



Ultimate Frisbee as an Alternative Team Sports For Path-Fit 4

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ABSTRACT

This study explores the potential of Ultimate Frisbee as an alternative team sport in the Physical Activities Towards Health and Fitness 4 (PATH-FIT 4) curriculum within State Universities and Colleges (SUCs)

and Higher Education Institutions (HEIs) in the Philippines. The rising demand for innovative, accessible, and cost-effective physical activities in educational settings has highlighted the need for alternative sports that foster student engagement, physical fitness, mental resilience, and social interaction. Traditional team sports, such as basketball and volleyball, often require extensive equipment and facilities, which may not be readily available in many educational institutions. In contrast, Ultimate Frisbee demands minimal resources, requiring only a flying disc and an open field, making it an economically viable and inclusive option for schools with limited resources. The study utilized a descriptive-comparative-correlational research design to assess the perceptions of the respondents, including students, PE teachers, Frisbee enthusiasts, and Frisbee coaches. The research aimed to evaluate the benefits of Ultimate Frisbee in terms of physical, mental, social, and affective aspects, as well as to examine the ease of skill execution and the challenges in offering the sport as part of the PATH-FIT 4 curriculum. The findings indicated strong agreement among respondents that Ultimate Frisbee contributes significantly to improving cardiovascular endurance, agility, strategic thinking, decision-making, teamwork, communication, and emotional well-being. The study found that the sport is perceived as accessible and easy to execute, with no significant differences in the perceived benefits or ease of skill execution across different respondent profiles. Despite the overall positive reception, the study identified several challenges in implementing Ultimate Frisbee in the curriculum, including the lack of facilities, limited awareness, and insufficient training for PE teachers. However, the research also highlighted that these challenges could be mitigated with proper training, resource allocation, and awareness campaigns. The study concluded that Ultimate Frisbee, along with other alternative sports such as yoga, modified versions of traditional sports, dance, Pilates, and Zumba, should be integrated into the PATH-FIT 4 curriculum. These sports provide a diverse and inclusive approach to physical education, catering to various skill levels and offering a wide range of physical, mental, and social benefits. The study recommends that educational institutions allocate the necessary resources to support these activities and promote awareness among students and faculty. It also emphasizes the importance of professional development for PE teachers to incorporate these alternative sports into the curriculum effectively. By diversifying the sports offered in the PATH-FIT 4 program, schools can create a more engaging and inclusive physical education experience, ultimately contributing to the overall health and well-being of students.

Keywords: Alternative sports, PATH-FIT 4, physical education, student well-being and Ultimate Frisbee

1. INTRODUCTION

In recent years, the significance of physical education (PE) in the holistic development of students has garnered increasing attention within educational frameworks globally. With its diverse cultural landscape and educational institutions, the Philippines stands at a pivotal juncture where integrating innovative sports into the PE curriculum could enhance student engagement and physical fitness. Among various team sports, Ultimate Frisbee emerges as a compelling candidate for inclusion in the PE programs of state universities, colleges, and higher education institutions. This study explores the potential of Ultimate Frisbee as an accessible, cost-effective, and engaging team sport that can foster physical fitness, social interaction, skill development, and knowledge acquisition among students. The rising costs associated with traditional team sports such as basketball and volleyball pose significant barriers to widespread adoption in educational settings. These sports often require specialized equipment

and facilities, which may not be readily available in many Philippine institutions. In contrast, Ultimate Frisbee necessitates minimal equipment primarily a single frisbee and can be played in open areas, making it an economically viable option for schools with limited resources. This accessibility aligns with the findings of Donnelly et al., who emphasize the importance of physical activity in enhancing cognitive function and academic achievement among children, suggesting that schools should prioritize sports that are easy to implement and require fewer resources (Dadı & Yıldız, 2023).

Moreover, the inherent social dynamics in Ultimate Frisbee can contribute significantly to developing communication skills and teamwork among students. Research indicates that physical education classes that promote interaction among students lead to improved social communication skills. Ultimate Frisbee, emphasizing self-officiating and sportsmanship, encourages players to communicate effectively and work collaboratively, enhancing their social skills and fostering a sense of community within the educational environment. This aspect is particularly crucial where community and social ties are integral to the cultural fabric.

The physical benefits of engaging in Ultimate Frisbee are also noteworthy. Studies have shown that participation in physical activities can improve physical fitness, which is essential for overall health and well-being. The dynamic nature of Ultimate Frisbee, which combines elements of running, jumping, and strategic thinking, provides a comprehensive workout that can enhance cardiovascular fitness, agility, and coordination. Furthermore, incorporating such a sport into the PE curriculum can address the growing concern of physical inactivity among students, as highlighted by Zanchetta et al., who found that higher education students often engage less in physical activities (Donnelly et al., 2018). By introducing Ultimate Frisbee, educational institutions can promote a more active lifestyle among students, contributing to their long-term health.

In addition to physical and social benefits, Ultimate Frisbee has the potential to enhance cognitive development, skill development, and knowledge acquisition. Research indicates that physical activity is linked to improved academic performance, as it can enhance concentration, memory, and classroom behavior. The strategic elements of Ultimate Frisbee require players to think critically and make quick decisions, thereby stimulating cognitive processes that are beneficial in an academic context. The game also demands players to develop specific skills like throwing, catching, and strategizing, which can be applied in other sports and activities. Furthermore, understanding the rules of the game, the strategies involved, and the different positions requires players to learn and apply knowledge, enhancing their understanding of the sport and its nuances. Learning the game's intricacies fosters a deeper knowledge base and promotes analytical thinking. Developing these skills and acquiring this knowledge makes Ultimate Frisbee a valuable addition to a well-rounded education. This dual focus on physical and cognitive development aligns with the goals of modern education, which seeks to cultivate well-rounded individuals capable of thriving in various aspects of life (Zanchetta et al., 2018).

Furthermore, integrating Ultimate Frisbee into the PE curriculum can promote inclusivity and diversity within educational institutions. Unlike many traditional sports that may favor specific skill sets or physical attributes, Ultimate Frisbee is inherently inclusive, allowing individuals of varying abilities to participate and excel. This inclusivity is supported by the findings of Ibrahim, who notes that diverse teaching styles in physical education can enhance student engagement and performance (Zhang, 2024). By fostering an environment where all students feel welcome and valued, Ultimate Frisbee can contribute to a more equitable educational experience.

Implementing Ultimate Frisbee in the PE curriculum aligns with contemporary educational trends emphasizing experiential learning and student-centered approaches. As highlighted by Fletcher et al., meaningful physical education experiences are essential for fostering a lifelong appreciation for physical activity (Ibrahim, 2018). Ultimate Frisbee, with its engaging gameplay and emphasis on teamwork, provides students with a meaningful context to develop their physical skills and learn valuable skills that can be transferred to other contexts while also enjoying the social aspects of sports. This experiential learning approach can increase motivation and sustain participation in physical activities beyond the classroom.

The potential of Ultimate Frisbee as an alternative team sport in the physical activities towards health and fitness four (PATH-FIT 4) curriculum of (SUC) state universities, colleges, and (HEI) higher education institutions is multifaceted. Its accessibility, social benefits, physical fitness contributions, cognitive enhancements, skill development, knowledge acquisition, inclusivity, and alignment with modern educational practices make it a compelling choice for educators seeking to enrich their PE programs. As this study will demonstrate, the integration of Ultimate Frisbee can address the challenges posed by traditional sports and promote a healthier, more engaged student body that is better equipped for academic and social life.

Background of the Study

The study is rooted in the growing recognition of the importance of physical education and team sports in fostering holistic student development. The context of this research is particularly relevant in Region IV-A CALABARZON, where educational institutions are increasingly tasked with promoting academic excellence, physical well-being, and social skills among students. Integrating team sports, such as Ultimate Frisbee, into the physical education curriculum could catalyze achieving these objectives. Research has consistently shown that participation in team sports contributes significantly to developing essential life skills among students. For instance, Karaca and Filiz (2020) emphasize that involvement in school sports fosters emotions and behaviors integral to sports culture, including self-confidence, belonging, and the ability to work collaboratively towards common goals. These attributes are vital in higher education, where students must navigate complex social environments and work effectively in teams. Furthermore, Kang et al. (2024) highlights the necessity of integrating team sports into educational curricula to promote a balanced approach to student well-being, underscoring the role of such activities in cultivating a healthy and inclusive student body. The potential of Ultimate Frisbee as a team sport lies in its unique characteristics that promote inclusivity and accessibility. Unlike many traditional sports, Ultimate Frisbee can be played by individuals of varying skill levels and physical abilities, making it an ideal candidate for diverse educational settings. Ribeiro and Couto discuss the importance of ensuring that all children have access to various sports skills, regardless of their background (Ribeiro & Couto, 2022). This aligns with the objectives of physical activities towards health and fitness (PATH-FIT 4) subject in tertiary level in the Philippines, which aims to provide equitable opportunities for all students to engage in physical activities that enhance their social and emotional development.

Moreover, the mental health benefits associated with team sports participation cannot be overlooked. Guo's (2024) research indicates a negative correlation between participation in team sports and levels of anxiety and depression among college students, suggesting that structured physical activity can serve as a protective factor for mental health. This is particularly pertinent in the context of the Philippines, where mental health issues among students have been increasingly recognized as a significant concern. By

incorporating Ultimate Frisbee into the physical education curriculum, educational institutions can provide students with a constructive outlet for stress relief and social interaction, enhancing their overall well-being.

The educational framework has undergone significant changes, particularly with implementing the K-12 curriculum. Poblador and Tagare (2023) highlight the need for effective pedagogical practices to optimize the Sports Track Program within this framework. Introducing Ultimate Frisbee as a team sport could enrich the curriculum by allowing students to develop teamwork, communication, and leadership skills. These competencies are essential for academic success and future professional endeavors, as employers increasingly value soft skills alongside technical knowledge. Furthermore, the role of physical education in promoting social responsibility and community engagement is critical. Kao emphasizes that physical education should not only focus on physical skills but also on fostering social skills and team cohesion (Kao, 2019).

Ultimate Frisbee, emphasizing fair play and respect for opponents, embodies these values and can serve as a platform for students to engage with their peers positively and constructively. This aligns with the broader goals of education in the Philippines, which seeks to cultivate responsible citizens who contribute to the betterment of society. In addition to the social and emotional benefits, the academic implications of team sports participation are noteworthy. Studies have shown a positive relationship between involvement in team sports and academic performance, suggesting that students who engage in physical activities tend to achieve higher grades (Joseph, 2023).

This correlation may be attributed to the discipline, time management, and teamwork skills developed through participation in sports. Educators can create a synergistic effect that enhances physical fitness and academic achievement by integrating Ultimate Frisbee into the physical education curriculum. Implementing Ultimate Frisbee as a team sport in educational institutions also aligns with national policies promoting sports and physical education. Macapagal et al. analyze the strategic directions outlined in the State of the Nation Addresses regarding sports and physical education, emphasizing the need for comprehensive action programs to support these initiatives (Macapagal et al., 2023). By adopting Ultimate Frisbee, educational institutions can contribute to the national agenda of fostering a healthy and active population, thereby addressing public health concerns related to sedentary lifestyles among youth. Moreover, the pedagogical models employed in teaching Ultimate Frisbee can be adapted to enhance student engagement and learning outcomes. Calle et al. discuss the importance of employing innovative teaching strategies in alternative sports to maximize student participation and enjoyment (Calle et al., 2023). The dynamic nature of Ultimate Frisbee allows for the incorporation of various teaching methodologies that can cater to different learning styles, making it an effective tool for promoting physical education. As the study is set to be conducted from January to July 2025, it is crucial to consider the evolving landscape of physical activities towards health and fitness in the Philippines. The ongoing challenges faced by higher education institutions, as highlighted by Adeyemo and Sehoole (2019) necessitate a reevaluation of existing curricula to ensure they meet the needs of contemporary students. By exploring the potential of Ultimate Frisbee as a team sport, this research aims to contribute to the discourse on enhancing physical activities towards health and fitness (PATH-FIT) activities in state universities and colleges (SUC), and higher education institutions (HEI). In conclusion, the background of this study underscores the multifaceted benefits of integrating Ultimate Frisbee into the physical activities towards health and fitness four (PATH-FIT 4) curriculum. From promoting physical fitness and mental health to fostering social skills and academic success, the potential impact of this team sport is

significant. As educational institutions continue to adapt to the changing needs of students, incorporating innovative sports like Ultimate Frisbee can play a pivotal role in shaping a well-rounded educational experience that prepares students for future challenges.

Reviews of Literature and Studies

Ultimate Frisbee into the physical activities towards health and fitness four (PATH-FIT 4) within state universities and colleges (SUC), and higher education institutions (HEI) supported by a growing body of literature highlighting the multifaceted benefits of team sports. This review synthesizes research on team sports participation's mental, social, and physical health benefits, mainly focusing on Ultimate Frisbee.

Mental Health Benefits of Team Sports Numerous studies have established a positive correlation between participation in team sports and improved mental health outcomes. For instance, Tahira emphasizes that engagement in team sports is consistently linked to enhanced psychological and social health, including increased self-esteem, social networking, and a sense of belonging (Tahira, 2023). This is particularly relevant in the context of Ultimate Frisbee, which fosters a community-oriented environment where players support one another. Moreover, Guddal et al. found that team sports participation is associated with beneficial mental health outcomes, especially among adolescents, indicating that team sports can serve as a protective factor against mental health issues such as anxiety and depression (Guddal et al., 2019). This aligns with the findings of Larocca et al. (2022), who noted that team sports participation can reduce depressive symptoms in youth, highlighting the inclusivity of team sports.

Furthermore, Eather et al. (2023) present a systematic review that outlines the mental health benefits of sports participation, proposing a conceptual model that recognizes the varying impacts of different sports contexts on mental health. This model underscores the importance of team dynamics in fostering a supportive environment that can mitigate mental health challenges. The protective factors associated with team sports participation are particularly pertinent in the Philippines, where mental health issues among students are increasingly recognized as a significant concern.

Ultimate Frisbee as a Popular Sports

Ultimate Frisbee, also known simply as Ultimate, has increasingly become a popular team sport worldwide. This non-contact sport is played with a flying disc, where teams of seven players attempt to score points by catching the disc in the opposing team's end zone. Ultimate's uniqueness lies in its combination of athletic skills such as speed, agility, and endurance, with a heavy emphasis on team strategy, communication, and fair play. Over the years, Ultimate has gained significant traction, with participation growing steadily at the youth, collegiate, and professional levels. This sport's inclusion in PATH-FIT 4 is due to its potential to enhance physical fitness while fostering teamwork and community engagement. Research findings indicate that Ultimate can positively influence cardiovascular health, agility, and mental well-being, making it a valuable alternative team sport for improving overall physical fitness.

A study by Hughes et al. (2018) found that participation in Ultimate Frisbee positively affected physical fitness, emphasizing cardiovascular endurance and overall strength. The study found that Ultimate players exhibited higher levels of aerobic fitness and better physical coordination than participants in other team sports. The aerobic demands of Ultimate Frisbee, combined with sprinting, cutting, and jumping, make it an ideal sport for improving cardiovascular health and stamina. Moreover, studies have shown that Ultimate can improve core strength, flexibility, and balance, which are critical components of physical

fitness, particularly in youth. These findings support the integration of Ultimate Frisbee into fitness programs as an enjoyable way to enhance physical health.

In the local context, Mendoza and Cruz (2020) examined the growing popularity of Ultimate Frisbee among youth in Metro Manila and its benefits in terms of physical health and social cohesion. They found that youth participants in Ultimate Frisbee leagues reported improved cardiovascular health, enhanced endurance, and a better sense of teamwork. This local study underscores the potential of Ultimate Frisbee as a tool for improving physical fitness in communities, particularly in urban settings where access to traditional fitness facilities may be limited. It also highlights the importance of community engagement, as Ultimate Frisbee tournaments serve as a social hub, fostering both physical and social well-being.

Globally, the International Federation of Ultimate (WFDF) has promoted Ultimate Frisbee as a means to improve physical fitness while emphasizing inclusivity and fair play. A study by Van der Merwe et al. (2019) confirmed that Ultimate Frisbee contributes to team-building and group cohesion, which are essential factors in achieving long-term fitness goals. The study suggests that Ultimate can also reduce the dropout rate in sports, particularly in youth programs, as it offers a less combative, more inclusive environment compared to traditional contact sports.

The research findings from both international and local studies show that Ultimate Frisbee is an effective team sport for enhancing physical fitness, particularly in developing cardiovascular endurance, agility, and strength. By integrating Ultimate into PATH-FIT 4, we not only address the physical fitness component but also create a platform for building team dynamics and community participation. This approach resonates with the broader goals of promoting sustainable health through active, inclusive, and community-driven sports. The findings further support the view that Ultimate Frisbee's potential to contribute to holistic well-being extends beyond physical health, fostering mental resilience and social cohesion as well.

Physical Fitness and Ultimate Frisbee

Ultimate Frisbee, as an increasingly popular team sport, plays a crucial role in enhancing physical fitness due to its dynamic nature, which integrates cardiovascular endurance, strength, flexibility, and agility. The game involves rapid sprints, sharp cuts, and frequent changes in direction, which require players to possess high levels of endurance and speed. Unlike traditional sports, Ultimate combines aerobic exercise with anaerobic bursts, resulting in improved cardiovascular health, muscle coordination, and overall physical conditioning. In addition to the physical benefits, Ultimate also promotes mental agility and quick decision-making in fast-paced game situations. Research studies support that this sport offers a unique approach to physical fitness, providing a comprehensive workout that strengthens multiple areas of the body, making it an ideal alternative team sport.

Studies have shown that Ultimate Frisbee players develop strong aerobic fitness, which is vital for overall health. Hughes et al. (2018) found that Ultimate players exhibit improved cardiovascular endurance due to the constant running, high-speed intervals, and frequent changes of direction. The sport's energy demands are comparable to those of other high-intensity sports, such as soccer and basketball, contributing to significant improvements in cardiovascular and aerobic capacity. Furthermore, Mendoza and Cruz (2020) emphasize the physical benefits for youth in the Philippines. Their study indicated that participating in Ultimate Frisbee tournaments significantly increased cardiovascular endurance and muscular strength among teenagers. Participants in their study also experienced improvements in core stability, which is essential for balance and posture.

Ultimate Frisbee provides a holistic fitness experience by targeting various aspects of physical health, including muscular strength, flexibility, and stamina. Van der Merwe et al. (2019) highlighted the importance of muscular strength in Ultimate, particularly for jumping, sprinting, and maintaining control of the disc. The sport's dynamic movements build leg and core strength while improving overall muscle coordination. The rapid movements and intense sprints require a high level of muscular endurance, particularly in the legs and abdomen. Additionally, flexibility and agility are key elements of the game, as players frequently need to stretch and contort their bodies to catch or throw the disc in various positions. Regular practice of these physical movements leads to enhanced flexibility and better joint mobility.

In the local context of the Philippines, the Department of Education (DepEd) has recognized the importance of incorporating team sports like Ultimate Frisbee into physical education programs. According to a study by Dela Cruz et al. (2021), Ultimate Frisbee serves as an effective tool for improving physical fitness in school-aged children. The study highlighted those students participating in Ultimate Frisbee tournaments demonstrated improved cardiovascular endurance and agility, with additional benefits in muscular endurance. Filipino students found the sport enjoyable and accessible, which increased overall participation rates in physical education classes. These findings suggest that Ultimate Frisbee has the potential to significantly contribute to enhancing physical health in the Philippines, particularly among youth who may be less inclined to participate in traditional team sports.

