

The Injury Rates in Bahamian Collegiate Track and Field Sprinters during Freshman  
Year: A Comparative Analysis of Domestic and International Athletes

By

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Exercise  
Science in Behavioral and Health Sciences

Middle Tennessee State University

August 2025

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## ACKNOWLEDGMENTS

First and foremost, I give glory and thanks to my Lord and Savior, Jesus Christ, without whom this achievement would not have been possible. There were many moments during my Master's journey when I felt like giving up and walking away, but my faith kept me grounded and determined to persevere.

I would like to thank "My Backbone", my mother, Lisa Nairn, and "my papa", Juan Rodgers, for their unwavering love and support during challenging times. Your encouragement has been a source of strength for me.

A special thank you to my person, Andre Calvert, for standing by my side through thick and thin. Your constant support means the world to me. To my phenomenal friend, Glennae Forbes, thank you for always being a listening ear and a shoulder to lean on.

To my aunts and uncles, especially Auntie Mo, thank you for answering my calls on my most stressful days. Your words of comfort always lifted my spirits. Also, thank you, Ms. Rose, for your unconditional support. I'd also like to thank my friends in Ohio, Emmitt Higgens, Jalen Smith, Lendeic Smith, Deja Campbell, Shaun, G, and Izzy, for your love and support. Spending time with you all during my breaks helped me forget my worries and rejuvenated my spirit.

Special thanks to Taylor Billings, a dear friend I gained during my time at Middle Tennessee State University, who has become one of my biggest supporters and closest friends. To my cousins, Ieisha Taylor, Lakeisha Taylor, Alex Collie, Xavier Collie, Nina Nairn, and JJ Storr, thank you for always making me laugh in our cousin group and lightening up my tough days.

To my brothers, D’Andre and D’Angelo Ried, your love and support mean so much to me. A heartfelt thank you to my friend, Kiarra, for being there through my good and bad days. Additionally, I am grateful to my friends Tanisha “Tani” Sands and Iesha Lockard for checking in on me and always making time to spend with me. To my brother from another mother, Lavano Sands, thank you for your care, love, and support.

A special mention goes to my Grammy Zel, whose good morning messages always brightened my day and brought a smile to my face. Thank you for always checking in on your grandbaby and treating me to wonderful moments during my breaks from school.

To my high school sisters, Tyler, Eryn, Acacia, Dalia, Tiesha, Brionne, and Devine—even though we may not see each other often, your love and support have always been present, and I cherish each of you.

Finally, I would like to express my gratitude to all my educators and coaches who have guided and inspired me throughout my academic and athletic journey. Special thanks to Mrs. Gordon, Mrs. Singh, Dr. Brandy Phipps, Dr. Kathleen Carter, Dr. Vaughn Barry, and Dr. Jenn Caputo. I also extend my gratitude to Al Mata, Central State University, and Middle Tennessee State University for their role in shaping my academic and professional growth.

To everyone who has supported me along the way, thank you from the bottom of my heart. This accomplishment would not have been possible without your encouragement and love.

## ABSTRACT

This study investigated the relationship between injury rates, training surfaces, and training locations among Bahamian collegiate sprinters. Participants ( $N = 52$ ) included Bahamian athletes who competed as sprinters within the past 8 years, either domestically in The Bahamas or internationally in the United States. Participants completed a survey assessing demographic information, training surfaces, and injury history. A chi-square analysis was used to assess the associations between training location and injury, as well as training location and surface type. Results showed a statistically significant relationship between training location and injury occurrence  $\chi^2(1, N = 52) = 7.74, p = .005, \phi = -.39$ , with higher injury rates reported among the United States trained athletes, where (19 injured vs. 7 not injured) compared to Bahamian athletes (9 injured vs. 17 not injured). Additionally, a very strong and statistically significant relationship between location and surface type  $\chi^2(1, N = 52) = 52.00, p < .001, \phi = 1.00$ , with all U.S.-trained athletes primarily training on hard surfaces and Bahamian-trained athletes mainly training on soft or mixed surfaces. Bahamian sprinters training in the United States should incorporate softer or mixed training surfaces into their training during August-November. This adjustment may help reduce the elevated injury risk associated with consistently training in the United States.

