from official competition. This theme also coincides with Simons et al. (1999), Gayles & Hu (2009), and Anundson (2022) in the fact that growth-oriented athletes increased task engagement intensity in goal attainment approaches and experienced higher levels of self-fulfillment in the post-action phase. Danthony et al. (2020) also found that adolescent-aged students with growth mindsets implemented developmental behaviors and increased task engagement intensity in the post-action phase to refine approaches that improved future performance. The congruence of the literature and the findings in this study suggest that the relationship between growth mindset and athletic participation influences growth-oriented behaviors across various contexts of life domains. The findings also revealed that goal attainment in athletics did not impede goal attainment in academics and athletics goal attainment and progression did not occur without the influence of academic goal attainment and progression.

#### **“Hard Work and Dedication” (Strong Work Ethic)**

This theme consisted of six data units that confirmed sport domains produce unprecedented amounts of work ethic to achieve consistent results (Murray & Chuan, 2020). In addition, virtues of dedication, courage, and character appear in the results of sport participation (Coakley et al., 2021). This theme classifies efficient optimization of task engagement intensity in growth-oriented approaches to goal attainment. Internal factors such as commitment and dedication surfaced from hubris and overall athletic culture. Work ethic influenced goal worth and increased self-belief and malleability in abilities. This confirms the student athlete literature that attests intentional efforts by athletes increase determination, grit, and effort (Coakley et al., 2021). The data analysis also revealed that work ethic occurred in the pre-action, action, and post-actional phases of growth-oriented behavior. These phases consisted of increased task engagement intensity in athletic and academic responsibilities.

Constant and consistent skill refinement increased self-belief and malleability in abilities. Athletic and academic results reaffirmed effort exertion and time input in activities of interest. Task intensity increased simultaneously with goal worth. Goal worth increased incrementally and visible checkpoints to test skill and competence increased athletic and academic growth mindsets, growth-oriented behaviors, and task engagement intensity. In addition, the action phase consisted of behaviors and cognitive construction. Engagement and intensity also increased in academic demands. This includes number of hours studied, collaboration to develop and meet learning targets, tracking progression, seeking feedback, and reflection. Athletic testing included the previous criteria, weight max and speed preparation, and unofficial and official intercollegiate sport competition. Skill refinement intensity varied based on the rigor of tasks and goal worth. The nature of frequent and incremental progression also influenced skill refinement intensity. The findings also revealed that goal worth increased skill refinement intensity. Athletic checkpoints ranged from games won, acceptance into post season competition, to individual plays and races. Academic checkpoints include tests, quizzes, semester completion, and additional assignment due dates. This suggests that skill refinement occurred in the pre-actional, action, and post action phases of growth-oriented behavior through task completion and goal attainment. The following excerpt from Warrick demonstrates how work ethic influenced increased levels of goal worth:

That was really my thing... I'm going to out work you and I just had confidence that you weren't going to outwork me. You weren't better than me. I don't care how big you were or how fast you thought you were... no matter what... if given the same number of opportunities or even given slightly less I was going to make the best of my chances and that's literally how I became a starter.

JaNorris also demonstrates work ethic in the athletic domain. He notes:

I was so committed to getting ice baths after a workout... getting the right amounts of sleep, getting the right amount of food, talking to my nutritionist. I would do two-a-days ... I'd go in the gym in the mornings... I would do cardio... weights... all on my own because it was a part of me... I needed to do this... it became the focal point of my college career from when I was about 21... my junior and senior year. I'd go and have my own private sessions. Do my jump rope, do my power cleans... the coaches coached me in the afternoon but not in the mornings... I

had a lot of freedom and flexibility to do what I wanted to do. As soon as I started doing this... at two points in my career... I was number one in the world... and I directly attribute that to those two a day sessions.

These statements also illuminate the reflection phase that occurs after task completion, identifies the self-fulfillment that surfaced after intense critique of growth-oriented approaches toward goal attainment and highlights self-belief and malleability in abilities.