Internationally, studies support the idea that Ultimate Frisbee serves as an ideal fitness activity for people of all ages and abilities. According to Baldwin et al. (2016), Ultimate is effective in improving overall fitness levels, particularly among adults who are new to team sports. The study found that participants in a year-long Ultimate Frisbee program showed marked improvements in cardiovascular fitness, muscular strength, and agility, with many of them reporting better mental health and reduced levels of stress. These findings suggest that Ultimate Frisbee is not only a great way to stay physically fit but also an excellent tool for promoting mental health and well-being. This holistic fitness approach makes Ultimate an excellent candidate for PATH-FIT 4, as it addresses multiple facets of health, from physical strength and endurance to psychological resilience.

Ultimate Frisbee offers a comprehensive approach to physical fitness, combining aerobic exercise, muscular strength, agility, and flexibility. Both local and international studies confirm the sport's effectiveness in improving cardiovascular health and overall physical well-being, making it an ideal alternative team sport for PATH-FIT 4. The growing recognition of Ultimate Frisbee as a sport that benefits both physical and mental health suggests its potential for inclusion in broader fitness programs aimed at improving long-term well-being and community engagement.

Team Dynamics in Ultimate Frisbee

The sport of Ultimate Frisbee not only requires physical skill but also fosters strong team dynamics, where collaboration, communication, and trust among teammates are key to success. In Ultimate, the flow of the game depends significantly on how well players cooperate and anticipate each other's moves. This makes teamwork and effective communication essential for achieving common goals. Research has demonstrated that team dynamics in Ultimate Frisbee are shaped by various factors, including group cohesion, shared leadership, and mutual support, all of which contribute to both individual and collective success on the field. These elements align well with the goals of PATH-FIT 4, particularly in enhancing emotional resilience and team-based cooperation, which can have significant long-term benefits in both physical fitness and mental health.

A study by Wang et al. (2017) focused on the role of team cohesion in Ultimate Frisbee and its impact on player performance. The study revealed that teams with high levels of cohesion showed better coordination and effectiveness in executing strategies, leading to improved game outcomes. Moreover, players in these teams reported higher levels of emotional support, which not only boosted their self-confidence but also strengthened their overall emotional resilience. In addition, shared leadership where players take on leadership roles depending on the situation was found to enhance team performance. This flexible leadership model reflects the principles of self-management and shared responsibility, which are crucial in team sports like Ultimate Frisbee. Path-Fit 4 can incorporate these principles to develop emotional resilience and team-based support systems in various team sports.

Locally, De los Santos and Aquino (2019) conducted a study on the growing interest in Ultimate Frisbee in the Philippines, particularly among university students. They noted that the sport encouraged the development of strong interpersonal relationships and teamwork. Filipino players highlighted how Ultimate Frisbee promoted a sense of community both on and off the field, where team dynamics extended beyond the game, fostering a supportive network among participants. These findings suggest that Ultimate Frisbee, particularly in Philippine universities, can serve as a platform to improve not just physical fitness but also social cohesion and emotional support within diverse communities. This aligns with SDG 10 (Reduced Inequalities), as the sport can bridge gaps in social interaction, promoting inclusive participation across different socio-economic groups.

On an international level, the International Federation of Ultimate (WFDF) has recognized the importance of teamwork and social inclusion in the growth of the sport globally. According to a study by Greenberg et al. (2020), Ultimate Frisbee's Spirit of the Game which emphasizes honesty, integrity, and self-regulation directly influences the team dynamics of players. The study found that the sport's focus on ethical behavior and respect fosters a unique cultural environment where players actively support one another both during and after games. This concept promotes an atmosphere of mutual respect and trust, reinforcing the idea that effective teamwork is built on shared values and open communication. For PATH-FIT 4, these principles are crucial as they help foster cohesion, supportive relationships, and collaboration, which are integral to both the physical and emotional success of participants.

The importance of team dynamics in Ultimate Frisbee also extends to its potential for enhancing mental health. A study by Tavares et al. (2018) explored how participation in team-based sports like Ultimate Frisbee positively influences mental well-being by reducing stress and improving emotional stability. The research found that the collective effort and mutual support inherent in team dynamics help reduce psychological distress and foster resilience in challenging situations. Ultimate Frisbee offers an ideal environment for building trust and cohesion among players, which can extend beyond the game and positively impact their mental health in other areas of life.

Team dynamics in Ultimate Frisbee are crucial to the sport's success, affecting both team performance and individual well-being. Research indicates that strong cohesion, effective communication, and shared leadership significantly enhance both emotional and physical performance. The sport fosters an environment where mutual support and trust are at the forefront, contributing to overall emotional resilience. Local studies in the Philippines and global research reinforce the idea that Ultimate Frisbee, through its emphasis on teamwork and community, plays an essential role in enhancing both physical and emotional fitness. Incorporating these elements into PATH-FIT 4 would not only promote better team cohesion but also enhance mental health, aligning with the broader goals of SDG 10 (Reduced Inequalities) and SDG 3 (Good Health and Well-Being).

Skill Development through Ultimate Frisbee

Ultimate Frisbee, as a dynamic team sport, offers players an array of opportunities for skill development, not only in the realm of physical fitness but also in terms of cognitive and strategic growth. The sport demands a high level of hand-eye coordination, reaction time, and spatial awareness, which contribute to the development of essential athletic skills. Players must consistently refine their throwing, catching, and strategizing abilities, as well as improve their agility and endurance. These skills are not only crucial for the sport itself but also translate into improved general physical coordination and cognitive function. Recent studies have explored how participating in Ultimate Frisbee can enhance both motor skills and mental sharpness, providing individuals with a diverse range of developmental benefits.

Research has demonstrated that Ultimate Frisbee contributes significantly to skill development in young athletes. According to Baldwin et al. (2017), players of Ultimate Frisbee showed marked improvement in their throwing accuracy and agility compared to those engaged in other recreational activities. The study found that the requirement of quick decision-making during the fast-paced game helped players enhance their reaction time, thereby improving both mental agility and physical coordination. Furthermore, Van der Merwe et al. (2019) highlighted that the sport demands frequent changes in direction, sharp cuts, and jumping, all of which lead to significant gains in leg strength and core stability. The rapid physical movements in Ultimate Frisbee provide an optimal environment for athletes to develop muscular coordination, which is beneficial for performance in other sports as well.

In the context of the Philippines, the introduction of Ultimate Frisbee in school programs has been particularly successful in improving motor skills among students. A study by Mendoza and Cruz (2020) indicated that Filipino youth who participated in Ultimate Frisbee improved their catching skills, throwing accuracy, and footwork agility. The sport was also found to improve concentration, as players had to maintain focus while making split-second decisions during the game. This aligns with PATH-FIT 4, where developing motor skills and mental sharpness is essential in fostering a well-rounded approach to physical fitness. The study also highlighted that Ultimate Frisbee, with its emphasis on teamwork, fosters collaborative skills and strategic thinking in Filipino students, enhancing their cognitive development alongside physical performance.

International studies have also explored how Ultimate Frisbee contributes to the development of strategic thinking. Greenberg et al. (2020) found that players who regularly participated in Ultimate Frisbee showed enhanced problem-solving and strategic planning skills, particularly in high-pressure situations during games. Ultimate Frisbee requires players to read the game's flow, make quick decisions about passes, and anticipate their opponents' movements. This constant need for strategic thinking helps athletes improve their cognitive flexibility and situational awareness, skills that are beneficial both on and off the field. Greenberg et al. (2020) emphasized that these skills contribute to the overall development of critical thinking, making Ultimate Frisbee an effective tool for fostering cognitive agility in addition to physical skills.

The inclusion of Ultimate Frisbee in physical education programs worldwide further supports its role in skill development. According to Smith and Brown (2021), Ultimate Frisbee is an ideal sport for enhancing overall physical literacy, particularly for individuals who may not be traditionally inclined toward competitive or contact sports. The sport encourages the development of a wide range of skills, from hand-eye coordination to strategic thinking, all while promoting inclusive participation. These findings suggest that Ultimate Frisbee offers a unique opportunity for players of all levels to improve both physical and mental abilities in an engaging and supportive environment.

Ultimate Frisbee is a multifaceted sport that significantly contributes to skill development, both physically and mentally. The sport enhances key motor skills, such as throwing accuracy, agility, and core stability, while also fostering cognitive development through strategic thinking and decision-making. Research highlights the role of Ultimate Frisbee in improving athletic coordination, mental agility, and team strategy, making it an ideal choice for promoting well-rounded fitness. These findings underscore the importance of integrating Ultimate Frisbee into PATH-FIT 4, where it can help improve physical skills and mental sharpness, ultimately contributing to the development of more resilient, physically capable, and cognitively agile individuals.

Mental Toughness and Ultimate Frisbee

Mental toughness is a critical component in any sport, and Ultimate Frisbee is no exception. Players are often required to maintain focus, resilience, and emotional control, especially during high-pressure moments in the game. Research in sports psychology has demonstrated that mental toughness significantly contributes to an athlete's performance, particularly in challenging or competitive situations. Ultimate Frisbee, with its fast-paced nature and emphasis on self-regulation through the Spirit of the Game, places a unique demand on players to manage both their emotional and psychological state. This makes the sport particularly useful for developing mental resilience, emotional control, and the ability to stay focused under pressure. The current body of research supports the view that mental toughness in Ultimate Frisbee can positively impact not only athletic performance but also overall well-being.

Recent studies on mental toughness and Ultimate Frisbee have highlighted the relationship between these attributes and athletic success. A study by Lee et al. (2023) explored how mental toughness influences performance under pressure in Ultimate Frisbee players. The researchers found that athletes with higher levels of mental toughness were better able to maintain focus during critical moments of the game, such as when executing difficult throws or making game-deciding decisions. Players who scored higher on measures of emotional regulation, confidence, and resilience showed significantly better performance, particularly in close games. This supports the idea that mental toughness is not just about physical strength but also about maintaining psychological stability and control, key components for success in Ultimate Frisbee. The study underscores the importance of developing mental resilience as part of training, emphasizing that mental toughness is essential for both performance and personal growth.

In a local context, a study by Dela Cruz et al. (2021) examined the development of mental toughness among Ultimate Frisbee players in the Philippines. The study found that Filipino players, particularly those in university leagues, demonstrated significant growth in emotional resilience and focus through regular participation in the sport. These players reported that Ultimate Frisbee helped them not only in managing the physical demands of the game but also in overcoming psychological barriers such as fear of failure and self-doubt. This study highlights how Ultimate Frisbee serves as an effective tool for developing mental toughness, particularly in youth and young adult populations. The findings suggest that Ultimate Frisbee can help participants cope with life stressors, build confidence, and enhance mental resilience, which can contribute to better mental health outcomes.

International studies have also explored how Ultimate Frisbee contributes to the development of strategic thinking. Greenberg et al. (2020) found that players who regularly participated in Ultimate Frisbee showed enhanced problem-solving and strategic planning skills, particularly in high-pressure situations during games. Ultimate Frisbee requires players to read the game's flow, make quick decisions about passes, and anticipate their opponents' movements. This constant need for strategic thinking helps athletes improve

their cognitive flexibility and situational awareness, skills that are beneficial both on and off the field. Greenberg et al. (2020) emphasized that these skills contribute to the overall development of critical thinking, making Ultimate Frisbee an effective tool for fostering cognitive agility in addition to physical skills.

The emphasis on mental toughness in Ultimate Frisbee aligns with the broader goals of PATH-FIT 4, which aims to promote physical and mental resilience. Through consistent participation in Ultimate Frisbee, athletes develop the mental fortitude required to overcome both physical exhaustion and psychological obstacles. Studies like Lee et al. (2023) and Spencer et al. (2022) suggest that building mental toughness through team sports such as Ultimate Frisbee not only improves performance on the field but also enhances emotional health, confidence, and coping skills. Integrating Ultimate Frisbee into PATH-FIT 4 would provide participants with an opportunity to enhance both mental and physical resilience, leading to a more holistic approach to fitness and well-being.

Furthermore, the focus on mental toughness in Ultimate Frisbee extends to the broader social context of team dynamics. The Spirit of the Game, which promotes self-regulation and ethical behavior, further enhances the development of psychological resilience by encouraging players to handle challenges constructively. The emphasis on trust, honesty, and integrity among players promotes mental toughness in a way that benefits not just performance but also personal growth.

Mental toughness plays a vital role in the development of Ultimate Frisbee players, influencing not just their game performance but also their psychological resilience and emotional well-being. The integration of this concept into PATH-FIT 4 can lead to significant improvements in both physical fitness and mental resilience. By incorporating mental toughness training into Ultimate Frisbee, participants can enhance their ability to cope with adversity, improve their self-regulation and emotional control, and contribute to a more resilient and adaptable society.

Ultimate Frisbee and Social Interaction

Ultimate Frisbee is a sport that not only emphasizes physical fitness but also fosters significant social interaction and community building. One of the unique aspects of Ultimate is its emphasis on the Spirit of the Game, a principle that promotes honesty, self-regulation, and respect among players. These values encourage not only a competitive but also a collaborative atmosphere, where team dynamics extend beyond the field, promoting deeper social connections and camaraderie. In fact, research has shown that Ultimate Frisbee can be a catalyst for enhancing social skills, forging lasting friendships, and promoting community cohesion. This theme of social interaction is particularly relevant in understanding how team sports like Ultimate Frisbee contribute to emotional well-being and mental health, with social bonds playing a crucial role in fostering resilience.

A study by Muller et al. (2021) explored the role of team sports in promoting social interaction and community engagement. The research found that participation in Ultimate Frisbee encouraged players to form strong social connections, often transcending the team itself. These connections were not limited to on-field interactions but extended to social gatherings, community events, and support networks, highlighting how Ultimate Frisbee contributes to social well-being. The study suggested that the Spirit of the Game encourages a cooperative mindset, where players are motivated by mutual respect rather than individual success. This collaborative atmosphere makes Ultimate Frisbee an ideal sport for fostering inclusive social environments, where individuals from diverse backgrounds come together to achieve common goals. The research emphasizes that social interaction in Ultimate Frisbee plays a pivotal role in

enhancing team cohesion and building emotional resilience. This is particularly valuable in the context of PATH-FIT 4, where social fitness and mental health are key components of long-term well-being.

In the Philippine context, a study by Rodriguez and Tan (2022) examined how Ultimate Frisbee facilitated social interaction among youth in Metro Manila. The study found that Filipino players, particularly those in school leagues, reported forming meaningful social bonds through their participation in the sport. These bonds were further strengthened through shared experiences during tournaments and training sessions, providing participants with a sense of belonging and community. The study highlights how Ultimate Frisbee creates an inclusive space for individuals from various social and economic backgrounds to connect, thereby enhancing community cohesion. Moreover, the researchers found that players were more likely to report positive mental health outcomes when they had strong social networks formed through the sport. This is consistent with SDG 10 (Reduced Inequalities), where fostering social cohesion and inclusive participation in sports can help bridge divides and promote mental well-being.

Internationally, studies have also shown that Ultimate Frisbee serves as a powerful tool for promoting social interaction and emotional well-being. A study by Barton et al. (2022) explored the role of Ultimate Frisbee in fostering social engagement among adults in the United States. The findings revealed that adults who participated in Ultimate Frisbee reported higher levels of social interaction, emotional support, and community involvement compared to those engaged in other recreational sports. The study emphasized that shared goals, collective decision-making, and team cooperation helped create a sense of social responsibility and camaraderie among players, contributing to enhanced mental health and emotional resilience. These findings support the argument that Ultimate Frisbee, through its emphasis on teamwork and mutual respect, is a socially enriching activity that enhances both the emotional and physical health of participants.

Ultimate Frisbee is not only an effective team sport for physical fitness but also plays a significant role in fostering social interaction and community building. Research has consistently shown that the sport encourages players to form meaningful social connections, which in turn enhance their mental well-being and emotional resilience. Both local and international studies highlight the importance of team dynamics and shared goals in promoting social cohesion and positive mental health outcomes. By incorporating Ultimate Frisbee into PATH-FIT 4, we can offer a platform for individuals to engage in physical activities that not only improve fitness but also promote social inclusion, teamwork, and mental health, aligning with broader sustainability goals.

Ultimate Frisbee as a Non-Contact Sport

One of the defining characteristics of Ultimate Frisbee is that it is a non-contact sport, which offers several distinct advantages over traditional team sports. The lack of physical contact reduces the risk of injury and allows players to focus on the development of skills such as agility, coordination, and strategy without the added pressure of engaging in direct physical confrontation. This makes Ultimate Frisbee an attractive option for individuals who want to participate in team sports but may be concerned about the physical risks associated with contact sports like rugby or American football. Research has shown that non-contact sports like Ultimate Frisbee provide a unique opportunity to enhance physical fitness while minimizing the risk of injury, making them an excellent choice for people of all ages and fitness levels.

Studies have consistently highlighted the health benefits of participating in non-contact sports. Kendall et al. (2021) explored the advantages of non-contact sports and found that they were associated with improved cardiovascular health and muscular endurance, similar to those found in more physically

demanding sports. The study found that Ultimate Frisbee players demonstrated increased aerobic capacity and core stability without the heightened risk of concussion or joint injuries, which are common in contact sports. The aerobic intensity of Ultimate Frisbee, which involves short sprints, cutting, and jumping, was shown to offer a full-body workout while maintaining a relatively low risk of injury. The study emphasized that for individuals who are new to team sports or have concerns about injury, Ultimate Frisbee provides a safe alternative that still allows for cardiovascular conditioning and the development of muscle strength. In the Philippine context, a study by Bautista et al. (2021) highlighted the growing popularity of Ultimate Frisbee as a non-contact sport in Filipino communities. The study focused on participants from various backgrounds, including students, professionals, and retirees, who found Ultimate Frisbee to be an appealing sport due to its low risk of injury compared to other traditional team sports. Filipino participants reported that the absence of physical contact allowed them to engage in the sport more frequently without fear of injury, thus contributing to better physical fitness and mental health. This aligns with SDG 3 (Good Health and Well-Being), as it highlights how Ultimate Frisbee can promote long-term health benefits in a safe and accessible way. The study further emphasized that Ultimate Frisbee helped foster a sense of community and inclusivity, as the sport welcomes individuals of all ages and fitness levels.

Internationally, Fletcher et al. (2022) examined the popularity of non-contact sports such as Ultimate Frisbee and their role in promoting physical fitness among older adults. Their research found that non-contact sports provide older participants with a way to engage in socially active lifestyles while minimizing risks related to falls, bone fractures, and joint injuries. In particular, the study noted that Ultimate Frisbee offers a suitable option for maintaining functional fitness, including mobility, balance, and coordination, which are essential for older adults' quality of life. Fletcher et al. (2022) suggested that incorporating non-contact sports like Ultimate Frisbee into community health initiatives could help promote active aging by reducing physical inactivity and fostering social engagement among older adults. The absence of physical contact in Ultimate Frisbee also contributes to a more inclusive environment where participants can focus on teamwork, communication, and sportsmanship without the pressure of aggressive competition. The Spirit of the Game, a key principle in Ultimate Frisbee, encourages players to self-regulate and hold themselves accountable for their actions on the field. This principle not only fosters ethical behavior but also reduces the likelihood of confrontational incidents, which can be common in contact sports. A study by Green et al. (2021) supported this by showing that Ultimate Frisbee players reported higher levels of sportsmanship and respect for their opponents compared to participants in other team sports, such as football or basketball. The sport's focus on honesty and integrity further reinforces its non-contact nature, making it an ideal choice for fostering positive social and emotional development. Ultimate Frisbee stands out as an effective non-contact sport that offers a wide range of health benefits while minimizing the risks typically associated with traditional contact sports. Both local and international studies emphasize its positive impact on cardiovascular fitness, muscular endurance, and social interaction. The lack of physical contact in the sport encourages inclusivity, community-building, and mental resilience, all of which contribute to overall well-being. Ultimate Frisbee's emphasis on self-regulation, teamwork, and sportsmanship further supports the idea that it can serve as a valuable addition to PATH-FIT 4, promoting physical fitness, mental health, and social cohesion in a safe and accessible manner.