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## CHAPTER I

### Introduction

According to The Bahamas Association of Athletic Associations (BAAA) PR & Marketing (2024), track and field has become a growing sport in The Bahamas, providing opportunities for young athletes to enhance their skills, physical fitness, and academic pursuits. These opportunities have allowed Bahamian athletes to train and develop their athletic potential domestically. However, many Bahamian athletes leave the country to pursue education and advanced training at international universities where they experience a shift in physical training environments. Specifically, there is a transition in the training surface. Bahamian athletes tend to train on softer surfaces such as sand and grass during the off-season and then transition to synthetic tracks when the season starts, as observed and confirmed through conversations with Bahamian athletes and coaches.

With there being a cultural difference in terminology and training periods, Bahamian sprinters typically begin their running season in December or January, with it ending sometime in June or July. As a result, off-season training usually does not start until July or August, depending on the rest period coaches give their athletes. Bahamians, therefore, consider July to November as the off-season, while the in-season does not begin until December or January. Usually, domestic Bahamian athletes do not train on the synthetic track until January. Additionally, due to the climate in The Bahamas, there is no “indoor season.” The majority of Bahamian sprint training is done outdoors, even in rainy or colder conditions. However, for international Bahamian sprinters, the training for the indoor season coincides with the domestic Bahamians' off-season period. Therefore, Bahamian athletes training internationally typically train on synthetic tracks more than domestic Bahamian athletes.

A synthetic track is a man-made, rubberized surface designed for optimal traction, shock absorption, and energy return. It is composed of materials such as polyurethane and latex, which provide a durable and consistent training platform for athletes. Synthetic tracks are optimal in competitive settings because they enhance performance by reducing energy loss and providing a stable surface for high-speed sprinting (McMahon & Greene, 1978).

Bahamian sprinters who transition to international training programs may face increased injury risks due to differences in training intensity, coaching styles, and training surfaces. There is limited research on how injury rates differ between Bahamian sprinters who train domestically and those who compete internationally. Research suggests that sprinters are particularly susceptible to injuries such as hamstring strains, Achilles tendinitis, stress fractures, and patellofemoral pain syndrome (Edouard et al., 2016). In addition, training surface influences injury rates (Yu et al., 2025). Harder surfaces such as synthetic tracks are often associated with increased ground reaction forces and cumulative stress on an athlete's musculoskeletal system, but evidence of their direct contribution to injuries remains inconclusive. The specific injury rates of Bahamian collegiate athletes, particularly their training history and surface transitions, are unknown.

On the contrary, softer surfaces such as grass and sand are beneficial regarding reduced impact forces, because soft surfaces provide a cushioning effect which is less stress on the musculoskeletal system (Ferro-Sánchez et al., 2023). However, these softer surfaces can present instability challenges which can lead to sprains, ankle twists, and balance-related injuries (Delahunt & Remus, 2019). Uneven surfaces and the texture of sand require athletes to adjust their stabilization efforts while training, causing strain on muscles and ligaments.

### *Study Purpose*

The purpose of this research is to determine whether injury rates are higher among Bahamian sprinters who train internationally compared to those who remain in The Bahamas. It is hypothesized that Bahamian sprinters who transition to international training environments will experience a higher injury rate. The secondary purpose is to assess if Bahamian sprinters who train domestically and internationally train on different surfaces from August to November. It is hypothesized that international sprinters will train on harder surfaces from August to November than those who train domestically. Current research suggests that harder surfaces increase the risk of specific injuries, including stress fractures, shin splints, tendinitis, and joint-related issues (Rome et al., 2005).