The literature associated with this theme also suggests that dedicated student athletes efficiently balance academic and athletic responsibilities with elevated levels of work ethic (Bopp et al., 2021; Harrison & Lawrence, 2004). This study also capitalizes on work ethic and how it translates to performance in the athletic, academic, and occupational domains of life. Work ethic also reduced stressors related to post sport transitions due to frequent skill refinement and task engagement intensity. The research also demonstrates that the transition into life post sport increased efficacy and self-fulfillment (Bopp et al., 2021). The participants also understood that effort exertion and increased goal worth applied to athletic and academic demands. Work ethic also influenced positive rapport and support from various campus personnel (Hong & Coffee, 2018).

### **“Consistent Performance” (Consistency and Persistence)**

This theme consisted of four data units that detail consistent growth-oriented behaviors across athletic and academic student athlete domains. Skill refinement, engagement, and construction occurred during consistent growth-oriented behaviors and approaches toward goal attainment over time. Previous goal attainment also influenced consistent growth-oriented behaviors. In addition, reflection on goal attainment approaches and previous performance markers influenced consistent growth-oriented behaviors. Consistency also increased self-belief, malleability in abilities, and engagement in skill refinement. Task frequency also increased cognitive processes and performance critiques. The findings within this theme agree with the literature in the fact that consistent goal-oriented behaviors reduce the achievement-complacency gaps and enhance performance for longer time periods (Burnette et al., 2013; Dweck & Leggett, 1988).

Consistency was necessary for preparation tasks, official athletic competition, and academic progression. Athletic preparation tasks include film study, weight training,

rehabilitation, and dieting. Academic preparation includes study hall and review session attendance, study habits, and class and study material updates. Consistency also existed when goal worth was high and in increasingly competitive achievement situations. Growth mindset and growth-oriented behaviors in these situations include decisions made during critical game time situations and competitive match ups in games and races. These findings coincide with the literature in the fact that consistency increases persistence, focus, determination, drive, and supports effort exertion during training and competition (Maherni et al., 2019). This confirms Ryska (2001) in the fact that this seminal study found that DI NCAA student athletes who executed growth mindsets demonstrated higher levels of confidence in their athletic ability.

The data analysis also revealed that consistency was high within the action and post-action phases of growth-oriented approaches toward goal attainment. The action phase identified many growth-oriented behaviors because of task frequency in areas of interest. In addition, cognition varied across domain type and task. Feasibility and desirability to complete tasks optimized during growth-oriented tasks that approached goal attainment. This finding suggests that goal worth remained high in skill refinement tasks. Intensity varies based on task rigor and interest. Tasks that required less intensity improved cognitive processes and tasks that required more rigor and intensity improved physical abilities and skills.

The following example by Najee confirms consistency surfaced within the action phase and experience integration from previous task behaviors and approaches toward goal attainment influenced growth-oriented behaviors:

When I was in military school, I had the schedule every day from 6 AM to 7 AM... that was study time. And then from 6 PM to 10 PM was study time. So that's five hours every day. So, I kind of just told myself... I can study half that time and still be above the rest... so after football... I went and studied from 7 to 10 everyday... No matter if it was a test... if it was homework... I just found something to do from 7 to 10... I just wanted to keep that trend going while it was already instilled in me.

This statement demonstrates that experience integration influenced deliberate behavior modification, task engagement, skill refinement, and goal worth in approaches toward goal attainment. In addition, research states that consistency influences future goal attainment, autonomy, and control over performance outcomes (Nowicki, 2017; Rattan et al., 2015).

Furthermore, this experience coincides with research that attests consistency normalizes the competitive and unpredictable nature of sports (Evans & Finn, 2017). In addition, research shows that consistency in highly competitive settings influence leadership skills, ethical and moral values, situational task intensity, and growth-oriented behaviors across various domains of life (Evans & Fin, 2017; Nowicki, 2017). This statement also agrees with the literature in the fact that consistent skill refinement leads to self-fulfilling results in goal attainment, strengthens cognitive functioning, and persistence during challenging tasks (Chao et al., 2017).

Consistency also surfaced in socio-environmental contexts. The data analysis revealed that growth mindsets influenced focus toward academic and athletic related goals. In addition, growth mindsets limited risk-taking behaviors that could occur outside of the student athlete domain. Consistency also influenced social interaction across peer groups. The participants revealed that they limited interaction with individuals that jeopardized goal attainment and had interests that would impede or be detrimental to growth mindsets and growth-oriented behaviors.