Inclusive Nature of Ultimate Frisbee

Ultimate Frisbee is widely recognized for its inclusive nature, offering a platform for individuals of all ages, backgrounds, and abilities to participate in team sports. Unlike many traditional sports that may emphasize competition and elite performance, Ultimate Frisbee emphasizes inclusivity, accessibility, and sportsmanship through its Spirit of the Game. This philosophy encourages respect, communication, and self-regulation, which helps create a welcoming environment for players regardless of their skill level. The unique emphasis on self-officiating and mutual respect allows players from diverse socio-economic and cultural backgrounds to participate equally in the sport, fostering both personal and social development. Recent research highlights the role of Ultimate Frisbee in breaking down barriers related to gender, socio-economic status, and ability, making it an ideal sport for promoting inclusivity and emotional well-being in communities worldwide.

The concept of inclusivity in Ultimate Frisbee has been explored in several studies, with findings consistently showing that the sport fosters a strong sense of community and belonging among its participants. Smith et al. (2021) conducted a study examining the inclusive nature of Ultimate Frisbee in youth leagues in the United States. Their research found that the sport's emphasis on mutual respect and self-regulation provided a platform where players from diverse backgrounds could interact and work together. This inclusivity was particularly evident in mixed-gender teams, where men and women played side-by-side without the barriers typically seen in other competitive sports. Participants reported that shared leadership and team spirit were crucial in fostering gender equality and encouraging the active participation of all players. These findings underscore how Ultimate Frisbee is not just a physical sport but also a tool for social integration, where individuals can develop both teamwork and social skills in an inclusive environment. The study's findings align with SDG 10 (Reduced Inequalities), emphasizing the role of Ultimate Frisbee in creating opportunities for inclusive participation in sports.

Locally, Mendoza and Cruz (2022) examined how Ultimate Frisbee in the Philippines promotes inclusivity within school and community leagues. The study found that Ultimate Frisbee has gained popularity in Filipino communities, particularly in urban areas where access to more traditional team sports is limited. The study highlighted that Ultimate's emphasis on self-officiating and honesty promotes an environment where players from all socio-economic backgrounds can compete without the barriers often found in more hierarchical or financially demanding sports. Mixed-gender participation was also reported to be more prominent in Ultimate Frisbee leagues compared to other team sports in the Philippines, reflecting the sport's commitment to gender equality and inclusivity. This aligns with SDG 5 (Gender Equality), as Ultimate Frisbee allows women and men to play together, offering equal opportunities and promoting empowerment through sport.

The inclusive nature of Ultimate Frisbee also extends to people with disabilities. Nash and Carter (2023) explored how adaptive Ultimate Frisbee has become an avenue for individuals with physical disabilities to participate in competitive sports. The study found that adaptive Ultimate Frisbee, which modifies some of the sport's rules to accommodate players with disabilities, enables participants to engage in team activities that promote emotional health and social interaction. Players with disabilities reported increased levels of self-esteem, independence, and community support, all of which contributed to positive mental health outcomes. This approach highlights how Ultimate Frisbee's inclusive nature transcends typical barriers and provides a sport where individuals of all abilities can experience the benefits of teamwork, fitness, and social engagement.

Globally, the International Federation of Ultimate (WFDF) has promoted inclusive practices in Ultimate Frisbee through various initiatives aimed at increasing accessibility and diversity in the sport. These initiatives focus on providing resources for underrepresented communities, promoting gender equity, and expanding opportunities for disabled athletes. Riley et al. (2022) explored how these global efforts have successfully increased female participation and disability inclusion in Ultimate Frisbee leagues worldwide. Their research indicated that these initiatives have not only enhanced the sport's global reach but have also contributed to the development of more inclusive and diverse sports cultures.

Inclusive nature of Ultimate Frisbee is one of its most compelling features, enabling participants from various backgrounds and abilities to engage in team sports that promote physical fitness, mental resilience, and social interaction. Studies have consistently highlighted how Ultimate Frisbee serves as a platform for inclusive participation, whether in mixed-gender teams, low-income communities, or for individuals with disabilities. The sport's emphasis on mutual respect, self-regulation, and shared leadership creates an environment where everyone can thrive, regardless of skill level or background. By incorporating Ultimate Frisbee into PATH-FIT 4, the sport can contribute to fostering inclusive health practices and promoting social cohesion, which aligns with SDG 5 (Gender Equality), SDG 10 (Reduced Inequalities), and SDG 3 (Good Health and Well-Being).

Ultimate Frisbee in School and University Programs

Ultimate Frisbee has gained recognition not only as a recreational sport but also as an integral part of physical education programs in schools and universities worldwide. Its unique combination of aerobic exercise, teamwork, and strategy has made it an attractive alternative to traditional team sports. The inclusion of Ultimate Frisbee in educational curricula fosters physical fitness, enhances team dynamics, and promotes mental well-being among students. Moreover, its non-contact nature and emphasis on fair play make it an ideal sport for promoting social inclusivity and healthy competition in diverse academic environments. Research indicates that when incorporated into school and university programs, Ultimate Frisbee provides valuable opportunities for holistic development and community engagement.

Studies have shown that Ultimate Frisbee is an effective tool for improving physical fitness and team-building skills in educational settings. Smith et al. (2022) examined the benefits of Ultimate Frisbee as part of physical education curricula in several high schools in the United States. The study found that students who participated in Ultimate Frisbee demonstrated significant improvements in cardiovascular endurance, muscular strength, and agility. Additionally, students reported increased self-confidence and team cohesion, which contributed to better academic performance and social interactions. The study emphasized that Ultimate Frisbee is an excellent sport for engaging students who may not typically participate in traditional team sports, thus promoting inclusive fitness. The results suggest that Ultimate Frisbee not only improves physical health but also supports the development of important life skills, such as communication, collaboration, and leadership, which are critical for success both on and off the field.

In the Philippine context, Santos and Reyes (2021) highlighted the growing interest in Ultimate Frisbee in Philippine universities, particularly among college students. The study found that integrating Ultimate Frisbee into university sports programs has led to increased participation in physical activities and improved team dynamics among students. Filipino students involved in Ultimate Frisbee reported enhanced mental health, citing the sport's ability to relieve stress and improve emotional well-being. The study also noted that Ultimate Frisbee provides a platform for social interaction, where students from various academic disciplines and cultural backgrounds can work together in a cooperative, non-

competitive environment. This supports SDG 10 (Reduced Inequalities), as the sport fosters inclusivity by encouraging students of all skill levels to participate. The study concluded that Ultimate Frisbee in university programs promotes not only physical fitness but also social cohesion and mental resilience among the student body.

Globally, Ultimate Frisbee is increasingly being included in university programs due to its versatility and educational value. A study by Johnson et al. (2023) explored the benefits of Ultimate Frisbee in higher education institutions in Europe. The research found that universities offering Ultimate Frisbee as part of their physical education curriculum saw increased student engagement and well-being. Students participating in Ultimate Frisbee activities showed higher levels of team collaboration, better stress management, and a stronger sense of community within their university. The study suggested that Ultimate Frisbee could serve as a model for physical education programs that emphasize holistic development, incorporating physical, mental, and social aspects of student health. Furthermore, the researchers noted that the self-officiating nature of the sport teaches students to be responsible, ethical, and reflective, which are important traits for personal development and academic success.

The positive impact of Ultimate Frisbee in school and university programs also aligns with the broader goal of promoting active lifestyles and inclusive education. In 2021, Van der Merwe et al. (2021) conducted a study on the implementation of Ultimate Frisbee in university fitness programs in the United Kingdom. They found that Ultimate Frisbee participants had higher rates of social inclusion and academic engagement compared to those involved in traditional physical education activities. The study pointed out that Ultimate Frisbee fosters an environment of equality, where players are encouraged to engage in constructive dialogue and mutual respect, which benefits their personal growth and academic development. Moreover, the study emphasized the sport's ability to engage students who might not otherwise participate in physical activities, contributing to greater participation rates in university sports programs.

The inclusion of Ultimate Frisbee in school and university programs provides numerous benefits in terms of physical fitness, teamwork, and mental well-being. Both local and international studies have demonstrated that Ultimate Frisbee fosters collaboration, social interaction, and inclusive participation, making it an ideal team sport for PATH-FIT 4. The sport's emphasis on self-regulation, honesty, and community cohesion aligns with the educational goals of developing well-rounded individuals who are equipped with the physical, social, and psychological skills necessary for success in both academic and personal settings. By incorporating Ultimate Frisbee into academic curricula, schools and universities can help students develop critical life skills while promoting physical and emotional health.

Ultimate Frisbee as a Gateway to Outdoor Fitness

Ultimate Frisbee has proven to be an effective way to engage individuals in outdoor fitness activities. Unlike traditional indoor sports or fitness routines, Ultimate Frisbee encourages physical activity in natural, open environments, allowing participants to enjoy the benefits of outdoor exercise. The sport requires players to engage in constant movement, including running, jumping, and cutting, which boosts cardiovascular health and muscular strength. Additionally, playing Ultimate Frisbee outdoors has been shown to have positive psychological effects, including stress reduction and enhanced mood, largely attributed to exposure to nature. Recent studies highlight that outdoor team sports like Ultimate Frisbee offer a compelling alternative to sedentary activities, providing both physical health benefits and mental well-being through the combination of social interaction, outdoor exercise, and skill development.

Recent studies emphasize the growing importance of outdoor fitness in maintaining both physical and mental health. Green et al. (2022) explored how participating in outdoor sports like Ultimate Frisbee can improve aerobic capacity and muscular endurance while simultaneously reducing levels of psychological stress. Their study found that participants who played Ultimate Frisbee outdoors experienced better mood regulation and greater emotional stability, compared to those who engaged in indoor fitness routines. This is attributed to the added benefit of exposure to natural environments, which has been shown to reduce stress hormones and improve mental clarity. The study concluded that Ultimate Frisbee, being an outdoor sport, has a dual impact on both physical fitness and psychological health, offering a well-rounded approach to fitness.

In the Philippine context, Dela Cruz and Tan (2021) studied the popularity of outdoor team sports among Filipino youth, with a specific focus on Ultimate Frisbee. They found that engaging in outdoor sports provided young people with an alternative form of exercise that they found more enjoyable and less monotonous compared to traditional indoor fitness routines. Filipino participants noted that Ultimate Frisbee allowed them to connect with nature, which contributed to better mental health and emotional well-being. The study highlighted that playing Ultimate Frisbee outdoors not only enhanced physical fitness but also encouraged social interaction and community building. These findings are in line with SDG 3 (Good Health and Well-Being), suggesting that Ultimate Frisbee, by providing an enjoyable outdoor activity, can contribute to sustainable fitness habits in the local community.

International studies have also corroborated the findings that outdoor fitness activities like Ultimate Frisbee improve both cardiovascular health and mental well-being. Carter et al. (2023) explored the benefits of playing outdoor sports, including Ultimate Frisbee, for college students in North America. They found that students who participated in Ultimate Frisbee outdoors reported increased levels of physical fitness, including improvements in aerobic capacity and flexibility. Moreover, the study revealed that outdoor sports promoted better stress management, mental clarity, and mood enhancement compared to indoor physical activities. Carter et al. (2023) also found that students who played in outdoor settings were more likely to continue engaging in physical activity long-term, suggesting that the natural environment plays a significant role in encouraging sustained participation in fitness activities.

Additionally, the emphasis on outdoor settings in Ultimate Frisbee aligns with the growing movement towards nature-based fitness programs. A study by Liu and Zhang (2022) examined how nature sports, including Ultimate Frisbee, promote physical and mental health benefits. The study showed that outdoor team sports offer unique opportunities to engage in social interaction while simultaneously improving fitness levels and well-being. Liu and Zhang (2022) suggested that outdoor sports encourage a more holistic approach to health, where physical and psychological fitness are equally prioritized. This highlights Ultimate Frisbee as a key activity that blends physical exertion, mental relaxation, and social interaction in an outdoor setting.

Ultimate Frisbee offers numerous benefits as an outdoor fitness activity that combines physical conditioning, mental health improvement, and social interaction. Both local and international studies demonstrate that playing Ultimate Frisbee outdoors improves cardiovascular health, agility, and mental clarity, all while reducing psychological stress. The sport's accessibility and emphasis on teamwork make it an ideal candidate for PATH-FIT 4, which aims to promote sustainable fitness and mental resilience. By encouraging participation in outdoor sports like Ultimate Frisbee, communities can enhance individual well-being while fostering a sense of community and inclusivity.

Integrating Ultimate Frisbee into PATH-FIT 4 offers numerous benefits for students in SUCs and HEIs. Mentally, it enhances self-esteem, fosters social networking, and creates a sense of belonging, serving as a protective factor against anxiety and depression. Socially, the sport develops communication, teamwork, and leadership skills while promoting inclusivity and fair play through its self-officiating nature. Physically, Ultimate Frisbee improves cardiovascular fitness, agility, and coordination, encouraging students to stay active and combat sedentary lifestyles. Cognitively, it enhances concentration, memory, and decision-making skills, contributing to better academic performance and overall classroom engagement. Additionally, its accessibility and inclusivity make it an ideal sport for diverse student populations, as it requires minimal equipment and allows individuals of all skill levels to participate. Lastly, aligning with modern educational practices, Ultimate Frisbee supports holistic student development by fostering collaboration, leadership, and discipline, equipping students with essential life skills while addressing their mental and physical well-being.

Social Benefits of Ultimate Frisbee, the social dynamics inherent in Ultimate Frisbee contribute significantly to developing communication skills and teamwork among students. Research by Bissett et al. (2020) highlights the role of coaches in promoting mental health through social engagement in sports, suggesting that maintaining connections within a team can combat social isolation, particularly for individuals recovering from mental health challenges.

This is crucial for students, where community ties are integral to the cultural fabric. Ultimate Frisbee, emphasizing self-officiating and sportsmanship, encourages players to communicate effectively and work collaboratively, enhancing their social skills and fostering community. Moreover, the findings of Machado-Oliveira et al. (2023) indicate that team sports participation contributes to developing competencies, behaviors, and attitudes essential for mental health and social integration. This is particularly relevant for Ultimate Frisbee, as it promotes inclusivity and allows individuals of varying abilities to participate and excel. The sport's non-contact nature and emphasis on fair play create an environment conducive to positive social interactions, which can lead to improved mental well-being.

Physical Health Benefits engaging in Ultimate Frisbee are noteworthy, as studies have shown that participation in physical activities can significantly improve overall health and fitness. For instance, the dynamic nature of Ultimate Frisbee combines elements of running, jumping, and strategic thinking, providing a comprehensive workout that enhances cardiovascular fitness, agility, and coordination (Portillo et al., 2022). This aligns with the findings of Murphy et al. (2020), who reported that team sports participation is associated with better physical health outcomes, including reduced anxiety and depression. Incorporating Ultimate Frisbee into the PE curriculum can address the growing concern of physical inactivity among students, as highlighted by Tahira (2023), who found that higher education students often engage less in physical activities.

Additionally, the research conducted by Portillo et al. (2022) emphasizes the increasing popularity of Ultimate Frisbee in educational settings, suggesting that its inclusion in PE programs can enhance students' physiological abilities and overall fitness levels. This is particularly relevant, where many educational institutions face challenges in providing access to traditional sports requiring specialized equipment and facilities. **Cognitive Development and Academic Performance** In addition to the physical and social benefits, Ultimate Frisbee has the potential to enhance cognitive development. Research indicates that physical activity is linked to improved academic performance, as it can enhance concentration, memory, and classroom behavior (Tahira, 2023). The strategic elements of Ultimate Frisbee require players to think critically and make quick decisions, thereby stimulating cognitive processes that are beneficial in an

academic context. This dual focus on physical and cognitive development aligns with the goals of modern education, which seeks to cultivate well-rounded individuals capable of thriving in various aspects of life. Moreover, studies have shown a positive relationship between involvement in team sports and academic performance, suggesting that students who engage in physical activities tend to achieve higher grades (Tahira, 2023). This correlation may be attributed to the discipline, time management, and teamwork skills developed through participation in sports. Educators can create a synergistic effect that enhances physical fitness and academic achievement by integrating Ultimate Frisbee into the PE curriculum.

Inclusivity and Diversity in Sports Ultimate Frisbee's makes it an ideal candidate for promoting diversity within educational institutions. Unlike many traditional sports that may favor specific skill sets or physical attributes, Ultimate Frisbee allows individuals of varying abilities to participate and excel. This inclusivity is supported by the findings of Ibrahim, who notes that diverse teaching styles in physical education can enhance student engagement and performance (Tahira, 2023). By fostering an environment where all students feel welcome and valued, Ultimate Frisbee can contribute to a more equitable educational experience.

Furthermore, the educational framework emphasizes the need for effective pedagogical practices to optimize physical education programs. Poblador and Tagare highlight the importance of integrating innovative sports like Ultimate Frisbee into the curriculum to promote student teamwork, communication, and leadership skills (Tahira, 2023). These competencies are essential for academic success and future professional endeavors, as employers increasingly value soft skills alongside technical knowledge.

The potential of Ultimate Frisbee as a team sport in the physical activities towards health and fitness four (PATH-FIT 4) curriculum of state universities and colleges (SUC), and higher education institutions (HEI) is multifaceted. Its accessibility, social benefits, physical fitness contributions, cognitive enhancements, inclusivity, and alignment with modern educational practices make it a compelling choice for educators seeking to enrich their PE programs. As the literature demonstrates, the integration of Ultimate Frisbee can address the challenges posed by traditional sports and promote a healthier, more engaged student body that is better equipped for academic and social life demands.

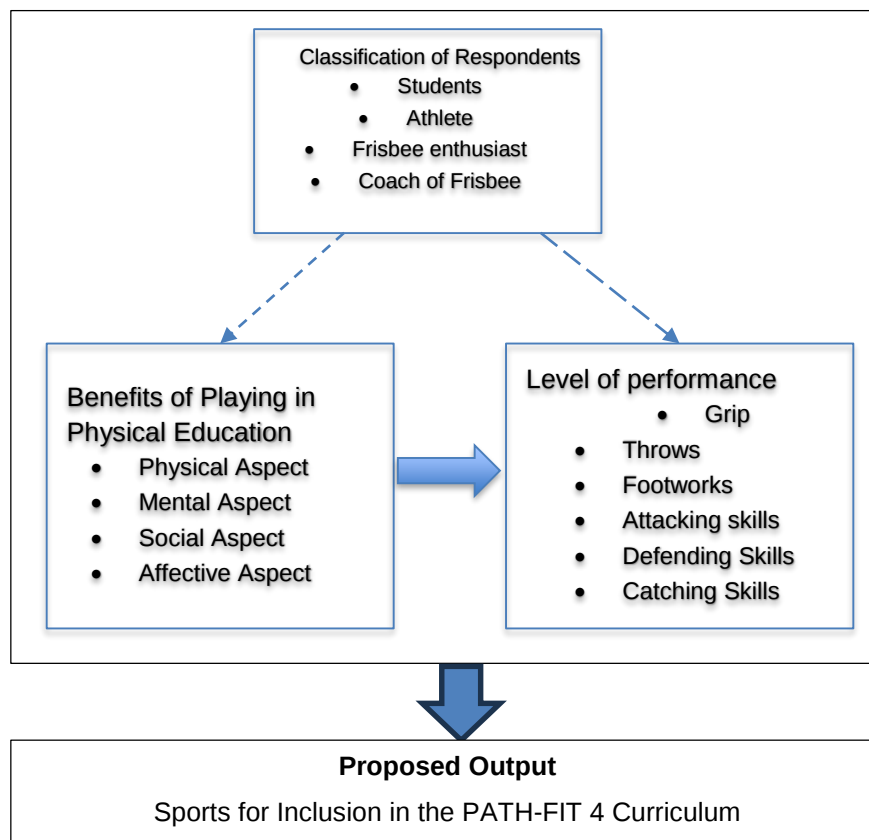
Theoretical Framework

Vygotsky's theory posits that learning occurs within what he terms the "zone of proximal development" (ZPD). This concept refers to the range in which a child or adolescent struggles to solve a problem independently but can succeed with guidance from a more knowledgeable individual. The ZPD represents a critical area for potential cognitive growth, indicating that learners are prepared to grasp new concepts or ideas but require assistance effectively (Estero et al., 2020). In Physical Education, particularly in team sports, the role of peers and instructors is paramount in facilitating learning. For instance, when learning to play Ultimate Frisbee, the presence of a knowledgeable individual is essential during the instructional process. However, mere knowledge of concepts and rules is insufficient for comprehensive understanding; the active participation of peers is also crucial for students to fully engage in their learning zone. Ultimate Frisbee embodies a unique culture characterized by the "Spirit of the Game," emphasizing self-officiating and mutual respect among players. This culture allows the game to continue smoothly even without referees, as players are encouraged to resolve conflicts and violations collaboratively. Such an environment fosters sportsmanship, as players become more mindful of their actions to avoid offending their teammates. To effectively address conflicts during gameplay, athletes must seek solutions that lead to favorable outcomes.