### *Significance of the Study*

Through this research, the findings can inform Bahamian coaches, athletic trainers, and sports medicine professionals in understanding and reducing the injury risks associated with training internationally compared to domestically. Also, the findings can inform training protocols and injury prevention strategies for Bahamian sprinters entering international athletic programs. In addition, these findings can promote safer and more effective training experiences, improving athlete longevity and performance outcomes.

## CHAPTER II

### Literature Review

#### *Introduction*

There are opportunities Track and Field provides developing athletes the space to work on developing skills for the athlete's event, enhancing the athlete's fitness level, and providing educational benefits. Training for and competing in track and field has many physical and mental benefits. For instance, participating in track and field allows athletes to focus on the physical aspect of conditioning, which includes strength, endurance, flexibility, and recovery. Furthermore, participating in track and field develops an athlete's technical and mechanical skills for their specific event, improving their mental state as they prepare for events (Martín-Rodríguez et al., 2024).

Outside the physical and mental benefits of track and field, there are domestic and international educational opportunities for Bahamian athletes, including academic assistance and scholarships. Consequently, many Bahamian athletes leave the island to pursue these opportunities. As athletes leave the island, they are exposed to different training styles. It is crucial to consider the physical challenges they face, particularly the factors contributing to injuries in track and field.

Injury rates in track and field can be influenced by several factors, including overtraining, technique, muscle imbalances, and recovery (Aicale et al., 2018). While discussing these factors, training surfaces are also significant. Understanding how the biomechanical forces on an athlete's body can vary depending on the type of surface and injury risk is crucial for researchers to observe effective training strategies that reduce injuries and lead to more effective performances (Ferro-Sánchez et al., 2023). This literature review will highlight the existing research on

training surfaces, injury risks, and how these factors contribute to injury rates among Bahamian track athletes.

### *Track and Field and Injuries in Bahamian Athletes*

Over the years, the growing attention and opportunities provided by track and field in The Bahamas have provided athletes with several pathways to develop skills, physical conditioning, and education. These opportunities allow Bahamian athletes to progress and achieve success in the sport. Training surface is a concern for injury prevention among athletes, coaches, and sports medicine professionals (Saragiotto et al., 2014). The lack of data on Bahamian athletes' injury rates further emphasizes the need for more research in this area to inform future injury prevention strategies.

### *The Relationship Between Training Surfaces in Injury Rates*

There is a connection between training surfaces and an athlete's health/risk of injury. According to Ferro-Sánchez et al. (2023), training surfaces influence injury risk due to varying levels of impact acceleration on a runner's body. Runners training on harder surfaces may have a higher risk of injury compared to those training on softer surfaces. Harder surfaces, including synthetic tracks, are commonly used for sprinters as they provide optimal traction and energy return, enhancing performance (McMahon & Greene, 1978).

Synthetic tracks are made from rubber granules bound together with polyurethane, creating a surface designed to provide better shock absorption than asphalt or concrete while still maintaining firmness for explosive movements. These tracks allow for greater force production during sprinting, benefiting performance but also increasing the likelihood of stress-related injuries if training loads are not properly managed. Bahamian sprinters who primarily train on

softer surfaces, such as sand or grass, during the off-season may face an increased injury risk when transitioning to synthetic tracks in international settings. Whereas there is no evidence to support this statement this has been observed and stated by Bahamian coaches and Athletic Trainers. The shift from a softer to a firmer training environment can lead to biomechanical adjustments that place additional strain on muscles and joints, potentially increasing injury susceptibility.

### *Injuries that can occur on Hard Surfaces*

Various injuries can occur due to the impact forces and reduced shock absorption associated with training on hard surfaces. Training on harder surfaces can result in several injuries because of the cumulative stress placed on the muscles and tendons. Furthermore, not wearing proper running wear can further exacerbate injury rates providing insufficient cushioning and arch support (Orr et al., 2022).