### **“Win at All Costs” (Competitiveness and Grit)**

This theme consisted of three data units that identified growth mindsets in competitive achievement situations. Competitiveness occurred within all phases of growth-oriented behaviors and approaches toward goal attainment. The data analysis revealed that the findings in this study align with the literature in the fact that competitiveness in successful achievement situations increase self-belief, malleability in abilities, confidence, and self-fulfillment. Durand-Bush et al. (2022) highlights a seminal study conducted by Morgan (1980) which investigates national and Olympic runners, rowers, and wrestlers. This study found that successful athletes exhibited greater efficacy and self-fulfillment when competition increased and winning continued (Durand-Bush et al., 2022; Morgan, 1980). The pre-decisional phase consisted of cognitive processes that identified necessary growth-oriented courses of action that led to goal attainment. These cognitive processes increased desire, willingness, and goal worth. Feasibility surfaced, however, grit further influenced persistence and self-belief in challenging tasks and achievement situations. The pre-actional phase consisted of identifying opportunities to initiate task completion and growth-oriented approaches toward goal attainment. The action phase consisted of elevated levels of task engagement intensity. The post-actional phase consisted of reflection, performance critique, and self-fulfillment. Visible quantifiable markers of previous success did

not influence competitiveness. The findings in this theme suggest that competitiveness was a situational quality, behavior, and relied on self-belief and malleability of ability in situational contexts. In addition, competitiveness influenced task engagement intensity, skill refinement frequency, and skill recognition. These findings agree with the literature that confirms competitiveness and grit is associated with the ability to focus attention, control performance imagery, commitment to goal attainment, mentally prepare, and create detailed competition plans (Durand-Bush et al., 2022; Maksum, 2014).

Competitiveness surfaced across athletic and academic domains that occurred across peer groups in tasks of interest, however, the findings also demonstrate that competition occurred more frequently in the athletic domain. Competitive achievement situations increased goal worth and grit increased task engagement intensity in achievement situations, growth-oriented behaviors, and approaches toward goal attainment. This coincides with the literature in the fact that grit is also associated with perfectionism (Fang & Liu, 2022; Gould et al., 2002). All participants reaffirmed highly competitive lifestyles and grit influenced consistent competitiveness. This finding also agrees with the research that attests growth-oriented individuals continuously strive to increase internal satisfaction and performance (Fang & Liu, 2022; Maksum, 2014). The following excerpt by Warrick demonstrates competitive lifestyles and growth mindset in achievement situations:

I'm a competitor... That's just how I live life... I don't care what it is, I'm going to always strive to be number one... I say... you can judge a competitor by what they do before and after a game. Everybody competes during a game, but... if you really want to know how much of a competitor he is, go... watch him at practice... no... watch him during summer workouts... then you know who really a competitor is... so for me, I did not want to sit on the bench... so I made sure I worked my butt off... I made sure I was not going to be outworked... I also made sure I knew my assignments... all the defense... so I had confidence that I was going to be better than you.

### **Conclusion**

The guiding research questions of this study captured the athletic and academic experiences of four former intercollegiate student athletes. The findings in this study revealed how those experiences enticed growth mindsets, growth-oriented behaviors, and growth-oriented

approaches toward goal attainment. The theoretical framework used in this study led to a deeper investigation of task engagement intensity, skill refinement, goal worth, and self-fulfillment. In addition, growth mindsets and growth-oriented behaviors occurred across physical, mental, and socio-environmental contexts.

This study reinforces the literature that suggests higher education and intercollegiate athletics construct renowned platforms to entice growth mindsets and growth-oriented behaviors that influence successful incremental progression (Brady & Alleyne, 2017; Coakley et al., 2021). The infrastructure of each system embeds incremental progression markers that naturally influence growth mindset and goal attainment (Dawkins et al., 2008; Meekins, 2018). In addition, this study provides descriptive insights to the demands of student athlete lifestyles while enrolled in the university system and participation in intercollegiate sport. The findings also revealed that the participants in this study embraced the implementation of growth mindsets and growth-oriented behaviors into lifestyles that lead to successful athletic and academic goal attainment. The findings in this study agree with the literature that shows growth mindsets and growth-oriented behaviors influence positive trajectory in self-fulfillment, efficacy, GPAs, and performance across life domains (Meekins, 2018). This study also demonstrates that student athletes can positively utilize and implement growth mindset into the college experience to approach goal attainment successfully. In addition, this study allows higher education personnel and student athletes to visualize how athletically, and academically successful student athletes capitalize on opportunities while competing in intercollegiate sport.