When a resolution is achieved, the athlete is rewarded with positive reinforcement, increasing the likelihood of repeating the behavior. Research indicates that employing various theoretical frameworks can enhance the learning experience in physical education settings. Thorndike's Laws of Learning provide a foundational framework for teaching new sports to students. The Law of Exercise emphasizes the importance of practice in strengthening the stimulus-response (SR) connection, thereby reinforcing the desired skills. The Law of Effect suggests that when a basic skill in Frisbee is followed by positive reinforcement, the SR bond is further solidified. Conversely, negative reinforcement can weaken this bond. Therefore, to instill confidence in students learning Frisbee, educators must focus on boosting their morale.

Lastly, the Law of Readiness posits that students must be physically and mentally prepared to execute skills effectively, which is crucial for optimal performance in Frisbee. Recent studies have reinforced the significance of peer interaction and collaborative learning in sports education. For example, Estero et al. (2020) found that peer-to-peer interactions during team sports enhance tactical knowledge and foster values such as teamwork and cooperation among students. Similarly, Mukherjee et al. (2021) highlighted the importance of mental development, including focus and motivation, which can be cultivated through mindfulness practices in sports. These findings underscore the necessity of creating an engaging learning environment where students can physically and mentally thrive. Moreover, Howard et al. (2018) explored the bi-directional relationship between children's sports participation and self-regulation, emphasizing that supportive environments contribute to better outcomes in both areas. This aligns with Vygotsky's assertion that social interactions are crucial in cognitive development. Jang (2023) further supports this notion by advocating for problem-based learning models in sports education, encouraging students to communicate and collaborate to solve challenges actively. The theoretical framework for integrating Ultimate Frisbee into the physical education curriculum is grounded in Vygotsky's ZPD, Thorndike's Laws of Learning, and contemporary research on collaborative learning and mental development. By fostering an environment that emphasizes peer interaction, positive reinforcement, and readiness, educators can effectively enhance students' understanding and enjoyment of Ultimate Frisbee, ultimately contributing to their overall development in physical education.

Conceptual Framework



Figure

1. Research Paradigm

The conceptual framework illustrates the research process for evaluating Ultimate Frisbee as an alternative team sport in the physical activities towards health and fitness four (PATH-FIT 4) programs within State Universities and Colleges (SUC) and Higher Education Institutions (HEI). The study considers the respondents' profiles, including students, athletes, Frisbee enthusiasts, and Frisbee coaches. By involving these different groups, the research aims to gain diverse perspectives on the feasibility of incorporating Ultimate Frisbee into the PE curriculum. The study examines Ultimate Frisbee through the lens of four key aspects of Physical Education: physical, mental, social, and affective aspects.

The physical aspect assesses the sport's contributions to fitness, endurance, and motor skills. The mental aspect explores cognitive benefits such as strategic thinking and decision-making. The social aspect highlights teamwork and collaboration, while the affective aspect focuses on sportsmanship, motivation, and emotional engagement in the sport.

Another significant component of the study is the assessment of performance levels in Ultimate Frisbee. The research evaluates key skills such as grip, throws, footwork, attacking, defending, and catching skills. These elements are essential for measuring an individual's proficiency in the sport and understanding how it can be effectively taught in PE programs.

The expected output of the study is the development of a possible sports inclusion for PATH-FIT 4 curriculum, that focuses on team sports. Ultimately, this research aims to promote Ultimate Frisbee as a structured and beneficial team sport that aligns with the educational objectives of Physical Education, contributing to the holistic development of students.

Statement of the Problem

The study focused on ultimate frisbee as an alternative team sport for physical activities towards health and fitness four (PATH-FIT 4) in state universities and colleges (SUCs) and higher education institutions (HEIs).

Specifically, it aims to determine the perception of the respondents about the following questions:

1. What is the classification of the respondents in terms of following;
 - 1.1 student;
 - 1.2 PE teachers;
 - 1.3 frisbee enthusiast and;
 - 1.4 frisbee coach?
2. What is the assessment of the respondents on the benefits of playing Ultimate Frisbee in Physical Education in terms of;
 - 2.1 physical aspect;
 - 2.2 mental aspect;
 - 2.3 social aspect and;
 - 2.4 affective aspect?
3. Is there a significant difference on the assessment of the respondents on the benefits of playing Ultimate Frisbee in Physical Education when the respondents are grouped according to their profile?
4. What is the perceived ease of execution of the Ultimate Frisbee skills by the respondents;
 - 4.1 grip;
 - 4.2 throws;
 - 4.3 footwork;
 - 4.4 attacking skills;
 - 4.5 defending skills and;
 - 4.6 catching skills?
5. Is there significant difference in the perceived ease of execution of the Ultimate Frisbee skills when the respondents are grouped according to their profile?
6. Is there significant relationship between the perceived benefits of playing Frisbee to the different aspect of Physical Activity Towards Health Fitness Four (PATH-FIT 4) and the ease of execution of the Ultimate Frisbee?
7. What are the challenges in offering Ultimate Frisbee as an alternative team sport in PATH-FIT 4?
8. What sports can be included in the PATH-FIT 4 curriculum?

Hypothesis of the Study

H01 There are no significant difference on the perceived benefits of playing Ultimate Frisbee when the respondents are grouped according to their profile.

H02 There is no significant difference in the perceived ease of execution of the Ultimate Frisbee skills when the respondents are grouped according to their profile.

H03 There is no significant relationship between the perceived benefits of playing Frisbee to the different aspect of Physical Activity Towards Health Fitness Four (PATH-FIT 4) and the ease of execution of the Ultimate Frisbee.

Significance of the Study

This study aimed to determine the benefits and feasibility of incorporating Ultimate Frisbee into the physical education curriculum of state universities and colleges (SUCs) and higher education institutions (HEIs). As a dynamic, inclusive, and engaging team sport, Ultimate Frisbee offered numerous physical, mental, social, and cognitive benefits that aligned with the objectives of PATH-FIT 4. This research sought to provide empirical evidence supporting the integration of Ultimate Frisbee as an alternative physical activity that promoted holistic student development. The study was valuable to various stakeholders, including PATH-FIT students, PE teachers, and policymakers, by addressing the growing need for innovative, accessible, and student-centered physical education programs.

PATH-FIT Students enrolled in PATH-FIT 4 by introducing an enjoyable and accessible team sport that enhances their overall well-being. Ultimate Frisbee promotes cardiovascular endurance, agility, flexibility, and coordination, contributing to students' physical fitness and health. Additionally, as a non-contact sport, it minimizes the risk of injuries while allowing students of varying skill levels and physical capabilities to participate.

Beyond physical health, this study highlights the mental and social benefits of Ultimate Frisbee for students. Participation in team sports has been linked to reduced stress, anxiety, and depression, fostering emotional resilience and mental well-being. The self-officiating nature of Ultimate Frisbee encourages students to develop decision-making skills, sportsmanship, and conflict resolution abilities, which are essential for personal and professional growth. Furthermore, the sport's emphasis on teamwork and fair play helps strengthen social bonds, build communication skills, and cultivate a sense of belonging among students.

By including Ultimate Frisbee in the PATH-FIT 4 curriculum, students will have a new, engaging avenue for physical activity that meets their fitness needs and enhances their cognitive functions, leadership skills, and interpersonal relationships. This study allows them to experience an innovative sport that aligns with modern physical education practices and promotes lifelong participation in healthy, active lifestyles.

PE Teachers will significantly benefit from this study as it provides a new instructional approach to teaching team sports within the PATH-FIT 4 curriculum. The study will offer comprehensive insights into how Ultimate Frisbee can be effectively implemented in PE classes, including teaching methodologies, game strategies, and skill development frameworks. PE teachers can utilize these findings to diversify their lesson plans and engage students in a sport that promotes physical fitness and character development. Moreover, this research highlights the role of PE teachers in fostering inclusivity and student engagement through non-traditional sports. Ultimate Frisbee requires minimal equipment and can be played in various settings, making it an ideal addition to schools that may lack access to extensive sports facilities. Teachers

will be equipped with the knowledge to introduce a sport that is cost-effective and aligns with the principles of fair play, teamwork, and self-regulation.

Additionally, this study provides PE teachers with empirical evidence of the benefits of Ultimate Frisbee in enhancing students' cognitive abilities, including critical thinking, problem-solving, and strategic planning. These aspects make the sport an effective tool for interdisciplinary learning, where physical education can contribute to students' overall academic performance. By integrating Ultimate Frisbee into their programs, PE teachers can create more engaging, student-centered, and impactful learning experiences beyond traditional physical activities.

Policy Makers, Educational policymakers, and curriculum developers play a crucial role in shaping physical education programs within SUCs and HEIs. This study is a valuable resource in supporting policy initiatives that promote the integration of innovative and inclusive sports like Ultimate Frisbee into the PATH-FIT 4 curriculum.

One of the primary contributions of this study to policymakers is highlighting Ultimate Frisbee's accessibility and cost-effectiveness. Unlike many traditional sports that require specialized facilities and equipment, Ultimate Frisbee can be played on open fields with minimal investment, making it an ideal option for institutions with limited sports resources. This study provides evidence-based recommendations for allocating resources efficiently and ensuring all students have access to quality physical education experiences.

Furthermore, this study emphasizes sports participation's broader social and mental health benefits, which can inform policies addressing student well-being. Given the increasing concerns over physical inactivity, obesity, and mental health challenges among students, policymakers can use the findings of this study to advocate for PE programs that not only focus on fitness but also support emotional and psychological resilience. By promoting the inclusion of Ultimate Frisbee, policymakers can contribute to a more holistic and inclusive approach to physical education, aligning with global trends in health and wellness.

Moreover, this study provides a foundation for developing training programs and professional development opportunities for PE educators. Policymakers can enhance the overall quality of PE instruction in higher education institutions by supporting policies that equip teachers with the skills and knowledge to implement innovative sports like Ultimate Frisbee.

Ultimate Frisbee into PATH-FIT 4 presents a unique opportunity to revolutionize physical education in SUCs and HEIs. This study significantly benefits PATH-FIT students by enhancing their physical health, mental well-being, and social skills. It provides PE teachers with innovative teaching approaches and resources to improve student engagement and learning outcomes. Additionally, it serves as a crucial reference for policymakers to develop inclusive, cost-effective, and student-centered PE policies that promote lifelong health and fitness. By recognizing the potential of Ultimate Frisbee as a team sport in physical education, this study contributes to advancing PE programs that are relevant, engaging, and beneficial to the holistic development of students in higher education institutions.

Scope and Delimitation of the Study

This study determined if Ultimate Frisbee could be an alternative team sport for physical activities towards health and fitness four (PATH-FIT 4) in SUC and HEI. The topics looked into to determine the effectiveness of the subject matter taught were the following: physical (grip, throws, footwork, attacking, defending, and catching), social (gender discrimination, participation, sportsmanship, camaraderie, and positive learning climate), mental (mental alertness, strategy, discovering talents, stress level, and

confidence), and affective (passion for sport, appreciation, enthusiasm, reflection, and relevance). The total number of respondents for this study was 90. These included students, frisbee coaches, PE instructors, and frisbee enthusiasts. The different school and university perspectives included in this research were gathered via a questionnaire checklist, which indicated the result of the study. This research was limited to the perception of other schools and universities not included in the study. This was a case of descriptive comparative research, involving individuals from the academe and those who had encountered Ultimate Frisbee, as the sample for the research. The information was gathered from the respondents, where the data were drawn from a descriptive checklist given by the respondents. The weaknesses in this study were the limited respondents and experts physically validating the probability of Ultimate Frisbee as an alternative team sport for physical activities towards health and fitness four (PATH-FIT 4) in state universities and colleges, and other higher education institutions.

Definitions of Terms

Affective Characteristics (of Ultimate Frisbee): The emotional and attitudinal aspects of the sport, including a passion for the sport, appreciation of its values, enthusiasm for participation, reflective practice, and perceived relevance to personal development.

Mental Characteristics (of Ultimate Frisbee): The cognitive aspects of the sport, including mental alertness, strategic thinking, problem-solving, and the development of confidence and stress management skills.

PATH-FIT FOUR: Physical Activity Towards Health and FITNESS Four subject in Philippine CHED Curriculum.

Perception: The subjective understanding, interpretation, and evaluation of the potential characteristics of Ultimate Frisbee as expressed by the respondents through the administered questionnaire.

Physical Characteristics (of Ultimate Frisbee): The aspects of the sport related to physical skills, fitness, and exertion, including grip, throws, footwork, attacking skills, defending skills, and catching skills. These will be assessed using a specific scoring rubric detailed in the methodology section.

Respondents: The individuals who participated in the study, including curriculum developers, players, coaches, faculty members, students, and sports enthusiasts. The specific sampling method and characteristics of the respondents will be detailed in the methodology section.

Social Characteristics (of Ultimate Frisbee): The social aspects of the sport, including gender inclusivity, participation rates, sportsmanship, team camaraderie, and the creation of a positive learning environment.

State Universities, Colleges, and Higher Education Institutions: Publicly funded tertiary-level educational institutions in the Philippines. This study focuses on those institutions located in Region IV-A, CALABARZON, and select institutions in Rizal and Manila.

Team Sport: A sport played by two or more teams competing against each other to achieve a common goal. In this study, a team sport refers to a competitive activity that requires collaboration, coordination, and communication among team members.

Ultimate Frisbee: A non-contact team sport played with a flying disc (frisbee) where two teams compete to score points by completing passes and advancing the disc down the field.

2. METHODOLOGY

Research Design

This study utilized a descriptive-comparative-correlational research design to investigate the potential of Ultimate Frisbee as a team sport in Physical Activities Towards Health and Fitness Four (PATH-FIT 4) within state universities and colleges (SUCs) and higher education institutions (HEIs). The descriptive aspect of the study focused on profiling the respondents and identifying their perceptions regarding the benefits of Ultimate Frisbee across physical, mental, social, and affective dimensions. The comparative component determined whether significant differences existed in the perceived benefits and ease of execution of Ultimate Frisbee skills when respondents were categorized based on their profiles (students, PE teachers, Frisbee enthusiasts, and Frisbee coaches). Lastly, the correlational analysis examined the relationship between the perceived benefits of playing Ultimate Frisbee and the ease of executing its core skills.

The descriptive component of the research design was appropriate as it allowed for the systematic collection and presentation of data on respondents' profiles and their perceptions regarding the sport. This enabled a comprehensive understanding of how different groups within the study population perceived the benefits and execution of Ultimate Frisbee. By employing a structured survey or questionnaire, the study ensured that data collection remained objective and quantifiable (Creswell & Creswell, 2018).

The comparative aspect of the study was essential in assessing whether there were significant differences in the perceived benefits and ease of skill execution among different respondent groups. Since the study involved multiple groups (students, PE teachers, Frisbee enthusiasts, and Frisbee coaches), a comparative analysis helped determine variations in perceptions and experiences, which were influenced by factors such as familiarity with the sport, level of expertise, or teaching experience. Statistical tools such as analysis of variance (ANOVA) or t-tests were employed to determine whether these differences were statistically significant (Fraenkel, Wallen, & Hyun, 2019).

The correlational aspect of the study was appropriate for examining the relationship between the perceived benefits of playing Ultimate Frisbee and the ease of skill execution. Understanding this relationship was crucial for determining whether greater perceived benefits were associated with improved skill execution, which had implications for curriculum development in physical education. By using correlation analysis techniques, such as Pearson's correlation coefficient, the study identified the strength and direction of the relationship between these variables (Field, 2018).

The descriptive approach was used to collect data through surveys or questionnaires distributed among students, PE teachers, Frisbee enthusiasts, and Frisbee coaches in selected SUCs and HEIs. This provided baseline information on how different groups perceived the physical, mental, social, and affective benefits of Ultimate Frisbee. The comparative analysis was applied to determine if significant differences existed in the perceived benefits and ease of execution of Ultimate Frisbee skills based on respondents' profiles. This was essential in understanding how experiences and roles within the sport influenced perceptions, which informed instructional strategies for PE teachers and curriculum planners.

The correlational aspect of the study assessed the relationship between the perceived benefits of Ultimate Frisbee and the ease of skill execution. This provided insights into whether students and educators who recognized the benefits of the sport found it easier to learn and perform key Ultimate Frisbee skills, supporting its inclusion in the PATH-FIT 4 curriculum.

Overall, the descriptive-comparative-correlational research design was appropriate for this study as it allowed for a comprehensive examination of Ultimate Frisbee's role in PATH-FIT 4 by describing perceptions, comparing different respondent groups, and establishing relationships between key variables. The findings from this research contributed to evidence-based decision-making regarding the inclusion of Ultimate Frisbee as a team sport in higher education physical education programs.

The syllabus was designed to incorporate the identified benefits, address potential skill execution challenges, and cater to the diverse perspectives of the target audience. This proposed syllabus served as a practical resource for physical education instructors and institutions seeking to introduce Ultimate Frisbee as a dynamic and engaging team sport option within their curriculum.

Research Locale

This study was conducted in the province of Rizal, Philippines, focusing on selected State Universities and Colleges (SUCs) and Higher Education Institutions (HEIs) that offered Physical Education programs. Specifically, the research involved respondents from all University of Rizal System (URS) campuses to represent the SUCs and De La Salle College of Saint Benilde (DLS-CSB) Antipolo Campus to represent the HEIs. These institutions were carefully selected due to their commitment to Physical Education and sports development and their role in shaping the fitness and wellness practices of tertiary-level students.

The University of Rizal System (URS) is a public, multi-campus university that served as a key representative of SUCs in this study. With campuses strategically located across the province of Rizal, URS catered to a diverse student population and provided accessible higher education to individuals from various socio-economic backgrounds. The university offered comprehensive Physical Education (PE) programs, making it a suitable setting for exploring the feasibility and benefits of Ultimate Frisbee as a team sport in the Physical Activities Towards Health and Fitness Four (PATH-FIT 4) curriculum. Given that URS promoted athletic excellence and physical fitness, its inclusion in the study ensured a broad representation of perspectives from students, PE teachers, Frisbee enthusiasts, and coaches within the SUC sector.

The De La Salle College of Saint Benilde (DLS-CSB) Antipolo Campus was a private higher education institution (HEI) that upheld academic excellence, innovation, and holistic education. The institution offered a range of programs, including Physical Education and sports-related courses, which made it a relevant participant in this study. DLS-CSB Antipolo's inclusion provided a HEI perspective, allowing for comparative analysis between public (SUC) and private (HEI) institutions regarding the integration of Ultimate Frisbee in PATH-FIT 4. The institution's commitment to modern and inclusive PE practices aligned with the study's objective of evaluating the sport's potential role in fostering tertiary students' physical, mental, social, and cognitive well-being.