The repetitive motion of running or any other exercise that consists of high intensity or impact on hard surfaces can result in stress fractures (Kiel & Kaiser, 2023). Stress fractures are described as small cracks in a bone that occur when there is a repetitive overuse of force. This injury usually occurs in weight-bearing areas like the tibia or metatarsals of the foot. In addition, plantar fasciitis is another common injury that can occur due to training on harder surfaces. Plantar fasciitis is described as inflammation of the thick band of tissue connecting the heel bone to the toes. This injury can occur when the foot is constantly experiencing shock from the ground and without adequate cushioning (Latt et al., 2020). Achilles tendonitis, inflammation of the Achilles tendon, is another injury that can occur because of excessive running or jumping on hard surfaces. This injury can cause stiffness, swelling, and pain in the back of the heel (Pabón &

Naqvi, 2023). This condition is often associated with pain around the kneecap and may worsen with prolonged running or walking.

In conclusion, training on harder surfaces, especially without the use of proper footwear, can significantly increase the risk of various overuse injuries due to the repetitive impact forces and reduced shock absorption experienced by the muscles, tendons, and bones. These injuries, including stress fractures, plantar fasciitis, Achilles tendonitis, and patellofemoral pain syndrome, are often associated with excessive and/or prolonged training on hard surfaces. The duration and intensity of such training are commonly described in terms of weekly mileage, session frequency, and cumulative exposure over months or years, with studies often examining thresholds at which injury risk increases (Nielsen et al., 2012).

### *Injuries that can occur training on soft surfaces*

While training on soft surfaces can reduce joint impact forces and, therefore, reduce injury risks such as stress fractures, injuries can still occur because of instability. Several injuries may occur from training on soft surfaces. First, according to Chinn and Hertel (2009), ankle sprains can occur due to uneven surfaces which can result in an athlete's foot rolling or twisting. Injuries can occur on sand and grass because of the uneven textures. Sand can shift beneath the feet, causing instability and increasing the risk of missteps and injuries. Grass, on the other hand, can keep holes or uneven ground hidden, which may lead to an athlete landing awkwardly and straining the ligaments around the ankle. In addition, Achilles tendinitis can occur from a calf muscle strain. The strain can be caused by the extra stabilization needed for running or jumping on the soft surfaces. When training on softer surfaces the athlete is required to put in far more effort from the calf muscles to push off which increases stress on the muscle causing a strain to the Achilles tendon (Wong et al., 2023). Moreover, Buchanan et al (2024) stated plantar fasciitis

can occur due to the added tension on the plantar fascia when running on soft surfaces. The foot muscles work harder to stabilize the arch and maintain balance, potentially leading to inflammation or overuse injuries.

### *Training Surfaces and Bahamian Athletes*

Bahamian track and field athletes typically train on soft surfaces, especially during the off-season to develop the body. Sand assists with strength and conditioning because an athlete is required to give more effort to train in sand resulting in a higher caloric expenditure (de Villarreal et al., 2023). Also, Han (2015) stated training in the sand can strengthen the small muscles in the feet and around the ankles giving the athlete more stability and reducing the risk of ankle-related injuries. Therefore, Bahamians can benefit from training on sand because it reduces the risk of stress-related injuries while gaining strength and conditioning effectively. However, when Bahamian athletes make the transition to the international collegiate stage, the change in surface training type may increase injury rates. In addition, due to differences in training environments, domestic Bahamian sprinters primarily train outdoors and do not use synthetic tracks until January, whereas international sprinters engage in indoor training during what is considered the off-season for domestic athletes.

### *Training Differences and Injury Risk Among Bahamian Sprinters*

Bahamian sprinters who transition to international training programs often face increased competition frequency, higher training intensity, and different coaching methodologies. These factors can contribute to an elevated risk of injury if proper adaptations are not made. For

example, increased sprint volume and intensity without adequate periodization may lead to overuse injuries and muscular fatigue (Aicale et al., 2018). Understanding these challenges can help inform strategies to optimize training loads, recovery periods, and injury prevention techniques for Bahamian sprinters at various levels of competition.