The analysis also revealed that challenging situations surfaced in informal, formal, unofficial, official, athletic, and academic settings. The theoretical framework gives deeper insight into how growth mindset maximizes self-belief and malleability in abilities to overcome obstacles and achieve goals (Brady & Alleyne, 2017; Davidson & Schuyler, 2015). Thus, this research is critical in understanding, supporting, and educating intercollegiate student athletes that seek to maximize positive trajectory while in college and post sport (Coakley et al., 2021).

### **Topics for Further Discussion**

This study analyzed four former intercollegiate student athletes across physical, mental, and socio-environmental domains of life experiences. Comparison studies that analyze likeness and differences of the general student population and student athletes would be beneficial.

Underrepresented student groups within higher education settings exemplify another student population that deserves an extensive amount of research dedicated to the analysis of their educational attainment. Studies that focus on student athletes at Historically Black Colleges and Universities (HBCUs) also warrants analysis (Rutledge, 2017, 2019, 2020). Athletes that compete or have competed professionally would also be valid population to study and analyze. Descriptive studies that reveal approaches taken by athletic academic personnel such as learning specialists and advisors would also strengthen the literature regarding student athletes and growth mindset. Campus climate and intercollegiate athletics culture would also benefit from research that analyzes growth mindset implementation in these domains.

Faculty, staff, and practitioners that work closely with student athletes can foster growth mindsets through skill refinement, skill recognition, task engagement intensity, and metacognitive learning strategies (Golby & Wood, 2016; Rattan et al., 2015). These strategies help cultivate persistence, goal worth, consistency, work ethic, and competitiveness (Hochanadel & Finamore, 2015; Shamim et al., 2017). The seminal studies of Aronson et al. (2002) and Good et al. (2003) found that malleability workshops in brain functioning and cognitive development influence the learning process and apply across life domains. The NCAA and individual institutions have also initiated various developmental programs such as the *Bridge Program*, the *Scholar Baller Program*, and the *LYFE Program* to collectively collaborate with educators to ensure that student athletes harness the benefits of athletic competition at premier schools in the United States (Rutledge, 2017; 2019; 2020). These programs have introduced new recruiting practices to intercollegiate athletics that gather the best student athletes to continue advancing the lofty athletic and academic goals of universities (Cross & Fouke, 2019). These programs have also demonstrated that student athletes can increase interpersonal skills, academic success, and growth-oriented behaviors that serve as foundations for current and future success (Coakley et al., 2021). Lastly, this research is useful because it can help facilitate transition into life post sport and address future challenges confidently (Rutledge, 2019, 2020).

## References

- Adeyemo, A. (2022). Place, race, and sports: Examining the beliefs and aspirations of motivated Black male students who play high school sports. *Urban Education, 57*(1), 154-183.
- Anundson, B. (2022). An examination of innovative career advising processes for NCAA student-athletes (Doctoral dissertation, Arizona State University).
- Aronson, J., Fried, C., & Good, C. (2002). Reducing the effects of stereotype threat on African American college students by shaping theories of intelligence. *Journal of Experimental Social Psychology, 38*(2), 113-125.
- Aksoy, E., & Bayazit, M. (2022). *Trait activation in commitment to difficult goals: The role of achievement striving and situational cues*. Applied Psychology.
- Backhouse, T., Killett, A., Penhale, B., & Gray, R. (2016). The use of non-pharmacological interventions for dementia behaviours in care homes: findings from four in-depth, ethnographic case studies. *Age and Ageing, 45*(6), 856-863.
- Ben-Ari, A., & Enosh, G. (2011). Processes of reflectivity: Knowledge construction in qualitative research. *Qualitative Social Work, 10*(2), 152-171.
- Blackwell, L., Trzesniewski, K., & Dweck, C. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development, 78*(1), 246-263.
- Bonte, P. (2015). *Freedom in the flesh: physically shaping oneself and one's future children: an ethical-existential critique* (Doctoral dissertation, Ghent University).
- Bonte, P., Sterckx, S., & Pennings, G. (2014). May the blessed man win: A critique of the categorical preference for natural talent over doping as proper origins of athletic ability. *Journal of Medicine and Philosophy, 39*(4), 368-386.
- Bopp, T., Stelfefson, M., Stewart, M., Zhang, L., Apperson, A., & Odio, M. (2021). Wellness in transitions out of college sports participation: Experiences of former NCAA division I student-athletes. *Journal for the Study of Sports and Athletes in Education, 1*-24.
- Brady, A., & Alleyne, R. (2017). Resilience and growth mindset in sport and physical activity. In *Positive Psychology in Sport and Physical Activity* (pp. 102-114). Routledge.
- Bureau, J., Howard, J., Chong, J., & Guay, F. (2022). Pathways to student motivation: A meta-analysis of antecedents of autonomous and controlled motivations. *Review of*