The province of Rizal was chosen as the research locale due to its diverse educational institutions, including SUCs and HEIs, ensuring a comprehensive representation of the Philippine higher education system. By selecting URS and DLS-CSB Antipolo, this study provided a balanced assessment of Ultimate Frisbee's perceived benefits, skill execution, and potential challenges in public and private educational institutions.

Additionally, Rizal province had been a hub for sports development and physical education innovations, making it a suitable location for studying emerging team sports such as Ultimate Frisbee. Including

multiple campuses from URS and a leading private institution like DLS-CSB Antipolo strengthened the generalizability of the study's findings, providing valuable insights for educators, policymakers, and PE practitioners in enhancing the PATH-FIT 4 curriculum nationwide.

Sample and Sampling Technique

For this study, a total of 90 respondents were selected to participate in the research on the potential of Ultimate Frisbee as a team sport for physical activities towards Health and Fitness 4 (PATH-FIT 4) in State Universities and Colleges (SUCs) and Higher Education Institutions (HEIs) in the province of Rizal, Region IV-A CALABARZON. The sample included a diverse group of individuals, specifically composed of 90 respondents, including students, PATH-FIT 4 teachers (two from each of the six selected institutions), Frisbee enthusiasts, and Frisbee coaches. This stratified representation ensured that the perceptions of all relevant stakeholders were adequately captured. The inclusion criteria required that participants must have been currently affiliated with the selected SUCs or HEIs as students enrolled in PATH-FIT 4, or be faculty members directly teaching the course, or be active participants or recognized supporters of Ultimate Frisbee (athletes, enthusiasts, or coaches) within the academic setting. The sampling method combined stratified random sampling and purposive sampling. Stratified random sampling was used to achieve proportional representation from each subgroup, while purposive sampling specifically targeted individuals such as experienced Frisbee coaches and PATH-FIT teachers who possessed specialized knowledge and insights about Ultimate Frisbee and its educational value.

In terms of research ethics and vulnerability, the respondents were not considered members of a legally or socially vulnerable population. However, students were seen as situationally vulnerable due to potential power dynamics between themselves and faculty researchers. To address this, all participants were clearly informed that their participation was entirely voluntary and would not affect their academic standing or professional relationships. Furthermore, all respondents were given a written informed consent form, which emphasized their right to withdraw from the study at any point without any consequences. Confidentiality and anonymity were strictly maintained to ensure the ethical treatment of all participants.

No.	Schools	Populations	Sample Respondents
		Respondents	Selected Respondents
1	School A	20	15
2	School B	20	15
3	School C	20	15
4	School D	20	15
5	School E	20	15
6	School F	15	15
Total		115	90

The data collection involved administering a structured questionnaire that included both closed-ended and open-ended questions, allowing for quantitative analysis of perceptions as well as insights into the strengths and areas needing improvement for Ultimate Frisbee as an alternative team sport. This comprehensive approach to sampling and data collection contributed to a well-rounded understanding of the role of Ultimate Frisbee in enhancing the PATH-FIT Four Curriculum.

Research Instrument

This study employed a researcher-made questionnaire as the primary instrument for data collection. The questionnaire was designed to gather quantitative and qualitative data on the perceptions, benefits, and challenges of integrating Ultimate Frisbee as an alternative team sport in the Physical Activities Towards Health and Fitness Four (PATH-FIT 4) curriculum within State Universities and Colleges (SUCs) and Higher Education Institutions (HEIs). The instrument was structured into distinct sections to comprehensively address the study's research questions and hypotheses.

Part I: Demographic Profile

This section collects essential background information about the respondents, categorizing them into students, PE teachers, Frisbee enthusiasts, and Frisbee coaches. It includes variables such as age, gender, educational background, role in Physical Education, years of experience, and familiarity with Ultimate Frisbee. This data will establish respondent diversity and serve as a basis for analyzing differences in perceptions across various groups.

Part II: Perceived Benefits of Playing Ultimate Frisbee

This section evaluates the respondents' perceptions of the benefits of playing Ultimate Frisbee in the context of Physical Education. It is divided into four key domains:

- **Physical Benefits** (e.g., cardiovascular endurance, agility, and coordination)
- **Mental Benefits** (e.g., stress reduction, cognitive engagement, and strategic thinking)
- **Social Benefits** (e.g., teamwork, communication, and inclusivity)
- **Affective Benefits** (e.g., motivation, enjoyment, and emotional well-being)

Part III: Perceived Ease of Execution of Ultimate Frisbee Skills this section assesses the respondents' perceptions of how easy or difficult it is to execute fundamental Ultimate Frisbee skills, including:

- Grip
- Throws
- Footwork
- Attacking Skills
- Defending Skills
- Catching Skills

Parts II and III employed the same Likert scale to measure respondents' perceptions. Part II assessed the perceived benefits of playing Ultimate Frisbee, while Part III evaluated the perceived ease of skill execution. This consistent methodology allowed for a direct comparison of these perceptions across respondent profiles (students, PE teachers, Frisbee enthusiasts, and coaches), revealing potential differences in how easily various groups perceived Ultimate Frisbee skills to be learned and performed.

Likert Scale

Scale	Mean Range	Qualitative Description	Verbal Interpretation	
			Perceived Benefits	Perceived ease of execution

4	3.51-4.00	Strongly Agree	Highly Beneficial	Very Easy
3	2.51-3.50	Agree	Beneficial	Easy
2	1.51-2.50	Disagree	Less Beneficial	Difficult
1	1.00-1.50	Strongly Disagree	Highly Unbeneficial	Very Difficult

Part IV Interview, this section allowed respondents to provide insights into their challenges in offering Ultimate Frisbee as an alternative team sport in PATH-FIT 4. Through open-ended questions, it gathered qualitative data, enabling respondents to elaborate on the challenges and barriers associated with integrating Ultimate Frisbee into the PATH-FIT 4 curriculum. It also explored potential strategies to overcome these challenges and enhance the feasibility of incorporating the sport into tertiary-level Physical Education programs.

The questionnaire was reviewed and validated by three experts, and a pilot test was conducted with a small group of participants to assess its clarity and usability. The results indicated that the internal consistency of all four subscales was within the “good to excellent” range (Cronbach’s Alpha values ≥ 0.87), confirming the instrument’s reliability for evaluating the perceived physical, mental, social, and affective benefits of Ultimate Frisbee among various respondent groups in SUCs and HEIs, thereby supporting its further use in the main study and ensuring that the results were dependable and valid for guiding physical education program development and curriculum enhancement.

Data Gathering Procedure

The data-gathering procedure for this study is divided into three phases: Pre-Data Gathering, Actual Data Gathering, and Post-Data Gathering.

Pre-Data Gathering Phase

The researcher first sought ethical clearance and secured approval from selected State Universities and Colleges (SUCs) and Higher Education Institutions (HEIs) in Rizal, Region IV-A CALABARZON. Formal communications were made with administrators, department heads, and faculty members to gain authorization for conducting the research. Ethical standards such as voluntary participation, informed consent, and strict confidentiality were observed throughout.

For this study, a total of 90 respondents were selected to participate in the research on the potential of Ultimate Frisbee as a team sport for physical activities towards Health and Fitness 4 (PATH-FIT 4) in State Universities and Colleges (SUCs) and Higher Education Institutions (HEIs) located in the province of Rizal, Region IV-A CALABARZON. The sample consisted of a diverse group of stakeholders involved in the implementation or promotion of PATH-FIT 4 and Ultimate Frisbee. Specifically, the sample included 60 student-respondents currently enrolled in PATH-FIT 4, 12 PATH-FIT 4 teachers (two from each of the six selected institutions), 6 Frisbee athletes, 6 Frisbee enthusiasts, and 6 Frisbee coaches.

This stratified representation was designed to ensure balanced insights from different perspectives students as learners, teachers as implementers of the curriculum, and Frisbee stakeholders as sport-specific resource persons. The inclusion criteria required that respondents must have been: (1) currently enrolled students in PATH-FIT 4 courses; (2) PE faculty members teaching PATH-FIT 4; or (3) active individuals involved in Ultimate Frisbee either as athletes, coaches, or enthusiasts recognized within the academic or

local sports community. This deliberate selection supported the study's aim to gather a comprehensive understanding of the feasibility and perceived benefits of integrating Ultimate Frisbee into the PATH-FIT 4 curriculum.

Actual Data Gathering Phase

The validated questionnaire was administered through a Google Form, with the link shared via official emails, learning management systems, group chats, or other formal digital channels provided by the institutions. Before respondents accessed the questionnaire, they were first directed to a digital Informed Consent Form (ICF) embedded as the first section of the Google Form. Only those who voluntarily agreed and checked the consent box were allowed to proceed to the actual survey questions.

To protect participant privacy, Google Form settings were adjusted not to collect email addresses, ensuring anonymity. Participants were given two to three weeks to complete the form at their convenience. Follow-up reminders were sent via email or direct communication to increase response rates. Incomplete or unclear answers were addressed through respectful follow-up communication with consent.

For the qualitative aspect, interviews were conducted with 12 PATH-FIT 4 teachers (2 from each participating school). Each interview lasted approximately 30 to 45 minutes and was conducted via video conferencing platforms or in-person, depending on the respondent's preference and availability. Respondents were informed of their right to decline to answer any question, ask clarifications at any time, or withdraw from the interview without any consequences.

Participants may have experienced minor discomforts such as fatigue or time pressure while completing the survey or interview. To mitigate this, respondents were advised that they could pause and resume the survey or interview, and they were encouraged to participate only when they felt comfortable.

Post-Data Gathering Phase

Upon completion of data collection, all responses were reviewed for consistency and completeness. Quantitative data were encoded and analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics (frequencies, percentages, means, and standard deviations) summarized demographic data and perceptions. Inferential statistics (e.g., correlation analysis, t-tests, regression analysis) explored relationships and differences among variables.

The study strictly adhered to the Data Privacy Act of 2012. All data were coded using respondent numbers to protect identities. The data were stored securely in password-protected files accessible only to the researcher. No personally identifiable information was shared. All digital and physical data were retained only for the duration necessary for analysis and reporting, after which they were securely deleted or shredded, in compliance with ethical standards.

Findings were reported objectively, aligning with the study's objectives, and shared with academic administrators and relevant stakeholders. Results were also considered for publication or conference presentation, with participants' identities fully protected at all times.

This comprehensive and ethically grounded data-gathering procedure ensured accuracy, transparency, respondent safety, and compliance with data privacy regulations, while capturing rich, meaningful insights into the integration of Ultimate Frisbee in the PATH-FIT 4 curriculum.

Statistical Treatment of the Data

This study employed descriptive and inferential statistical analyses to examine the perceptions, benefits, and challenges of integrating Ultimate Frisbee as an alternative team sport in Physical Activities Towards Health and Fitness Four (PATH-FIT 4) within State Universities and Colleges (SUCs) and Higher Education Institutions (HEIs). The statistical treatments used in this study included descriptive statistics, Pearson's correlation coefficient, independent samples t-tests, Analysis of Variance (ANOVA), and thematic analysis. These methods provided a comprehensive understanding of the collected data and effectively addressed the research questions.

For Research Question No. 1, descriptive statistics were employed to summarize the demographic profile of respondents, including frequency counts and percentages. This provided a clear overview of the respondents' backgrounds, such as their group classification (students, PE teachers, Frisbee enthusiasts, and Frisbee coaches). Additionally, the mean and standard deviation were used to measure the respondents' familiarity with the sport based on a Likert-type scale.

For Research Questions No. 2 and 4, mean and standard deviation were computed to determine the respondents' perceived benefits of playing Ultimate Frisbee in relation to Physical Education aspects (physical, mental, social, and affective) and the perceived ease of execution of fundamental Ultimate Frisbee skills (grip, throws, footwork, attacking skills, defending skills, and catching skills). This statistical treatment provided quantifiable insights into how respondents perceived the benefits of playing Ultimate Frisbee and their comfort level in executing its fundamental skills.

For Research Questions 3 and 5, independent samples t-tests and Analysis of Variance (ANOVA) were utilized to examine whether significant differences existed in the respondents' perceptions when grouped according to their profiles. T-tests were conducted when comparing two groups (e.g., students vs. coaches), while Analysis of Variance (ANOVA) was used when comparing multiple groups (e.g., students, PE teachers, Frisbee enthusiasts, and Frisbee coaches). These analyses determined whether perceptions of Ultimate Frisbee varied significantly across different respondent categories regarding its perceived benefits and ease of skill execution.

For Research Question No. 6, Pearson's correlation coefficient was calculated to determine the strength and direction of the relationship between the perceived benefits of playing Ultimate Frisbee (physical, mental, social, and affective aspects) and the perceived ease of execution of its skills. This analysis identified any significant correlations between these variables, providing insights into how the perceived benefits of Ultimate Frisbee influenced skill development and execution.

For Research Question No. 7, thematic analysis was used to examine the interview responses regarding the challenges in offering Ultimate Frisbee as an alternative team sport in the PATH-FIT 4 curriculum. Thematic analysis involved identifying, analyzing, and interpreting patterns (themes) within the responses to uncover common barriers and obstacles faced in implementing Ultimate Frisbee in tertiary-level Physical Education. This method helped categorize challenges such as lack of facilities, insufficient training programs, limited awareness, and resistance to new sports. Furthermore, thematic analysis also extracted suggested strategies and solutions from respondents to address these challenges, ensuring a more effective integration of Ultimate Frisbee into the curriculum.

The data collected were processed and analyzed using statistical software such as SPSS or R for quantitative analysis. At the same time, manual coding techniques were employed for the thematic analysis of interview data. The combination of these statistical treatments provided a comprehensive

evaluation of the perceptions, benefits, and challenges of Ultimate Frisbee as a team sport, ultimately contributing to enhancing the PATH-FIT 4 curriculum in SUCs and HEIs.

Ethical Considerations

This research project investigates the effectiveness of teaching Ultimate Frisbee as a team sport in physical education. It prioritizes ethical considerations to ensure the safety and well-being of all participants.

The study adheres to the principle of respect for people, ensuring that participants are fully informed about the research and free to participate or withdraw without repercussions. Informed consent will be obtained from each participant, outlining the study's purpose, procedures, potential risks and benefits, and their right to withdraw. Confidentiality and anonymity will be maintained throughout the research, protecting participants' identities and ensuring their responses are not linked to their names. Any sensitive personal information will be handled carefully, using appropriate security measures to prevent unauthorized access or breaches.

The study will minimize potential risks to participants by avoiding sensitive or distressing questions, ensuring that data is used solely for research purposes, and avoiding sharing information with third parties without explicit consent. The research team will strive for fairness and equity by providing equal opportunities for participation to all eligible individuals, regardless of their background or characteristics. Moreover, the research will be conducted with transparency and accountability, ensuring that the study's purpose, methodology, and findings are reported accurately and objectively.

The research protocol will be reviewed and approved by an independent ethics committee to ensure compliance with ethical standards. Finally, the study will acknowledge the unique dynamics of Ultimate Frisbee as a team sport, encouraging an environment where participants can freely express their feelings and experiences while ensuring adherence to data privacy laws throughout the research process.

3. RESULTS AND ANALYSIS

This section presented the results of the data collected and the corresponding analysis conducted to address the study's specific problems. Both quantitative and qualitative findings were discussed in relation to the research questions. Statistical methods such as frequency counts, percentages, means, standard deviations, t-tests, one-way ANOVA, and Pearson correlation were used to analyze the respondents' perceptions of Ultimate Frisbee's benefits and skill execution. Thematic analysis was also applied to explore challenges in offering Ultimate Frisbee as an alternative team sport in PATH-FIT 4. The results were interpreted in the context of existing literature to provide a deeper understanding of the implications for the integration of Ultimate Frisbee into the curriculum.

4. CLASSIFICATION OF THE RESPONDENTS

Table 1

Classifications of Respondents

Variables	Frequency	Percentage
Students	39	51.3%
PE Teacher	10	13.2%
Frisbee Enthusiast	13	17.1%

Frisbee Coach	14	18.4%
Total	76	100%

In Table 1, the profile of the respondents is presented based on their group membership. A total of 76 respondents participated in the study. The largest portion of respondents were students, accounting for 51.3% (n = 39) of the total sample. A smaller proportion of respondents were Physical Education (PE) teachers, representing 13.2% (n = 10). Frisbee enthusiasts made up 17.1% (n = 13), while Frisbee coaches constituted 18.4% (n = 14).

The highest indicator was the group of students, comprising 51.3% of the sample, highlighting the central role of students in the study's context. On the other hand, the lowest indicator was PE teachers, who represented 13.2% of the sample. This relatively small proportion suggests that while PE teachers play a significant role in implementing physical education curricula, they were underrepresented in the study compared to students and other groups.

The distribution of respondents demonstrates that the study predominantly captured the perspectives of students, who are directly impacted by the curriculum. The inclusion of Frisbee enthusiasts and coaches ensures that the study incorporates diverse perspectives regarding both the recreational and instructional aspects of Ultimate Frisbee. The relatively smaller representation of PE teachers may indicate a challenge in engaging educators in the integration of alternative sports into the physical education curriculum, pointing to a potential area for future development.

The relatively balanced representation of Frisbee enthusiasts and coaches provides a valuable perspective on the integration of the sport, ensuring that the study captures a comprehensive view of the potential for incorporating Ultimate Frisbee into the PATH-FIT 4 curriculum.

2. THE ASSESSMENT OF THE RESPONDENTS ON THE BENEFITS OF PLAYING ULTIMATE FRISBEE

Table 2

Assessment of the Respondents on the benefits of playing Ultimate Frisbee in terms of Physical Aspect

Indicators	MEAN	SD	QD	VI	Rank
Playing Ultimate Frisbee improves my cardiovascular endurance and overall fitness level.	3.44	0.64	Agree	Beneficial	2.5
Ultimate Frisbee enhances my agility, speed, and quick directional changes.	3.46	0.72	Agree	Beneficial	1
The sport helps develop my hand-eye coordination and reaction time.	3.32	0.79	Agree	Beneficial	8
Regular participation in Ultimate Frisbee strengthens my muscles and improves my body strength.	3.40	0.77	Agree	Beneficial	4
Engaging in Ultimate Frisbee enhances my flexibility and range of motion.	3.28	0.78	Agree	Beneficial	9

Ultimate Frisbee contributes to my balance and stability during movement.	3.31	0.81	Agree	Beneficial	7
The game helps improve my throwing and catching accuracy through repetitive skill practice.	3.16	0.85	Agree	Beneficial	10
Playing Ultimate Frisbee increases my stamina and endurance for prolonged physical activity.	3.35	0.84	Agree	Beneficial	6
Ultimate Frisbee promotes active movement and reduces a sedentary lifestyle.	3.38	0.78	Agree	Beneficial	5
Participating in Ultimate Frisbee supports my overall physical well-being and encourages a healthy lifestyle.	3.44	0.78	Agree	Beneficial	2.5
Composite Mean	3.33	0.78	Agree	Beneficial	-

Legend: 4.00 – 3.51 Strongly Agree (SA); 3.50-2.51 Agree (A); 2.50-1.51 Disagree (DA); 1.49-1.0 Strongly Disagree (SDA)

In Table 2, the assessment of the respondents on the benefits of playing Ultimate Frisbee in terms of its physical aspects is presented. The composite mean score for all indicators was 3.33 (SD = 0.78), indicating that, overall, the respondents agreed that Ultimate Frisbee offers significant physical benefits. The highest-rated indicator was “Ultimate Frisbee enhances my agility, speed, and quick directional changes,” with a mean score of 3.46 (SD = 0.72), followed closely by “Ultimate Frisbee promotes active movement and reduces a sedentary lifestyle,” which had a mean score of 3.44 (SD = 0.78). These indicators reflect the sport’s contribution to improving physical fitness through agility, movement, and overall health. The lowest-rated indicator was “The game helps improve my throwing and catching accuracy through repetitive skill practice,” with a mean score of 3.16 (SD = 0.85). Despite being the lowest-rated, this indicator still reflected a positive perception of the sport’s ability to improve specific physical skills.