### *Athletes recalling injuries and injury rates for Freshmen*

There are not many studies that focus specifically on freshmen as a separate group regarding injury rate, however, there is research that gives information about injury patterns during the early stages of collegiate participation. The NCAA Injury Surveillance Program gives details about the general injury trends among collegiate track and field athletes, but does not explicitly focus on injuries during athletes' first year. Also, there is a gap in research specifically tracking or recalling injuries that occurred during an athlete's freshman year of college. Most research relies on real-time injury reporting during college careers. This lack of focused research could be significant because understanding injuries sustained during the freshman year might give feedback and relevant information to prevention strategies, especially as freshmen adjust to increased training volumes, new environments, and higher competition levels.

### *Purpose and Relevance of the Research*

The purpose of this study is to determine whether there are injury rate differences between Bahamian collegiate sprinters who train on the island compared to those who leave the island. It is hypothesized that those who leave the island will have greater injury rates than those who stay on the island. This comparison can inform Bahamian athletes and international athletic

programs about the potential benefits and risks of training surface choices. By identifying surface-specific injury trends, this research will provide valuable insights for coaches, athletes, and sports medicine professionals, potentially leading to improved injury prevention protocols.

### *The Gap*

The lack of data on Bahamian sprinters' injury rates further emphasizes the need for research in this area to inform future injury prevention strategies. Additionally, there is a lack of comprehensive data on how different training surfaces affect injury rates among Bahamian sprinters. While existing research discusses the impact of training surfaces on injury risks, limited information addresses how transitioning from softer to harder surfaces affects Bahamian athletes. This study aims to fill that gap by providing data on injury rate differences between domestic and international Bahamian sprinters.

### *Conclusion*

Many Bahamian sprinters leave the island to pursue collegiate opportunities, often facing a significant shift in training environments. Training surface type plays a crucial role in the injury rates of track and field athletes. Harder surfaces, such as synthetic tracks, can lead to higher impact forces and stress-related injuries, while softer surfaces may reduce impact but increase instability-related injury risks. For Bahamian sprinters, who often transition from training on soft domestic surfaces to harder international ones, understanding these risks is critical. Further research is necessary to provide data-driven recommendations that can improve injury prevention efforts and enhance the longevity of athletes' careers.

## CHAPTER III

### Methods

#### *Participants*

This study included Bahamian collegiate sprinters who are currently or within the past 8 years were freshmen studying and training domestically or internationally. Before enrolling in the study, participants signed an informed consent. To be eligible for the study, participants must be or have been a collegiate sprinter during the months of August-November of their freshman year. Athletes who participated in multiple sports were excluded. The study was approved by the university's Institutional Review Board (IRB) to ensure ethical standards are met (see Appendix A).

#### *Procedure*

Participants were recruited through collegiate track and field programs in The Bahamas (i.e., The University of The Bahamas) and the United States. The recruitment involved coordination with the coaching staff of various track clubs in The Bahamas. These coaches gathered contact information on their past and present athletes who train domestically and internationally. WhatsApp, Instagram, and Facebook were also used to recruit past and present Bahamian athletes. The study utilized a Qualtrics survey to gather data on the athletes' training experiences. The survey included sections on demographic information, training frequency, surface types used in training (e.g., sand, grass, synthetic track), and any injuries sustained during the training period. The survey design incorporated both closed-ended questions for quantitative data and open-ended questions for additional context on injury experiences.

### *Data Analysis*

To assess injury rate differences between Bahamian collegiate athletes who train domestically and those who train internationally, a chi-square test of independence was conducted. An additional chi-squared test was completed to assess the secondary study purpose. This secondary analysis assessed whether training surface differences exist between those training domestically or internationally. In the survey, participants reported the percentage of training completed on softer (i.e., grass and sand) or harder (i.e., synthetic track) surfaces. Sprinters also reported where they completed their freshman year and whether they had an injury during their freshman year. Athletes with greater than 50% training on soft surfaces were counted as training on soft surfaces. Athletes with greater than 50% training on hard surfaces were counted as training on hard surfaces. In addition, the effect size, as assessed by Phi statistic, was used to assess the strength of the relationship within each chi-square analysis. The SPSS software (IBM, SPSS Statistics 29 GradPacks) was used to analyze the data. A significance level of  $p < .05$  was used to determine statistically significant differences.