- Educational Research*, 92(1), 46-72.
- Burnette, J., O'Boyle, E., VanEpps, E., Pollack, J., & Finkel, E. (2013). Mind-sets matter: A meta-analytic review of implicit theories and self-regulation. *Psychological Bulletin*, 139(3), 655.
- Chao, M., Visaria, S., Mukhopadhyay, A., & Dehejia, R. (2017). Do rewards reinforce the growth mindset? Joint effects of the growth mindset and incentive schemes in a field intervention. *Journal of Experimental Psychology: General*, 146(10), 1402.
- Coakley, J., Hallinan, C., & McDonald, B. (2021). *Sports in society: Sociological issues and controversies*. McGraw Hill.
- Cross, J., & Fouke, B. (2019). Redefining the scholar-athlete. *Frontiers in Sports and Active Living*, 1, 10.
- Davidson, R., & Schuyler, B. (2015). Neuroscience of happiness. *World Happiness Report*, 88-105.
- De Meester, A., Galle, J., Soenens, B., & Haerens, L. (2022). Perseverance in motor tasks: the impact of different types of positive feedback. *Physical Education and Sport Pedagogy*, 1-14.
- Dawkins, M., Jomills Henry Braddock, I., & Celaya, A. (2008). Academic engagement among African American males who hold aspirations for athletic careers in professional sports. *Challenge Online*, 14(2), 51-65.
- Donnor, J. (2005). Towards an interest-convergence in the education of African-American football student athletes in major college sports. *Race, Ethnicity, and Education*, 8(1), 45-67.
- Durand-Bush, N., Baker, J., van den Berg, F., Richard, V., & Bloom, G. (2022). The gold medal profile for sport psychology (GMP-SP). *Journal of Applied Sport Psychology*, 1-24.
- Dweck, C. (2006). *Mindset: The new psychology of success*. Random House.
- Dweck, C. (2010). Even geniuses work hard. *Educational Leadership*, 68(1), 16.
- Dweck, C. (2010). Mind sets and equitable education. *Principal Leadership*, 10(5), 26.
- Dweck, C., & Leggett, E. (1988). A social cognitive approach to motivation and personality. *Psychological Review*, 95, 256-273.

- Evans, M., & Finn, S. (2017) *Company athletics: Developing leaders of moral and social character*. Master Teacher Program Dan Furlong MA, CSCS United States Military Academy.
- Ewald, K., & Jiobu, R. (1985). Explaining positive deviance: Becker's model and the case of runners and bodybuilders. *Sociology of Sport Journal*, 2(2), 144-156.
- Fang, T., & Liu, F. (2022). A review on perfectionism. *Open Journal of Social Sciences*, 10(1), 355-364.
- Fusch, P., & Ness, L. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, 20(9), 1408.
- Fusch, P., Fusch, G., & Ness, L. (2017). How to conduct a mini-ethnographic case study: A guide for novice researchers. *The Qualitative Report*, 22(3), 923.
- Gayles, J., & Hu, S. (2009). The influence of student engagement and sport participation on college outcomes among division I student athletes. *The Journal of Higher Education*, 80(3), 315-333.
- Golby, J., & Wood, P. (2016). The effects of psychological skills training on mental toughness and psychological well-being of student-athletes. *Psychology*, 7(06), 901.
- Gollwitzer, P., & Keller, L. (2016). Mindset theory. *Encyclopedia of Personality and Individual Differences*, 1-8.
- Good, C., Aronson, J., & Inzlicht, M. (2003). Improving adolescents' standardized test performance: An intervention to reduce the effects of stereotype threat. *Journal of Applied Developmental Psychology*, 24(6), 645-662.
- Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological characteristics and their development in Olympic champions. *Journal of Applied Sport Psychology*, 14(3), 172-204.
- Gupta, S., & McCarthy, P. (2021). Sporting resilience during COVID-19: What is the nature of this adversity and how are competitive elite athletes adapting? *Frontiers in Psychology*, 12, 374.
- Haimovitz, K., & Dweck, C. (2017). The origins of children's growth and fixed mindsets: New research and a new proposal. *Child Development*, 88(6), 1849-1859.
- Han, C. (2022). Structural relations among achievement goals, perceptions of classroom goals,