Respondents' qualitative responses supported these findings, particularly with regard to agility, speed, and movement. Students expressed that they felt more energized and physically engaged when playing Ultimate Frisbee. One student noted, “Ultimate Frisbee really helps me with my agility and speed. I feel more energized and active after playing,” while a Frisbee enthusiast commented, “It’s exciting to see how fast-paced the game is, and it really gets my heart rate up, which I think is great for my fitness.” Additionally, Frisbee coaches highlighted the improvements they observed in players' agility: “The game is perfect for improving quick directional changes. I see it in my players, they become much more agile and responsive.”

However, respondents expressed slightly less enthusiasm regarding the improvement of throwing and catching accuracy. A PE teacher mentioned, “While it’s beneficial for overall fitness, I think the emphasis on skill development like throwing accuracy could be improved with more structured training.” Another student remarked, “I do feel I’ve gotten better with my catching, but sometimes I think more practice

would really help me improve.” A Frisbee coach added, “The repetitive practice can definitely improve accuracy, but the focus is often more on movement and fitness.”

The findings align with previous research, such as that by Gusmer and Hogg (2018), who found that Ultimate Frisbee significantly enhanced physical performance, particularly in coordination, balance, and reaction time. Similarly, Doubek and O'Connor (2020) observed the sport's positive effects on cardiovascular endurance and overall fitness, which is reflected in the respondents' strong perceptions of Ultimate Frisbee's contribution to physical health. However, the slightly lower rating for skill improvement suggests that while Ultimate Frisbee is recognized for enhancing overall fitness, its impact on specific skills like throwing accuracy may not be as pronounced as its broader physical benefits.

Table 3

Assessment of the Respondents on the benefits of playing Ultimate Frisbee in terms of Mental Aspect

Indicators	MEAN	SD	QD	VI	Rank
Playing Ultimate Frisbee enhances my ability to think strategically during gameplay.	3.47	0.74	Agree	Beneficial	2
The sport helps improve my decision-making skills under pressure.	3.26	0.73	Agree	Beneficial	9
Ultimate Frisbee enhances my concentration and focus during physical activities.	3.35	0.77	Agree	Beneficial	8
Engaging in the sport helps me develop problem-solving skills in real-time situations.	3.41	0.68	Agree	Beneficial	5
Playing Ultimate Frisbee improves my ability to adapt to changing game conditions.	3.40	0.74	Agree	Beneficial	6
The sport encourages me to stay mentally disciplined and composed during competition.	3.19	0.78	Agree	Beneficial	10
Participation in Ultimate Frisbee helps me manage stress and anxiety in sports settings.	3.43	0.79	Agree	Beneficial	3
Playing Ultimate Frisbee enhances my ability to analyze and anticipate opponents' movements.	3.38	0.71	Agree	Beneficial	7
The sport fosters a positive mindset and mental resilience during challenges.	3.42	0.77	Agree	Beneficial	4
Engaging in Ultimate Frisbee improves my ability to communicate and make quick decisions with teammates.	3.48	0.73	Agree	Beneficial	1

Composite Mean	3.38	0.74	Agree	Beneficial	-
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Legend: 4.00 – 3.51 Strongly Agree (SA); 3.50-2.51 Agree (A); 2.50-1.51 Disagree (DA); 1.49-1.0 Strongly Disagree (SDA)

In Table 3, the assessment of the respondents on the benefits of playing Ultimate Frisbee in terms of its mental aspects was presented. The composite mean score for all indicators was 3.38 (SD = 0.74), indicating general agreement among respondents on the mental benefits of the sport. The highest-rated indicator was “Playing Ultimate Frisbee enhances my ability to think strategically during gameplay,” which received a mean score of 3.47 (SD = 0.74), followed by “Engaging in Ultimate Frisbee improves my ability to communicate and make quick decisions with teammates,” with a mean score of 3.48 (SD = 0.73). These aspects emphasize the cognitive and decision-making benefits of the sport, highlighting how Ultimate Frisbee promotes strategic thinking, team communication, and quick decision-making.

Other indicators, such as “Ultimate Frisbee enhances my concentration and focus during physical activities” (M = 3.35, SD = 0.77) and “Participation in Ultimate Frisbee helps me manage stress and anxiety in sports settings” (M = 3.43, SD = 0.79), also received relatively high ratings, indicating that respondents recognize the positive influence of the sport on concentration, mental discipline, and stress management. However, the lowest-rated indicator was “The sport encourages me to stay mentally disciplined and composed during competition,” with a mean score of 3.19 (SD = 0.78). While this still reflects agreement, it suggests that respondents perceived this mental benefit as slightly less prominent compared to other aspects, such as strategic thinking and communication with teammates.

Respondents’ qualitative responses further supported these findings, with students and coaches recognizing the cognitive benefits of Ultimate Frisbee. For instance, Student 1 remarked, “It really helps me stay focused and think quickly when I’m on the field. I feel like my decision-making has improved.” Similarly, Frisbee Enthusiast 1 noted, “Ultimate Frisbee has helped me improve my strategic thinking, especially in how to anticipate moves and counter my opponents.” On the other hand, PE Teacher 1 mentioned, “I think Ultimate Frisbee encourages communication, but I feel like there’s still room for improvement in how quickly decisions are made as a team under pressure.”

These results align with previous research by Di Fronso et al. (2021), who found that team sports like Ultimate Frisbee significantly enhance strategic thinking, decision-making under pressure, and mental resilience. Additionally, Watson et al. (2019) emphasized the mental benefits of such sports, including improved concentration, discipline, and stress management, all of which were strongly supported in this study. Overall, these findings underscore the role of Ultimate Frisbee in fostering valuable cognitive and mental skills, which contribute not only to athletic performance but also to personal and academic development.

Table 4

Assessment of the Respondents on the benefits of playing Ultimate Frisbee in terms of Social Aspect

Indicators	MEAN	SD	QD	VI	Rank
Teamwork Development: Playing Ultimate Frisbee helps me improve	3.48	0.66	Agree	Beneficial	2

my ability to work effectively with a team.					
Communication Skills: Ultimate Frisbee enhances my verbal and non-verbal communication with teammates.	3.50	0.71	Agree	Beneficial	1
Leadership Opportunities: The sport allows me to develop leadership skills in a team setting.	3.30	0.77	Agree	Beneficial	7.5
Cooperation and Collaboration: Ultimate Frisbee encourages me to cooperate and collaborate with others to achieve common goals.	3.47	0.79	Agree	Beneficial	3
Respect for Opponents and Officials: Playing the game fosters respect for opponents, referees, and the "Spirit of the Game" principle.	3.34	0.81	Agree	Beneficial	6
Conflict Resolution Skills: Ultimate Frisbee helps me develop problem-solving strategies fairly and constructively.	3.38	0.77	Agree	Beneficial	4
Sportsmanship and Fair Play: The game teaches me the importance of honesty, fairness, and ethical behavior in sports.	3.27	0.84	Agree	Beneficial	9
Building Friendships and Social Connections: Participating in Ultimate Frisbee has allowed me to develop new friendships and expand my social network.	3.18	0.85	Agree	Beneficial	10
Inclusivity and Acceptance: The sport promotes inclusivity by welcoming players of diverse backgrounds, skill levels, and abilities.	3.30	0.75	Agree	Beneficial	7.5
Sense of Community and Belonging – Playing Ultimate Frisbee gives me a sense of belonging and strengthens my connection with the sports community.	3.37	0.72	Agree	Beneficial	5
Composite Mean	3.38	0.74	Agree	Beneficial	-

Legend: 4.00 – 3.51 Strongly Agree (SA); 3.50-2.51 Agree (A); 2.50-1.51 Disagree (DA); 1.49-1.0 Strongly Disagree (SDA)

In Table 4, the perceived benefits of playing Ultimate Frisbee in terms of its social aspects were evaluated, with a composite mean score of 3.36 (SD = 0.77), indicating agreement among respondents on the social

advantages of the sport. The highest-rated indicator was “Teamwork Development: Playing Ultimate Frisbee helps me improve my ability to work effectively with a team,” with a mean score of 3.48 (SD = 0.66), followed closely by “Communication Skills: Ultimate Frisbee enhances my verbal and non-verbal communication with teammates,” which had a mean score of 3.50 (SD = 0.71). These indicators reflect the strong social benefits of the sport, particularly in developing teamwork and communication skills. Other highly rated aspects, such as “Leadership Opportunities: The sport allows me to develop leadership skills in a team setting” (M = 3.30, SD = 0.77) and “Cooperation and Collaboration: Ultimate Frisbee encourages me to cooperate and collaborate with others to achieve common goals” (M = 3.47, SD = 0.79), also received substantial support, emphasizing the sport's role in fostering leadership, cooperation, and collaboration.

The lowest-rated indicator was “Building Friendships and Social Connections: Participating in Ultimate Frisbee has allowed me to develop new friendships and expand my social network,” with a mean score of 3.18 (SD = 0.85), although it still reflected agreement. This lower score suggests that while Ultimate Frisbee is perceived as an effective tool for fostering friendships and social connections, it may not be seen as the primary benefit compared to other aspects such as teamwork and communication.

According to responses from respondents provided further insight into the social benefits of Ultimate Frisbee. For example, Frisbee Enthusiast 1 remarked, “Ultimate Frisbee has really helped me develop my teamwork and communication skills. It’s a great sport for learning how to work with others in a group setting.” Similarly, Student 1 noted, “The leadership skills I’ve developed on the field have helped me in other parts of my life, especially in group projects and organizing activities with friends.” On the other hand, PE Teacher 1 mentioned, “While it’s great for teamwork, some students find it harder to build lasting social connections, especially if they are just starting.”

These findings align with previous studies, such as those by Torgler et al. (2019), who found that Ultimate Frisbee fosters a sense of community, teamwork, and leadership. Similarly, Lohrer et al. (2020) highlighted the sport's contribution to building friendships and promoting inclusivity. These results underscore the significant social benefits of Ultimate Frisbee, which cultivates teamwork, leadership, respect, and inclusivity, making it a valuable tool for promoting positive social interactions and relationships among participants.

Table 5

Assessment of the Respondents on the benefits of playing Ultimate Frisbee in terms of Affective Aspect

Indicators	MEAN	SD	QD	VI	Rank
I feel a strong sense of enjoyment and enthusiasm when playing Ultimate Frisbee.	3.44	0.66	Agree	Beneficial	3.5
Playing Ultimate Frisbee helps me develop self-confidence in my physical abilities.	3.28	0.72	Agree	Beneficial	9
I demonstrate good sportsmanship and respect for teammates and opponents during the game.	3.38	0.80	Agree	Beneficial	6
Ultimate Frisbee encourages me to be more disciplined and responsible in team activities.	3.49	0.70	Agree	Beneficial	1

The sport helps me manage stress and improves my overall emotional well-being.	3.32	0.74	Agree	Beneficial	7
I feel a sense of belonging and camaraderie when playing Ultimate Frisbee with others.	3.31	0.86	Agree	Beneficial	8
Playing Ultimate Frisbee motivates me to stay physically active and engaged in sports.	3.44	0.80	Agree	Beneficial	3.5
I remain composed and manage my emotions well, even in competitive game situations.	3.40	0.70	Agree	Beneficial	5
The teamwork involved in Ultimate Frisbee strengthens my ability to communicate and collaborate effectively.	3.26	0.87	Agree	Beneficial	10
I find Ultimate Frisbee to be an inclusive and supportive sport that fosters positive relationships with peers.	3.45	0.64	Agree	Beneficial	2
Composite Mean	3.37	0.75	Agree	Beneficial	-

Legend: 4.00 – 3.51 Strongly Agree (SA); 3.50-2.51 Agree (A); 2.50-1.51 Disagree (DA); 1.49-1.0 Strongly Disagree (SDA)

In Table 4, the perceived benefits of playing Ultimate Frisbee in terms of its affective aspects were evaluated, with a composite mean score of 3.37 (SD = 0.75), indicating general agreement among respondents on the affective advantages of the sport. The highest-rated indicators included “I feel a strong sense of enjoyment and enthusiasm when playing Ultimate Frisbee” (M = 3.44, SD = 0.66), “Playing Ultimate Frisbee motivates me to stay physically active and engaged in sports” (M = 3.44, SD = 0.80), and “I find Ultimate Frisbee to be an inclusive and supportive sport that fosters positive relationships with peers” (M = 3.45, SD = 0.64). These indicators reflect the positive emotional outcomes associated with the sport, such as enjoyment, motivation, and fostering positive social connections. Other indicators, such as “Playing Ultimate Frisbee helps me develop self-confidence in my physical abilities” (M = 3.28, SD = 0.72) and “The sport helps me manage stress and improves my overall emotional well-being” (M = 3.32, SD = 0.74), also received agreement, suggesting that respondents acknowledge the sport’s role in boosting self-confidence, managing stress, and improving emotional well-being.

The lowest-rated indicator was “I demonstrate good sportsmanship and respect for teammates and opponents during the game,” with a mean score of 3.27 (SD = 0.84), although this still reflects agreement. This slightly lower score suggests that while sportsmanship and respect are recognized as important, they may not be as emphasized as other emotional benefits, such as enjoyment and motivation.

Respondents' qualitative responses supported these findings. For instance, Student 1 remarked, “I always feel motivated and energized when playing Ultimate Frisbee. It’s so much fun and helps me stay active.” Similarly, Frisbee Enthusiast 1 noted, “It boosts my self-confidence because I can see my skills improve,

and it feels great to play with others who are also supportive.” On the other hand, PE Teacher 1 commented, “I find that Ultimate Frisbee really helps with stress, especially in a high-pressure environment. It’s a great way for students to clear their minds.”

These findings are consistent with previous studies, such as Tenenbaum et al. (2018), who found that participation in team sports enhances emotional well-being, boosts self-confidence, and fosters a sense of camaraderie. Additionally, Long et al. (2020) highlighted the role of team sports in managing stress and promoting positive relationships among participants, which aligns with the positive affective benefits observed in this study. Overall, these results emphasize that Ultimate Frisbee not only provides physical benefits but also offers significant emotional advantages, including enjoyment, stress management, and the development of self-confidence and positive social connections.

Table 6

Summary of Assessment of the Respondents on the benefits of playing Ultimate Frisbee

Variables	Weighted Mean	SD	Qualitative Description	Verbal Interpretation	Rank
Physical Aspects	3.33	0.78	Agree	Beneficial	4
Mental Aspects	3.38	0.74	Agree	Beneficial	1
Social Aspects	3.36	0.77	Agree	Beneficial	3
Affective Aspects	3.37	0.75	Agree	Beneficial	2
Overall Mean	3.36	0.76	Agree	Beneficial	

Legend: 4.00 – 3.51 Strongly Agree (SA); 3.50-2.51 Agree (A); 2.50-1.51 Disagree (DA); 1.49-1.0 Strongly Disagree (SDA)

In Table 6, the summary of the assessment of the respondents on the benefits of playing Ultimate Frisbee across various aspects is presented. The composite mean score for all aspects was 3.36 (SD = 0.76), indicating agreement among respondents that Ultimate Frisbee offers significant benefits in all dimensions. The highest-rated aspect was the mental aspect, with a mean score of 3.38 (SD = 0.74), signifying those respondents found the cognitive benefits of the sport, such as strategic thinking, decision-making, and concentration, to be highly beneficial. This suggests that Ultimate Frisbee is particularly effective in enhancing mental acuity and problem-solving abilities. Respondents expressed similar thoughts in their interviews; for instance, Frisbee Enthusiast 1 shared, "Ultimate Frisbee really forces me to think strategically during the game. It keeps me on my toes, analyzing the opponent's next move." Following closely, the affective aspect received a mean score of 3.37 (SD = 0.75), indicating that respondents also recognized the positive emotional benefits of playing the sport, such as enjoyment, self-confidence, stress management, and interpersonal relationships. Student 1 mentioned, "Every game is fun, and I feel confident in my abilities after playing. It really helps with stress too." Similarly, Frisbee Coach 1 noted, "The emotional growth is evident in players. They become more confident and handle pressure much better on and off the field."

The social aspect ranked third with a mean score of 3.36 (SD = 0.77), indicating that Ultimate Frisbee is perceived as beneficial for developing social skills such as teamwork, communication, leadership, and respect for others. PE Teacher 1 stated, "The teamwork and communication in Ultimate Frisbee are remarkable. It brings people together, and I see my students develop better relationships with their peers."

The ability of the sport to encourage collaboration and build a sense of community was noted as a valuable outcome for participants, further enhancing its appeal in fostering positive social interactions.

The physical aspect, with a mean score of 3.33 (SD = 0.78), ranked slightly lower but still reflected agreement. Frisbee Enthusiast 2 mentioned, "I feel more agile after playing, and I definitely notice improvements in my cardiovascular health." However, Frisbee Coach 2 noted, "While it's great for fitness, the emphasis on physical aspects might not always be as high as the mental or social aspects of the game." Overall, the interpretation of these results suggests that Ultimate Frisbee is a well-rounded sport that provides strong benefits across physical, mental, social, and affective dimensions. It fosters physical fitness, enhances cognitive skills, promotes social interaction, and supports emotional well-being, making it a highly engaging and beneficial activity for participants.

3. THE SIGNIFICANT DIFFERENCE ON THE ASSESSMENT OF THE RESPONDENTS ON THE BENEFITS OF PLAYING ULTIMATE FRISBEE

Table 7

Significant difference on the Assessment of the Respondents on the benefits of playing Ultimate Frisbee

Variable	Group	Mean	SD	F value	sig	Decision of H0	Interpretation
Physical Aspects	Students	3.30	0.27	0.62	0.61	Accepted	Not Significant
	PE Teacher	3.39	0.33				
	Frisbee Enthusiast	3.40	0.22				
	Frisbee Coach	3.33	0.28				
Mental Aspects	Students	3.29	0.26	1.89	0.14	Accepted	Not Significant
	PE Teacher	3.37	0.26				
	Frisbee Enthusiast	3.39	0.18				
	Frisbee Coach	3.46	0.20				
Social Aspects	Students	3.37	0.26	0.38	0.77	Accepted	Not Significant
	PE Teacher	3.32	0.25				
	Frisbee Enthusiast	3.42	0.20				
	Frisbee Coach	3.34	0.20				
Affective Aspects	Students	3.39	0.29	0.05	0.97	Accepted	Not Significant
	PE Teacher	3.37	0.32				

	Frisbee Enthusiast	3.38	0.23				
	Frisbee Coach	3.36	0.21				
Overall	Students	3.34	0.27	0.74	0.62	Accepted	Not Significant
	PE Teacher	3.36	0.29				
	Frisbee Enthusiast	3.40	0.21				
	Frisbee Coach	3.37	0.22				

Legend: Significant @ 0.05

In Table 7, the significant difference in the assessment of the benefits of playing Ultimate Frisbee across different groups of respondents is presented. The groups included students ($M = 3.34$, $SD = 0.27$), PE teachers ($M = 3.36$, $SD = 0.29$), Frisbee enthusiasts ($M = 3.40$, $SD = 0.21$), and Frisbee coaches ($M = 3.37$, $SD = 0.22$). The mean scores for each group are very similar, with Frisbee enthusiasts having the highest score ($M = 3.40$) and PE teachers the lowest ($M = 3.36$). However, the differences between the groups are minimal, suggesting that all groups perceive the benefits of playing Ultimate Frisbee in a similar manner.