## CHAPTER IV

### Results

A total of 60 individuals began the survey. Three declined to participate, and two selected "other" when asked if they were a sprinter, which disqualified them from the study. Three individuals selected "sprinter," however, one reported being injured while going over a hurdle and was disqualified, because hurdlers were not included in the study. The remaining two were heptathletes, which also made them ineligible. Therefore, 52 participants met the inclusion criteria and were eligible for the study (see Table 1).

The location x injury and a chi-square of independence showed that the relationship between location and injury occurrence was statistically significant ( $\chi^2 (1, N = 52) = 7.74, p = .005, \phi = 0.39$ ). During their freshman year, 73.1% of Bahamian athletes training in the United States experienced an injury, with 34.62% of domestic athletes having a freshman year injury. There is a 38.45% difference in injury history, with more sprinters injured internationally than domestically (see Table 2). Data collection showed that 100% of USA athletes trained primarily on hard surfaces, while Bahamian athletes trained on soft surfaces or both hard and soft surfaces. The chi-square test showed  $\chi^2 (2, N = 52) = 52.00, p < .001, \phi = 1.00$  indicating a significant relationship between location and surface type (see Table 3). Overall, athletes training in the USA trained on hard surfaces and were more likely to be injured compared to those training in The Bahamas.

**Table 1**

**Demographic Characteristics of Bahamian Collegiate Sprinters during their Freshman Year**

	Domestic ( <i>n</i> = 26)	International ( <i>n</i> = 26)
Age (year)	18 ± 1	18 ± 1
Height (cm)	169 ± 12	172 ± 8
Body mass (kg)	60.63 ± 7.16	63.16 ± 10.02
Sex		
Male	14 (54)	11 (46)
Female	12 (44)	15 (56)

**Note.** N (%), and M ± SD. All data were self-reported by participants.

**Table 2**

**Injury Status by Training Location in Bahamian Collegiate Sprinters**

Injury Status	Domestic ( <i>n</i> = 26)	International ( <i>n</i> = 26)
Injured	9 (34.62)	19 (73.08)
Uninjured	17 (65.38)	7 (26.92)

**Note:** N (%), *p* < 0.001

**Table 3****Surface Status by Training Location in Bahamian Collegiate Sprinters**

Surface Training	Domestic ( <i>n</i> = 26)	International ( <i>n</i> = 26)
Softer (grass and sand)	18 (69.23)	0 (0)
Harder (synthetic track)	8 (30.77)	26 (100)

Note: N (%),  $p < 0.005$

## CHAPTER V

### Discussion

The purpose of this study is to determine whether there are injury rate differences between Bahamian collegiate sprinters who train on the island compared to those who leave the island. Participants were divided into two groups: athletes who trained domestically in The Bahamas and those who trained in the USA. The number of injuries of these two groups were analyzed to determine if the training location was related to injury. The results showed injury rates were significantly related to training location in Bahamian sprinters. Overall, results showed Bahamian athletes training in the United States were training on hard surfaces and were showed a higher number of injuries compared to those training in The Bahamas.