- and grit. *Current Psychology*, 1-11.
- Harrison, K., & Lawrence, S. (2004). Female and male student athletes' perceptions of career transition in sport and higher education: A visual elicitation and qualitative assessment. *Journal of Vocational Education and Training*, 56(4), 485-506.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
- Heitmann, S., Grund, A., Fries, S., Berthold, K., & Roelle, J. (2022). The quizzing effect depends on hope of success and can be optimized by cognitive load-based adaptation. *Learning and Instruction*, 77, 101526.
- Hochanadel, A., & Finamore, D. (2015). Fixed and growth mindset in education and how grit helps students persist in the face of adversity. *Journal of International Education Research*, 11(1), 47-50.
- Hong, H., & Coffee, P. (2018). A psycho-educational curriculum for sport career transition practitioners: Development and evaluation. *European Sport Management Quarterly*, 18(3), 287-306.
- Hwang, S. (2008). Utilizing qualitative data analysis software: A review of Atlas. ti. *Social Science Computer Review*, 26(4), 519-527.
- Ikeda, K. (2022). How beliefs explain the effect of achievement goals on judgments of learning. *Metacognition and Learning*, 1-32.
- Jang, D., Ahn, J., & Kwon, S. (2020). Relationships between implicit beliefs and mental toughness: The role of implicit beliefs of adolescent football players and their coaches. *Journal of Physical Education and Sport*, 20(1), 156-163.
- Joshi, R., Hadley, D., Nuthikattu, S., Fok, S., Goldbloom-Helzner, L., & Curtis, M. (2022). Concept mapping as a metacognition tool in a problem-solving-based BME course during in-person and online instruction. *Biomedical Engineering Education*, 1-23.
- Jowett, N., & Spray, C. (2013). British Olympic hopefuls: The antecedents and consequences of implicit ability beliefs in elite track and field athletes. *Psychology of Sport and Exercise*, 14(2), 145-153.
- Kaplan, A., & Maehr, M. (2007). The contributions and prospects of goal orientation theory. *Educational Psychology Review*, 19(2), 141-184.

- Kroeper, K., Fried, A., & Murphy, M. (2022). Towards fostering growth mindset classrooms: Identifying teaching behaviors that signal instructors' fixed and growth mindsets beliefs to students. *Social Psychology of Education*, 1-28.
- Lin, T. (2021). Exploring the differences in Taiwanese university students' online learning task value, goal orientation, and self-efficacy before and after the COVID-19 outbreak. *The Asia-Pacific Education Researcher*, 30(3), 191-203.
- Maksum, A. (2014). National mental model and competitiveness: Transformation toward achieving and progressive behavior. *Anima, Indonesian Psychology Journal*, 29(2), 63-73.
- Marheni, E., Purnomo, E., & Cahyani, F. (2019). The role of motivation in increasing achievement: Perspective sports psychology. In *2nd International Conference on Sports Sciences and Health 2018*. Atlantis Press.
- Martin, J., Estep, A., Tozcko, M., Hartzel, B., & Boolani, A. (2022). Relationships between grit and lifestyle factors in undergraduate college students during the COVID-19 pandemic. *Journal of American College Health*, 1-9.
- Mays, N., & Pope, C. (1995). Qualitative research: rigour and qualitative research. *Bmj*, 311(6997), 109-112.
- McGuire, S. (2015). *Teach students how to learn: Strategies you can incorporate into any course to improve student metacognition, study skills, and motivation*. Stylus Publishing, LLC.
- Meekins, E. (2018). *Ball is life: Black male student-athletes narrate their division I experiences* (Doctoral dissertation, Loyola Marymount University).
- Miller, P., & Kerr, G. (2002). The athletic, academic and social experiences of intercollegiate student-athletes. *Journal of Sport Behavior*, 25(4), 346.
- Morgan, W. (1980). The trait psychology controversy. *Research Quarterly for Exercise and Sport*, 51(1), 50-76.
- Mueller, C., & Dweck, C. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of Personality and Social Psychology*, 75(1), 33.
- Murray, T., & Chuan, V. (2020). *The Ethics of sports technologies and human enhancement*. Routledge.