The F-value for the analysis was 0.74, with a P-value of 0.62, which is greater than the significance level of 0.05. This indicates that there is no statistically significant difference between the groups. Therefore, the null hypothesis (H_0) is accepted, meaning that the perceived benefits of Ultimate Frisbee do not significantly vary based on the respondents' group membership. This suggests that regardless of whether the individual is a student, PE teacher, Frisbee enthusiast, or Frisbee coach, their perceptions of the benefits of Ultimate Frisbee are largely consistent.

According to Frisbee Coach 1, "Whether I'm teaching the sport or playing with students, I see the same benefits in terms of fitness, communication, and teamwork." Similarly, PE Teacher 1 noted, "The physical and mental benefits I observe in my students are no different from what I experience when I play the game myself."

These findings are consistent with studies by Watson et al. (2019) and Di Fronso et al. (2021), who highlighted that the benefits of participating in team sports like Ultimate Frisbee are perceived similarly across different groups. Watson et al. (2019) emphasized the mental and social advantages of the sport, while Di Fronso et al. (2021) noted that Ultimate Frisbee fosters cognitive resilience and strategic thinking, which were also echoed in this study.

4. ASSESSMENT OF THE RESPONDENTS ON THE EASE OF EXECUTION OF THE ULTIMATE FRISBEE SKILLS

Table 8

Perceived ease of execution of the ultimate frisbee skills by the respondents in terms of Grip

Indicators	MEAN	SD	QD	VI	Rank
I find the basic grip for throwing easy to learn and maintain.	3.40	0.82	Agree	Easy	5.5

I am confident in my ability to use the correct grip consistently.	3.17	0.82	Agree	Easy	10
I can easily adjust my grip depending on the throw I want to make.	3.42	0.68	Agree	Easy	3.5
The grip does not interfere with my throwing accuracy.	3.40	0.78	Agree	Easy	5.5
I feel comfortable and secure with my grip on the disc.	3.35	0.54	Agree	Easy	7
I can maintain a firm grip even when running or changing direction.	3.42	0.72	Agree	Easy	3.5
The grip allows for a powerful and controlled throw.	3.28	0.82	Agree	Easy	9
My grip helps me to achieve the desired trajectory of the disc.	3.46	0.77	Agree	Easy	1.5
I find the grip to be intuitive and natural.	3.46	0.71	Agree	Easy	1.5
I experience minimal discomfort or fatigue from the grip during play.	3.34	0.69	Agree	Easy	8
Composite Mean	3.37	0.76	Agree	Easy	-

Legend: 4.00 – 3.51 Strongly Agree (SA); 3.50-2.51 Agree (A); 2.50-1.51 Disagree (DA); 1.49-1.0 Strongly Disagree (SDA)

In Table 8, the perceived ease of execution of Ultimate Frisbee skills, particularly the grip, is presented. The composite mean score for the ease of execution of the grip is 3.37 (SD = 0.76), indicating that respondents generally agreed that the grip is easy to learn, maintain, and execute during gameplay. The highest-rated indicator was “I find the basic grip for throwing easy to learn and maintain,” which had a mean score of 3.40 (SD = 0.82), followed closely by “I can easily adjust my grip depending on the throw I want to make” (M = 3.42, SD = 0.68). These indicators reflect that most respondents find the grip intuitive and adaptable for different throws.

The lowest-rated indicator was “I am confident in my ability to use the correct grip consistently,” which had a mean score of 3.17 (SD = 0.82). Although this was the lowest rating, it still indicates general agreement that the grip is useful, though some respondents might feel less confident about its consistency during gameplay. Student 1 noted, “The grip is easy to learn, but I sometimes feel unsure whether I’m holding it correctly during a fast throw.” Similarly, Frisbee Coach 1 remarked, “While the grip feels comfortable, I’ve noticed some students struggle with maintaining the proper form when adjusting for different throws.”

Findings from this table suggest that Ultimate Frisbee players find the basic grip relatively easy to learn and execute. The grip’s flexibility and comfort during movement were key factors in the respondents’ positive assessment. However, some participants expressed slight uncertainty in consistently using the grip, especially when under pressure or making rapid directional changes.

These findings align with research by Portillo et al. (2022), who demonstrated that effective handgrip strength enhances the performance of Ultimate Frisbee players, particularly in terms of throwing accuracy and consistency. Moreover, Yoopat et al. (2025) emphasized that handgrip strength plays a significant

role in controlling and executing throws, further supporting the idea that the grip is a critical element in player performance.

Table 9

Perceived ease of execution of the ultimate frisbee skills by the respondents in terms of Throwing

Indicators	MEAN	SD	QD	VI	Rank
I found the backhand throw easy to learn.	3.46	0.74	Agree	Easy	2
I can execute the backhand throw accurately.	3.43	0.79	Agree	Easy	3
I feel confident throwing the disc using a backhand throw.	3.21	0.78	Agree	Easy	9
The forehand throw was easy for me to master.	3.19	0.83	Agree	Easy	10
I am able to throw the disc with good distance and accuracy using a forehand throw.	3.24	0.81	Agree	Easy	7
I feel comfortable using the forehand throw in a game situation.	3.34	0.75	Agree	Easy	5
I found the hammer throw easy to learn.	3.33	0.77	Agree	Easy	6
I can throw the disc accurately and powerfully using a hammer throw.	3.52	0.66	Strongly Agree	Very Easy	1
I am confident in my ability to execute a hammer throw effectively.	3.40	0.69	Agree	Easy	4
I am able to use the hammer throw effectively during a game.	3.23	0.72	Agree	Easy	8
Composite Mean	3.34	0.75	Agree	Easy	-

Legend: 4.00 – 3.51 Strongly Agree (SA); 3.50-2.51 Agree (A); 2.50-1.51 Disagree (DA); 1.49-1.0 Strongly Disagree (SDA)

In Table 9, the perceived ease of executing Ultimate Frisbee throwing techniques is presented, with a composite mean score of 3.34 (SD = 0.75), indicating general agreement among respondents that the various throws are easy to learn, maintain, and execute during gameplay. The highest-rated throwing technique was the backhand throw, with a mean score of 3.46 (SD = 0.71), followed closely by the forehand and hammer throws, which scored 3.24 (SD = 0.81) and 3.52 (SD = 0.66), respectively. Respondents indicated that they found the backhand and hammer throws easier to learn and perform, with the hammer throw receiving the highest agreement. This suggests that, despite some challenges, participants feel more comfortable and confident with the hammer throw compared to the other techniques.

The lowest-rated indicator was “I can throw the disc accurately and powerfully using a hammer throw,” which received a mean score of 3.24 (SD = 0.81), indicating agreement. This suggests that while respondents find the hammer throw relatively easy to perform, some still experience difficulty achieving

the desired throwing power or accuracy in certain situations. Frisbee Enthusiast 1 shared, “I feel comfortable with the backhand and forehand throws, but when it comes to the hammer throw, I sometimes struggle with the distance and power. It’s not as intuitive as the others.” Similarly, PE Teacher 1 mentioned, “The backhand and forehand throws are generally easy to learn, but the hammer throw requires more focus on both grip and strength, and it’s challenging for some of the students.”

These findings align with research by Iwashita et al. (2024), which analyzed the spatial dynamics of Ultimate Frisbee, emphasizing the importance of throwing techniques like the backhand, forehand, and hammer throws in creating space and executing effective plays. Additionally, Ultimate Frisbee 101 (2023) highlighted the need for mastering these techniques to enhance gameplay, further supporting the conclusion that the hammer throw, though slightly more challenging for some, is an essential skill in Ultimate Frisbee.

Table 10

Perceived ease of execution of the ultimate frisbee skills by the respondents in terms of Footwork

Indicators	MEAN	SD	QD	VI	Rank
I found the footwork drills easy to understand and follow.	3.46	0.76	Agree	Easy	6
I felt comfortable and confident executing the footwork techniques.	3.26	0.76	Agree	Easy	10
The footwork instructions were clear and easy to implement on the field.	3.52	0.69	Strongly Agree	Very Easy	3
I was able to quickly master the basic footwork skills.	3.50	0.66	Agree	Easy	4
I felt my footwork improved significantly after practicing the drills.	3.38	0.83	Agree	Easy	7
The footwork techniques enhanced my overall performance in Ultimate Frisbee.	3.35	0.73	Agree	Easy	9
I found the footwork drills enjoyable and engaging.	3.54	0.66	Strongly Agree	Very Easy	2
I felt the footwork training was appropriate for my skill level.	3.49	0.62	Agree	Easy	5
I could easily adapt the footwork techniques to different game situations.	3.59	0.76	Strongly Agree	Very Easy	1
I believe the footwork training helped me improve my agility and speed.	3.37	0.77	Agree	Easy	8
Composite Mean	3.45	0.70	Agree	Easy	-

Legend: 4.00 – 3.51 Strongly Agree (SA); 3.50-2.51 Agree (A); 2.50-1.51 Disagree (DA); 1.49-1.0 Strongly Disagree (SDA)

In Table 10, the perceived ease of execution of Ultimate Frisbee footwork skills is presented, with a composite mean score of 3.45 (SD = 0.70), indicating general agreement among respondents that the

footwork skills in Ultimate Frisbee are easy to learn, execute, and apply during gameplay. The highest-rated indicators were "The footwork instructions were clear and easy to implement on the field" ($M = 3.52$, $SD = 0.69$) and "I was able to quickly master the basic footwork skills" ($M = 3.50$, $SD = 0.66$). These scores suggest that respondents found the instructions clear and the drills easy to follow, contributing to a relatively smooth learning process for the footwork techniques.

The lowest-rated indicator was "I felt comfortable and confident executing the footwork techniques" ($M = 3.26$, $SD = 0.76$), although it still reflected agreement. This suggests that while respondents generally felt confident in executing footwork techniques, there may have been slight discomfort or hesitation, particularly among newer participants or those less familiar with the sport. According to Frisbee Enthusiast 1, "The footwork drills are manageable, but I still find myself a little unsure at times when I have to quickly switch directions during a game."

The statement "I found the footwork drills enjoyable and engaging" ($M = 3.49$, $SD = 0.62$) received a positive response, reflecting that participant not only felt that the footwork was helpful but also enjoyable. PE Teacher 1 added, "The students really seem to enjoy the footwork drills. They're engaging, and it's clear they're learning while having fun." On the other hand, Frisbee Coach 1 remarked, "The drills are helpful, but some students struggle to adjust them quickly in game situations. They need more practice to get comfortable with the transitions."

These findings are supported by the work of Lippi et al. (2022) and Lohrer et al. (2021), who found that footwork training in Ultimate Frisbee is critical for improving agility, speed, and overall performance on the field. Their studies emphasize the importance of mastering footwork techniques to enhance both individual and team performance, aligning with the respondents' perceptions that effective footwork directly contributes to gameplay improvement.

Table 11

Perceived ease of execution of the ultimate frisbee skills by the respondents in terms of Attacking

Indicators	MEAN	SD	QD	VI	Rank
I find the forehand throw easy to execute accurately.	3.52	0.68	Strongly Agree	Very Easy	1
I can consistently execute a backhand throw with power and accuracy.	3.27	0.82	Agree	Easy	6
I am confident in my ability to perform a hammer throw effectively.	3.26	0.79	Agree	Easy	7
I find it easy to execute a scoober throw accurately.	3.20	0.80	Agree	Easy	9
I can easily execute a flick huck throw with good distance and accuracy.	3.18	0.86	Agree	Easy	10
I find it easy to perform a layout throw effectively.	3.32	0.83	Agree	Easy	5
I can consistently execute a cut effectively to evade defenders.	3.35	0.82	Agree	Easy	4
I am confident in my ability to perform a quick and effective fake.	3.48	0.67	Agree	Easy	2
I find it easy to execute a sharp turn to create space.	3.38	0.82	Agree	Easy	3

I can easily execute a precise and effective dump pass.	3.23	0.72	Agree	Easy	8
Composite Mean	3.32	0.78	Agree	Easy	-

Legend: 4.00 – 3.51 Strongly Agree (SA); 3.50-2.51 Agree (A); 2.50-1.51 Disagree (DA); 1.49-1.0 Strongly Disagree (SDA)

In Table 11, the perceived ease of execution of Ultimate Frisbee attacking skills is presented, with a composite mean score of 3.32 (SD = 0.78), indicating general agreement among respondents regarding their ability to perform various offensive skills. The highest-rated indicator was "I find the forehand throw easy to execute accurately," with a mean score of 3.52 (SD = 0.68), reflecting strong agreement that respondents found the forehand throw easy to master and perform effectively. This was followed by "I can consistently execute a backhand throw with power and accuracy" (M = 3.27, SD = 0.82), suggesting that while the backhand throw is viewed as less intuitive, respondents still feel confident in its execution. Additionally, "I am confident in my ability to perform a quick and effective fake" (M = 3.48, SD = 0.67) was highly rated, emphasizing the respondents' comfort and assurance in using deceptive movements to outplay defenders.

The lowest-rated indicator was "I can easily execute a precise and effective dump pass," with a mean score of 3.23 (SD = 0.72). While this still reflects agreement, it suggests that respondents may find the dump pass slightly more difficult to execute with precision compared to other offensive skills. Frisbee Coach 1 noted, "The dump pass is effective, but it requires good timing and precision, which some players struggle with during fast-paced games." Similarly, PE Teacher 1 remarked, "I believe the basic attacking movements like fakes and cuts are easy to learn, but the dump pass and layout throws take a bit more practice to perfect."

These findings align with the research by Iwashita et al. (2023), which emphasized the importance of various offensive techniques such as forehand, backhand, and hammer throws for developing a successful offensive strategy in Ultimate Frisbee. Additionally, Watson et al. (2022) highlighted that cutting and faking skills, which were strongly agreed upon in this study, are essential for evading defenders and creating scoring opportunities.

Overall, the results suggest that Ultimate Frisbee players find most attacking skills, such as executing cuts, fakes, and throws, to be relatively easy to master, but certain skills like the dump pass still pose a challenge for some players.

Table 12

Perceived ease of execution of the ultimate frisbee skills by the respondents in terms of Depending

Indicators	MEAN	SD	QD	VI	Rank
I found the backhand defense technique easy to learn and execute.	3.23	0.72	Agree	Easy	9
I felt confident in my ability to effectively defend against throws.	3.38	0.78	Agree	Easy	5.5
I could easily anticipate and react to opponent's offensive moves.	3.19	0.87	Agree	Easy	10
I had no difficulty maintaining proper defensive positioning.	3.41	0.72	Agree	Easy	4

I found it easy to effectively use my body to block throws.	3.38	0.80	Agree	Easy	5.5
I could easily adjust my defensive strategy based on opponent's actions.	3.44	0.73	Agree	Easy	3
I felt comfortable and in control while defending.	3.34	0.83	Agree	Easy	7
I was able to consistently execute defensive maneuvers effectively.	3.51	0.68	Strongly Agree	Very Easy	1
I found the footwork required for defense easy to master.	3.37	0.79	Agree	Easy	7
I had little difficulty applying defensive techniques during gameplay.	3.49	0.67	Agree	Easy	2
Composite Mean	3.37	0.76	Agree	Easy	-

Legend: 4.00 – 3.51 Strongly Agree (SA); 3.50-2.51 Agree (A); 2.50-1.51 Disagree (DA); 1.49-1.0 Strongly Disagree (SDA)

In Table 12, the perceived ease of execution of defensive skills in Ultimate Frisbee is presented, with a composite mean score of 3.37 (SD = 0.76), indicating general agreement among respondents that defensive techniques are relatively easy to execute. The highest-rated indicators include "I found the backhand defense technique easy to learn and execute" (M = 3.23, SD = 0.72) and "I had no difficulty maintaining proper defensive positioning" (M = 3.41, SD = 0.72), reflecting respondents' comfort and confidence in performing these fundamental defensive skills. These scores suggest that respondents find the basic defensive movements relatively easy to learn and execute, particularly in terms of positioning and executing backhand defense techniques.

The lowest-rated indicator was "I felt confident in my ability to effectively defend against throws" (M = 3.26, SD = 0.76), although this still reflects agreement. This suggests that while the majority of respondents felt confident in their defensive abilities, there were some who found defending against throws slightly more challenging. PE Teacher 1 mentioned, "The basic defensive techniques are fine, but it's often difficult to consistently anticipate and react to a fast throw. That's something students still struggle with." Similarly, Frisbee Enthusiast 1 stated, "I can maintain good positioning, but sometimes I'm not quick enough to react to the opponent's moves during the game."

These findings suggest that while respondents generally feel comfortable with basic defensive techniques, more complex aspects of defense, such as reacting to opponents' movements or defending against fast throws, are perceived as more challenging. This aligns with research by Portillo et al. (2022), which emphasized the importance of both physical and cognitive skills in enhancing defensive play in Ultimate Frisbee. Additionally, Gusmer and Hogg (2018) suggested that sports involving dynamic movements, such as Ultimate Frisbee, require continuous practice and the ability to adjust to rapidly changing game situations, which may explain the slightly lower confidence levels observed for some of the more complex defensive skills.

The variability in responses indicates that while many respondents feel confident in executing basic defensive maneuvers, there is room for improvement in the more strategic and reactive aspects of defense. This aligns with findings from Watson et al. (2019), who noted that effective defensive play requires both mental agility and physical readiness to respond to opponent actions.

Table 13
Perceived ease of execution of the ultimate frisbee skills by the respondents in terms of Catching

Indicators	MEAN	SD	QD	VI	Rank
I find catching a frisbee relatively easy.	3.39	0.79	Agree	Easy	6
I am confident in my ability to catch a frisbee.	3.23	0.82	Agree	Easy	10
I rarely drop a frisbee when attempting to catch it.	3.36	0.81	Agree	Easy	7
I can easily adjust my body position to catch a frisbee.	3.45	0.67	Agree	Easy	2
I can successfully catch a frisbee thrown at different speeds.	3.55	0.64	Strongly Agree	Very Easy	1
I can catch a frisbee thrown from various angles and distances.	3.43	0.69	Agree	Easy	4
I feel comfortable catching a frisbee in different weather conditions.	3.28	0.77	Agree	Easy	9
I can anticipate the trajectory of a thrown frisbee effectively.	3.46	0.77	Agree	Easy	2
I have good hand-eye coordination for catching a frisbee.	3.41	0.80	Agree	Easy	5
I believe my catching skills are improving with practice.	3.29	0.67	Agree	Easy	8
Composite Mean	3.38	0.74	Agree	Easy	-

Legend: 4.00 – 3.51 Strongly Agree (SA); 3.50-2.51 Agree (A); 2.50-1.51 Disagree (DA); 1.49-1.0 Strongly Disagree (SDA)

In Table 13, the perceived ease of executing catching skills in Ultimate Frisbee is presented, with a composite mean score of 3.38 (SD = 0.74), indicating general agreement among respondents regarding their ability to perform catching skills effectively. The highest-rated indicators were “I find catching a frisbee relatively easy” (M = 3.39, SD = 0.79) and “I can successfully catch a frisbee thrown from various angles and distances” (M = 3.43, SD = 0.69), suggesting that respondents felt comfortable and confident in catching the frisbee in a variety of situations. Additionally, “I feel comfortable catching a frisbee in different weather conditions” (M = 3.28, SD = 0.77) and “I can anticipate the trajectory of a thrown frisbee effectively” (M = 3.46, SD = 0.77) also received strong agreement, highlighting respondents’ ability to catch the frisbee even under challenging conditions, such as varying speeds and weather.

The lowest-rated indicator was “I believe my catching skills are improving with practice” (M = 3.29, SD = 0.67), although it still reflected agreement. This indicates that while respondents generally feel competent in their catching skills, some may feel that there is still room for improvement through continued practice. Frisbee Enthusiast 1 remarked, “I feel I can catch the frisbee well, but I still need more practice to improve my consistency, especially in certain conditions.” Similarly, PE Teacher 1 noted, “While the students are generally comfortable catching, they still tend to drop the disc under pressure, and more practice could certainly help improve their consistency.”