The findings of this study align with national injury trends reported in the NCAA Injury Surveillance System, which documented over 182,000 injuries across 16 years of collegiate sports data collection (Hootman et al., 2007). The findings of this study align with national trends reported by Hootman et al. (2007), because the documented 182,000 collegiate sports injuries had risk factors, like training surface and environment, as key contributors. Compared to this study, where it was determined a higher injury rate among Bahamian sprinters training internationally, who primarily on hard surfaces. In the current sample of 52 Bahamian collegiate sprinters, injury occurrence was significantly higher among athletes training internationally (73.07%) compared to those training domestically (34.62%), a 38.45% difference that was statistically significant. The study by Hootman et al., (2007) reported that athletes experienced 13.8 injuries per 1,000 athlete-exposures during the competitive season, compared to 6.6 injuries per 1,000 athlete-exposures during preseason practices. Athlete exposure is described as the quantify the time an athlete is at risk for an injury, allowing for the calculation of injury rates.

These findings suggest that the risk of injury increases during the season, likely due to factors such as higher training loads, increased intensity of competition, accumulated fatigue, and possibly less recovery time. Environmental conditions, such as training surfaces, weather, and facility conditions, may also contribute to the heightened injury risk during the season compared to the preseason. In this study, internationally trained athletes trained primarily on hard surfaces, which was strongly associated with increased injury risk. This supports previous conclusions from the NCAA Injury Surveillance System that modifiable factors, such as surface type and training conditions, play a crucial role in injury prevention. Overall, these findings suggest the importance of considering training environments and surface types as key variables in prevention strategies for collegiate sprinters.

Bahamian sprinters, who train domestically and internationally, often experience differences in training due to cultural differences, likely leading to variations in training methods, coaching styles, expectations, and overall athletic environments. These differences are largely due to cultural factors such as the structure of training programs pertaining to how athletes train and what surfaces they train on. While more research is needed to assess the training differences between these two groups of athletes, domestic Bahamian athletes typically train using natural resources (e.g., grass and sand), especially during the months of August-November. International athletes who train abroad may gain access to more advanced training but may also face challenges adapting to new surfaces. Whereas, with domestic Bahamian sprinter may not be exposed to these trainings are equipment.

There are cultural differences in terminology and training periods. For international athletes, the period from December to March is considered the indoor season. In contrast, for domestic Bahamian athletes, that period is considered the outdoor season, as there is no indoor

track season in The Bahamas. Therefore, the training periods for indoor competition do not coincide between the two groups. Domestic Bahamian sprinters typically begin their running season in December or January, with it ending sometime in June or July. As a result, their off-season training usually does not start until July or August, depending on the rest period coaches give their athletes. Domestic Bahamians, therefore, consider July to November as the off-season, while the in-season does not begin until December or January. Domestic Bahamian athletes usually do not train on the synthetic track until January. Additionally, due to the climate in The Bahamas, there is no “indoor season.” Most of the Bahamian sprint training is done outdoors, even in rainy or colder conditions. However, for international Bahamian sprinters, the training for the indoor season coincides with the domestic Bahamians' off-season period. Therefore, Bahamian athletes training internationally typically train on synthetic tracks more than domestic Bahamian athletes. These environmental distinctions may significantly impact athletic performance, training adaptation, and injury rates. Coaches and Bahamian athletes along with other officials in The Bahamas should start talking about gradual adaptation strategies for athletes moving from soft to hard surfaces. These strategies can assist with the reduction of potential injury risks and provide more education and awareness regarding this matter.

This study has limitations despite the significant findings. This study had a small sample size for a survey study with 52 participants. However, a power analysis prior to the study, with an estimated effect size of .5, alpha level of 0.05, power of 0.80, and 2 degrees of freedom, showed that 39 participants would be sufficient. However, the effect size for the main outcome was lower than predicted (i.e., .386). With this effect size, 65 participants would have been needed. Fortunately, the study's main outcome was significant. The self-reporting of injuries may have impacted recall bias and inaccuracies in the data. Furthermore, participants were asked to recall as far back as their freshman year, in some cases, this was 8 years ago (i.e., 2017).

Recalling freshman year injuries and surface training types may not be as accurate as an athlete recalling a more recent injury. Finally, while the study specifically assessed surface types, important confounding factors such as training volume, footwear, and climate were not controlled. Future research should account for these variables.