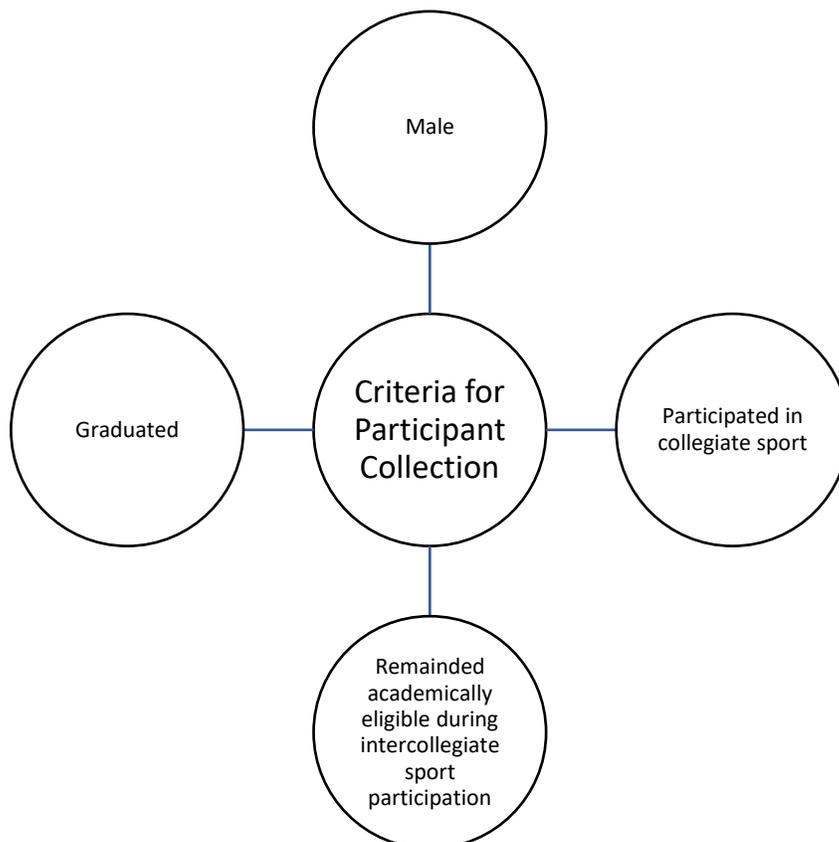
- Nowicki, A. (2017). *United States Marine Corps basic reconnaissance course: predictors of success*. Naval Postgraduate School.
- Ofoegbu, E., Gaston-Gayles, J., & Weight, E. (2022). "More than an athlete": How Black student-athletes use navigational capital to transition to life after sport. *Journal for the Study of Sports and Athletes in Education*, 16(1), 23-44.
- Paunesku, D., Walton, G., Romero, C., Smith, E., Yeager, D., & Dweck, C. (2015). Mind-set interventions are a scalable treatment for academic underachievement. *Psychological Science*, 26(6), 784-793.
- Rattan, A., Savani, K., Chugh, D., & Dweck, C. (2015). Leveraging mindsets to promote academic achievement: Policy recommendations. *Perspectives on Psychological Science*, 10(6), 721-726.
- Rutledge, M. (2017). Leaders yearning for excellence: How motivation and self-determination benefits a diverse group of student athletes. *Journal of Research Initiatives*, 2(3), 9.
- Rutledge, M. (2019). Understanding the importance of intrinsic motivation: An analysis of intrinsic motivation and positive student athlete experience integration. *Research Issues in Contemporary Education*, 4(1), 45-62.
- Rutledge, M. (2020). Understanding holistic development in Black American male student-athletes through educational models. *Negro Educational Review*, 71.
- Ryska, T. (2001). The impact of acculturation on sport motivation among Mexican American adolescent athletes. *Psychological Record*, 51(4), 533-548.
- Sabarwal, S., Abu-Jawdeh, M., & Kapoor, R. (2022). Teacher beliefs: why they matter and what they are. *The World Bank Research Observer*, 37(1), 73-106.
- Sahagun, M., Moser, R., Shomaker, J., & Fortier, J. (2021). Developing a growth-mindset pedagogy for higher education and testing its efficacy. *Social Sciences & Humanities Open*, 4(1), 100168.
- Sangasubana, N. (2011). How to conduct ethnographic research. *Qualitative Report*, 16(2), 567-573.
- Simons, H., Van Rheezen, D., & Covington, M. (1999). Academic motivation and the student athlete. *Journal of College Student Development*, 40, 151-162.