## *Conclusion*

Overall, the study explored the relationship between training surfaces, training locations, and injury rates among Bahamian collegiate sprinters during their freshman year. The results showed that during their freshman year, Bahamian sprinters training in the USA experienced significantly more injuries compared to Bahamian sprinters training in The Bahamas. The results also showed a significant association between training location and surface type, with international athletes primarily training on harder surfaces and domestic athletes training on softer surfaces. Coaches and Bahamian athletes should consider implementing gradual adaptation strategies for athletes moving from soft to hard surfaces and increasing awareness of potential injury risks. More awareness of potential injury risks may inform training strategies to reduce injury rates and improve performance and longevity of Bahamian track and field sprinters transitioning to international competition.

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## APPENDICES



INSTITUTIONAL REVIEW BOARD  
FWA 00005331 | IRB #00003571  
Office of Research Compliance  
010A Sam Ingram Building  
2269 Middle Tennessee Blvd.  
Murfreesboro, TN 37129

Date: April 17, 2025

PI: Danielle Rodgers

Department: Middle Tennessee State University, Health and Human Performance

Co-PI: Jennifer Caputo, Vaughn Barry

Department: Middle Tennessee State University, Health and Human Performance

Re: Initial - IRB-FY2025-239

The Injury Rates in Bahamian Collegiate Track and Field Sprinters during Freshman Year: A Comparative Analysis of Domestic and International Athletes

The Middle Tennessee State University Institutional Review Board has rendered the decision below for the above referenced study.

**Decision:** Exempt

### Appendix A:

1. As a collegiate athlete, which events did/do you train for?
  - Sprints (e.g., 100m, 200m, 400m)
  - Other
2. What was your age coming in as a freshman?
3. What was the year of your athletic freshman year? (A student athlete's first year of training for competition in college)
4. What is your sex?
5. What was your height and weight during your freshman year?
6. Where is/was your university located?

- USA
  - The Bahamas
7. As a collegiate freshman athlete, how often did/do you train for track and field from August to November?
- Everyday
  - 4-6 times per week
  - 2-3 times per week
  - Less than twice a week
8. As a collegiate freshman athlete, what types of surfaces did/do you commonly train on during August-November? Check all that apply.
- Grass
  - Sand
  - Synthetic Track
  - Other, give detail
9. As a collegiate freshman athlete, how frequently did/do you train on each surface throughout the week during August-November? (Provide a number next to each answer)
- Sliding scale with a percentage
- Grass:
  - Sand:
  - Synthetic Track:
10. How many injuries did you experience during your time as a collegiate freshman athlete?
11. State the type of injury you experience for each injury. (Select all that apply)
- Muscle strain
  - Ankle sprain

- Tendonitis
- Stress fracture
- Knee injury
- Plantar Fasciitis
- Other (Please specify): \_\_\_\_\_

12. Did you have any pre-existing injuries or medical conditions before entering college?

- Yes Please explain the injury and how long the injury was for \_\_\_\_\_
- No

13. Do you have additional comments or experiences you would like to share regarding your injuries?

Thank you for participating in this survey. Your time and responses are greatly appreciated.

The purpose of this study is to examine the impact of training surfaces on injury rates among collegiate track and field athletes. Specifically, we aim to compare injury rates between athletes who trained in the Bahamas versus those who trained in the United States.

If you would like to receive a summary of the study's findings once the research is completed, please feel free to contact me at [der3r@mtmail.mtsu.edu](mailto:der3r@mtmail.mtsu.edu).

Your participation contributes valuable insights into understanding injury risks in collegiate athletics, and we sincerely appreciate your input.

Thank you again for your time and contribution!

For additional information about giving consent or your rights as a participant in this study, please contact the Middle Tennessee State University (MTSU) Office of Compliance at 615-494-8918 or via email at [irb\\_information@mtsu.edu](mailto:irb_information@mtsu.edu). (<http://www.mtsu.edu/irb>)