- Shamim, S., Cang, S., & Yu, H. (2017). Supervisory orientation, employee goal orientation, and knowledge management among front line hotel employees. *International Journal of Hospitality Management*, 62, 21-32.
- Turner, C. (2004). Voices of four African American and European American female principals and their leadership styles in a recognized urban school district. [ezproxy.tamu.edu:2048/login?url=http://search.proquest.com/docview/305076483?accountid=7082](http://ezproxy.tamu.edu:2048/login?url=http://search.proquest.com/docview/305076483?accountid=7082). (305076483).
- Valenta, G. (2014). Breaking new ground in the philosophy of medicine and bioethics. *Journal of Medicine and Philosophy*, 39(4), 317-328.
- Vandewalle, D. (2012). A growth and fixed mindset exposition of the value of conceptual clarity. *Industrial and Organizational Psychology*, 5(3), 301-305.
- Warkineh, T., Rogers, A., & Danki, T. (2018). Profiling adult literacy facilitators in development contexts: An ethnographic study in Ethiopia. *International Review of Education*, 64(1), 9-30.
- Wei, L., Zhang, H., Liu, Z., & Ge, X. (2021). Goal completion moderates the association between immoral behavior and self-perceived authenticity. *Self and Identity*, 1-16.
- Yeager, D., Carroll, J., Buontempo, J., Cimpian, A., Woody, S., Crosnoe, R., & Dweck, C. (2022). Teacher mindsets help explain where a growth-mindset intervention does and doesn't work. *Psychological Science*, 33(1), 18-32.
- Yeager, D., & Dweck, C. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational psychologist*, 47(4), 302-314.
- Yik, B., Raker, J., Apkarian, N., Stains, M., Henderson, C., Dancy, M., & Johnson, E. (2022). Evaluating the impact of malleable factors on percent time lecturing in gateway chemistry, mathematics, and physics courses. *International Journal of STEM Education*, 9(1), 1-23.
- Yu, J., Kreijkes, P., & Salmela-Aro, K. (2022). Students' growth mindset: Relation to teacher beliefs, teaching practices, and school climate. *Learning and Instruction*, 80, 101616.
- Yuan, F. (2021). *On thinking of power: A research on mindset about power and well-being among business leaders in China high-tech industry* (Doctoral dissertation, University of Pennsylvania).

## Figures and Tables

Figure 1.1

*Criteria for Participant Collection*



**Table 1***Background of Participants*

<b>Name</b>	<b>Age</b>	<b>Parental Background</b>	<b>High School</b>	<b>College Sport</b>	<b>Undergraduate Degree/Graduate Degree</b>	<b>Current Profession</b>
<b>Warrick Lewis</b>	30	Single mother	City of Champions	Football	BA/JD	Attorney
<b>Najee James</b>	29	Mother and father	Funky Town	Football	BS/MS	Musician
<b>Nico Porter</b>	32	Grandparents	Texas Tradition	Football	MS/M.Ed.	Principal
<b>JaNorris Mason</b>	25	Mother and father	Texas Speed	Track	BS/MBA	Accountant

Figure 2.1

*Themes*