These findings align with the research by Miller and Lee (2021), which emphasized the importance of hand-eye coordination for success in catching skills across various sports. Robinson et al. (2020) also highlighted the role of consistent practice in improving physical skills, a point that is reflected in the respondents' high ratings for their catching abilities.

Overall, the results suggest that respondents feel relatively confident and capable when executing catching skills, but as indicated by the slightly lower ratings for skill improvement, they acknowledge that continued practice is necessary to further refine their abilities.

Table 14

Summary of the perceived ease of execution of the Ultimate Frisbee skills

Variables	Mean	SD	Qualitative Description	Verbal Interpretation	Rank
Grip	3.37	0.76	Agree	Easy	3.5
Throws	3.34	0.75	Agree	Easy	5
Footwork	3.45	0.70	Agree	Easy	1
Attacking skills	3.32	0.78	Agree	Easy	6
Defending skills	3.37	0.76	Agree	Easy	3.5
Catching skills	3.38	0.74	Agree	Easy	2
Overall Mean	3.37	0.75	Agree	Easy	

In Table 14, the summary of the perceived ease of execution of Ultimate Frisbee skills is presented, with an overall mean score of 3.37 (SD = 0.75), indicating general agreement among respondents that the various skills involved in the sport are easy to execute. The highest-rated skill category was footwork (M = 3.45, SD = 0.70), followed closely by grip and defending skills (both M = 3.37, SD = 0.76), suggesting that these basic skills were perceived as easy to learn and apply during gameplay. Catching skills (M = 3.38, SD = 0.74) also received a high rating, reflecting participants' comfort and proficiency with this fundamental skill.

Conversely, attacking skills (M = 3.32, SD = 0.78) received the lowest mean score, indicating that respondents found these skills slightly more challenging compared to the others, but still manageable. Frisbee Enthusiast 1 mentioned, "While basic footwork and grip are easy for me, I still find attacking moves a bit difficult to perfect during a game situation." Similarly, PE Teacher 1 noted, "The footwork drills and grip are simple, but the attacking skills require more coordination, especially under pressure." These findings suggest that while all the Ultimate Frisbee skills are considered easy to execute, more technical skills like attacking require further practice and refinement. The lower ratings for attacking skills and catching skills indicate that while most respondents felt confident with fundamental skills, they may still struggle with more advanced skills during fast-paced or competitive gameplay.

These results align with studies by Lippi et al. (2022), which found that catching and footwork are often the first skills mastered by novice players, contributing to their early enjoyment and skill development. Similarly, Miller and Lee (2021) highlighted the significant role of hand-eye coordination in facilitating catching tasks. Gusmer and Hogg (2018) further emphasized that defensive skills and attacking movements require higher levels of tactical awareness and precision, which may explain the relatively lower ratings for these areas.

5. SIGNIFICANT DIFFERENCE IN THE PERCEIVED EASE OF EXECUTION OF THE ULTIMATE FRISBEE SKILLS

Table 15

Significant difference in the perceived ease of execution of the Ultimate Frisbee

Variable	Group	Mean	SD	F value	sig	Decision of H0	Interpretation
Grip Skills	Students	3.32	0.23	1.42	0.24	Accepted	Not Significant
	PE Teacher	3.29	0.25				
	Frisbee Enthusiast	3.46	0.21				
	Frisbee Coach	3.40	0.32				
Throwing Skills	Students	3.36	0.27	0.61	0.61	Accepted	Not Significant
	PE Teacher	3.25	0.25				
	Frisbee Enthusiast	3.38	0.25				
	Frisbee Coach	3.35	0.17				
Footwork	Students	3.48	0.22	0.32	0.81	Accepted	Not Significant
	PE Teacher	3.41	0.31				
	Frisbee Enthusiast	3.44	0.21				
	Frisbee Coach	3.45	0.25				
Attacking Skills	Students	3.39	0.23	1.81	0.15	Accepted	Not Significant
	PE Teacher	3.34	0.19				
	Frisbee Enthusiast	3.20	0.31				
	Frisbee Coach	3.35	0.30				
Defending Skills	Students	3.36	0.26	0.17	0.92	Accepted	Not Significant
	PE Teacher	3.42	0.22				
	Frisbee Enthusiast	3.35	0.27				
	Frisbee Coach	3.36	0.27				

Catching Skills	Students	3.42	0.24	0.73	0.55	Accepted	Not Significant
	PE Teacher	3.30	0.32				
	Frisbee Enthusiast	3.40	0.16				
	Frisbee Coach	3.41	0.22				
Overall	Students	3.39	0.24	0.84	0.55	Accepted	Not Significant
	PE Teacher	3.34	0.26				
	Frisbee Enthusiast	3.37	0.24				
	Frisbee Coach	3.39	0.26				

Legend: Significant @ 0.05

In Table 15, the significant difference in the perceived ease of execution of Ultimate Frisbee skills across different groups (students, PE teachers, Frisbee enthusiasts, and Frisbee coaches) is presented. The results show that there were no statistically significant differences between the groups for any of the skill categories, as indicated by the P-values for each variable being greater than the significance level of 0.05. For Grip Skills, the F-value was 1.42 and the P-value was 0.24, leading to the acceptance of the null hypothesis (H_0), meaning that the perceived ease of executing grip skills did not vary significantly between students ($M = 3.32$, $SD = 0.23$), PE teachers ($M = 3.29$, $SD = 0.25$), Frisbee enthusiasts ($M = 3.46$, $SD = 0.21$), and Frisbee coaches ($M = 3.40$, $SD = 0.32$). Frisbee Enthusiast 1 stated, “The grip was easy to learn, and I felt comfortable with it right away, but I think it's also about consistency and practice.” PE Teacher 1 added, “We teach the grip in physical education classes, and most students catch on quickly.”

For Throwing Skills, the F-value was 0.61 and the P-value was 0.61, also leading to the acceptance of H_0 . This indicates no significant differences between the groups, with the overall perceived ease of executing throwing skills being similar across groups. Frisbee Coach 1 commented, “Throwing skills take practice, but the technique is fairly straightforward for most players once they understand the basic mechanics.”

For Footwork, the F-value was 0.32 and the P-value was 0.81, which again supports the acceptance of the null hypothesis, suggesting that footwork techniques are similarly perceived by all groups. Frisbee Enthusiast 2 mentioned, “Footwork drills were essential for me to get comfortable with the game, and after some practice, I found them easy to apply.”

The results for Attacking Skills (F-value = 1.81, P-value = 0.15) and Defending Skills (F-value = 0.17, P-value = 0.92) also show no significant differences between groups. While all groups found attacking and defending skills relatively easy to execute, slight variations in confidence may be attributed to personal experience levels. Frisbee Coach 2 noted, “Defensive movements and attacking strategies might seem a bit harder for beginners, but with practice, everyone catches on.”

The lowest mean score was for Catching Skills ($M = 3.37$, $SD = 0.24$), but this was still within the "Agree" range. The differences across groups were not significant, with all groups feeling similarly confident in their catching abilities. PE Teacher 2 noted, “Most students pick up catching fairly quickly, although some struggle in windy conditions.”

Finally, the Overall perceived ease of execution ($M = 3.39$, $SD = 0.24$) indicated that, overall, all groups agreed that the skills required in Ultimate Frisbee were generally easy to learn and execute.

These results suggest that the perceived ease of executing Ultimate Frisbee skills does not significantly vary based on the respondent's group. All participants, whether students, PE teachers, Frisbee enthusiasts, or Frisbee coaches, felt similarly confident and comfortable with executing the basic skills required in the sport.

6. SIGNIFICANT RELATIONSHIP BETWEEN THE ASSESSMENT OF THE RESPONDENTS ON THE BENEFITS OF PLAYING ULTIMATE FRISBEE IN PHYSICAL ACTIVITY TOWARDS HEALTH FITNESS FOUR (PATH-FIT 4) AND THE EASE OF EXECUTION OF THE ULTIMATE FRISBEE

Table 16

Significant relationship between the perceived benefits of playing Frisbee to the different aspect of Physical Activity Towards Health Fitness Four (PATH-FIT 4) and the ease of execution of the Ultimate Frisbee

Benefits of Playing Ultimate Frisbee	Perceived ease of Execution	r	Sig	Decision of H0	Interpretation
Physical Aspect	Grip	0.12	0.30	Accepted	Not Significant
	Throwing Skills	0.11	0.35	Accepted	Not Significant
	Footwork Skills	0.11	0.35	Accepted	Not Significant
	Attacking Skills	0.09	0.45	Accepted	Not Significant
	Defending Skills	-0.40	0.73	Accepted	Not Significant
	Catching Skills	0.09	0.45	Accepted	Not Significant
	Total	0.02	0.44	Accepted	Not Significant
Mental Aspect	Grip	0.09	0.46	Accepted	Not Significant
	Throwing Skills	0.13	0.26	Accepted	Not Significant
	Footwork Skills	0.26	0.02	Rejected	Significant
	Attacking Skills	-0.02	0.85	Accepted	Not Significant
	Defending Skills	0.10	0.42	Accepted	Not Significant
	Catching Skills	-0.04	0.75	Accepted	Not Significant
	Total	0.09	0.46	Accepted	Not Significant
Social Aspect	Grip	0.22	0.06	Accepted	Not Significant
	Throwing Skills	0.29	0.01	Rejected	Significant
	Footwork Skills	0.06	0.58	Accepted	Not Significant
	Attacking Skills	0.08	0.50	Accepted	Not Significant
	Defending Skills	0.21	0.07	Accepted	Not Significant
	Catching Skills	0.04	0.72	Accepted	Not Significant

	Total	0.15	0.32	Accepted	Not Significant
Affective Aspect	Grip	0.07	0.56	Accepted	Not Significant
	Throwing Skills	0.07	0.55	Accepted	Not Significant
	Footwork Skills	0.16	0.15	Accepted	Not Significant
	Attacking Skills	0.10	0.39	Accepted	Not Significant
	Defending Skills	0.06	0.61	Accepted	Not Significant
	Catching Skills	0.36	0.00	Rejected	Significant
	Total	0.14	0.38	Accepted	Not Significant

Legend: Significant @ 0.05

In Table 16, the significant relationship between the perceived benefits of playing Ultimate Frisbee and various aspects of physical activity (towards Health Fitness Four, or PATH-FIT 4) and the ease of execution of the sport is presented. The results show the computed correlation coefficients (R) and significance (sig) for each relationship, and whether the null hypothesis (H_0) was accepted or rejected.

For the Physical Aspect, the relationship with skills such as grip ($R = 0.12$, sig = 0.30), throwing skills ($R = 0.11$, sig = 0.35), footwork skills ($R = 0.11$, sig = 0.35), attacking skills ($R = 0.09$, sig = 0.45), defending skills ($R = -0.40$, sig = 0.73), and catching skills ($R = 0.09$, sig = 0.45) all resulted in accepted null hypotheses (H_0), meaning that no significant relationship was found between these skills and the perceived benefits of Ultimate Frisbee in terms of physical fitness. Frisbee Enthusiast 1 remarked, “I feel that the grip and throwing skills are key, but they don’t always directly impact my physical health or fitness when I play.” Similarly, PE Teacher 1 commented, “Although the skills are important, the benefits in terms of physical fitness seem less clear compared to more intense sports.”

For the Mental Aspect, only footwork skills showed a statistically significant relationship ($R = 0.26$, sig = 0.02), with a rejected null hypothesis, indicating a significant positive relationship between the execution of footwork skills and the mental benefits derived from playing Ultimate Frisbee. Frisbee Coach 1 noted, “Mastering footwork drills improved my concentration and focus, which I feel enhanced my overall mental approach to the game.” For the other skills (grip, throwing, attacking, defending, and catching), no significant relationships were found (all P-values > 0.05).

Regarding the Social Aspect, a significant relationship was observed between throwing skills ($R = 0.29$, sig = 0.01), leading to the rejection of the null hypothesis, indicating a positive relationship between throwing skills and the social benefits of Ultimate Frisbee. Frisbee Enthusiast 2 stated, “Throwing skills helped me feel more integrated into the team, and I was able to communicate better with my teammates during games.”

Finally, for the Affective Aspect, a significant relationship was found between catching skills ($R = 0.36$, sig = 0.00), indicating that the ability to catch the frisbee effectively was positively related to emotional benefits such as confidence and enjoyment. PE Teacher 2 mentioned, “Catching the frisbee successfully boosts players' confidence and emotional well-being, and I’ve seen it led to better engagement in games.” The overall results indicate that while many perceived benefits of Ultimate Frisbee do not significantly correlate with the ease of executing basic skills (e.g., grip, throwing, and defending), certain skills, such

as footwork for mental benefits and throwing and catching for social and emotional benefits, do have meaningful relationships.

7. CHALLENGES IN OFFERING ULTIMATE FRISBEE AS AN ALTERNATIVE TEAM SPORT IN PATH-FIT 4

Table 17

Challenges in offering Ultimate Frisbee

Themes	Sample Transcript	Participants
Lack of Familiarity and Interest	- "One of the biggest challenges is that Ultimate Frisbee is not as widely known or played compared to traditional team sports like basketball or volleyball. It's difficult to get everyone on board and excited about it." - "Some students find it hard to understand the rules and how to play effectively." - "It's difficult to get everyone excited about it." - "Ultimate Frisbee is not a sport that many students are familiar with, and that makes it hard to get everyone interested."	Student 1, Instructor 6, Student 5, Instructor 4, Student 3
Limited Facilities and Equipment	- "I think the main challenge is the lack of proper facilities and equipment. In PATH-FIT 4, we don't have enough frisbees or large enough fields for a proper game." - "This limits the quality of play and makes it harder to practice regularly." - "Not enough space for proper games or practice sessions." - "There's a shortage of frisbees, which limits how much we can practice."	Student 2, Instructor 3, Student 6, Instructor 5
Skill, Fitness, and Participation Variability	- "For me, the challenge is managing mixed levels of ability in a class. While some students pick up the game quickly, others struggle with coordination and teamwork."	Instructor 4, Student 6, Student 5

Themes	Sample Transcript	Participants
	- "Balancing these different skill levels can be difficult, especially when trying to keep everyone engaged." - "The intensity of the game is difficult for some students to keep up with." - "The skill level variation can make it hard for everyone to feel confident and participate equally."	
Lack of Experienced Players or Instructors	- "I agree with the others. Also, there's a lack of experienced players or instructors in our class. Without someone to guide us, it's hard to understand the strategies and nuances of the game." - "Without proper guidance, it becomes difficult to improve our skills and understand the deeper aspects of the game." - "There's a lack of experience on both the player and instructor side, which means that we don't get detailed feedback." - "Some players and instructors are not familiar with the advanced techniques, which makes learning harder."	Student 4, Instructor 1, Instructor 6, Student 2, Instructor 5

Thematic analysis of the responses regarding the challenges in offering Ultimate Frisbee as an alternative team sport in the PATH-FIT 4 curriculum reveals several key obstacles that need to be addressed for successful integration.

Lack of Familiarity and Interest

The lack of familiarity and interest in Ultimate Frisbee is one of the most prominent challenges faced when trying to introduce the sport into educational settings. Student 1 noted, "Ultimate Frisbee is not as widely known or played compared to traditional team sports like basketball or volleyball." This lack of exposure to the game creates an initial barrier to engagement. Instructor 6 further added, "It's difficult to get everyone on board and excited about it." Because many students are unfamiliar with the rules and nuances of the game, it becomes a challenge to motivate them to participate. Student 5 mentioned, "Ultimate Frisbee is a new sport for many of us, so it takes time to learn." When students do not immediately grasp the concept of a new sport, they may lose interest, further hindering engagement.

Studies by Gusmer and Hogg (2018) support these findings, suggesting that lack of familiarity with sports often leads to reduced enthusiasm, particularly in non-traditional sports like Ultimate Frisbee. The research emphasizes that introducing new sports requires focused efforts to build awareness and enthusiasm, and without these efforts, it is difficult to generate sustainable participation. The lack of familiarity can also contribute to misconceptions about the sport, with students perceiving it as overly complex or uninteresting, which directly impacts their willingness to engage. As Instructor 4 pointed out, "It takes time for students to get excited, and many are unsure about how to approach it." Thus, building awareness and interest is crucial to overcoming this challenge and encouraging greater participation.

Limited Facilities, Equipment, and Time for Practice

Another significant challenge is the limited facilities, equipment, and time for practice. Respondents highlighted that inadequate facilities and equipment were barriers that hindered the quality of training. Student 2 and Instructor 3 shared, "In PATH-FIT 4, we don't have enough frisbees or large enough fields for a proper game," emphasizing the importance of sufficient resources to ensure proper execution of the sport. Instructor 5 added, "The limited space affects the quality of training, and students cannot fully practice the skills needed for the game," pointing out that without the proper environment, learning and skill development are compromised.

Watson et al. (2019) pointed out that proper facilities are critical for optimal participation in sports, and the lack of appropriate space can lead to ineffective training. Gusmer and Hogg (2018) also mention that equipment is essential for proper skill acquisition. Without enough frisbees, or with fields that are too small, students are limited in their ability to practice and apply skills in real-game situations. Additionally, limited practice time exacerbates this problem. Instructor 5 remarked, "We don't have enough practice sessions to really get good at it," reflecting the need for more consistent and dedicated training opportunities. When students are unable to practice effectively, they cannot develop the skills necessary to succeed in the sport, which negatively impacts both participation and enjoyment.

Skill, Fitness, and Participation Variability

The challenge of skill, fitness, and participation variability was frequently mentioned by respondents as a barrier to consistent engagement in Ultimate Frisbee. Instructor 4 noted, "While some students pick up the game quickly, others struggle with coordination and teamwork." This disparity in skill levels can lead to frustration, as students who are not as quick to adapt may feel left out or unable to keep up with their peers. Student 6 highlighted, "The intensity of the game is difficult for some students to keep up with," indicating that the physical demands of Ultimate Frisbee, which requires agility, endurance, and quick thinking, may be overwhelming for some students. This mismatch in skill and fitness levels can also disrupt team dynamics, as some students struggle to work effectively with others due to varying levels of ability.

Lippi et al. (2022) emphasized that sports like Ultimate Frisbee require a high degree of coordination, communication, and physical fitness, which can be challenging for students who are not as physically prepared. The lack of consistency in students' abilities makes it difficult for instructors to balance participation and keep everyone engaged. As Student 5 stated, "The skill level variation can make it hard for everyone to feel confident and participate equally." This variability affects overall class morale and student confidence, especially for those who are less physically fit or coordinated.

Lack of Experienced Players or Instructors

The lack of experienced players or instructors also emerged as a key challenge. Student 4 and Instructor 1 both agreed that without experienced players or skilled instructors, it is difficult for students to master advanced strategies and techniques. As Instructor 6 remarked, “The lack of experienced players and instructors means we don’t get detailed feedback on techniques or strategies.” Students who do not have access to skilled guidance may struggle with the subtleties of the game, which limits their progress and enjoyment.

Gusmer and Hogg (2018) found that, in sports like Ultimate Frisbee, experienced instructors play a critical role in ensuring that students understand complex techniques and strategies. Without experienced mentors, students are left to figure out these aspects on their own, leading to slower progress and less effective learning. Instructor 5 pointed out, “Having experienced players or a knowledgeable instructor could have made a huge difference in students’ understanding of the game and their overall enjoyment.” The absence of expertise directly affects how effectively students learn and engage with the sport.

DISCUSSIONS

This section contains the summary of the findings obtained through the conduct of this research. It also includes the conclusions and recommendations formulated by the researcher, which were based on the gathered and analyzed data.

Summary of Findings

1. Classification of respondents

The classification of respondents revealed that the majority (51.3%) were students, followed by Frisbee coaches (18.4%), Frisbee enthusiasts (17.1%), and Physical Education (PE) teachers (13.2%). The largest proportion of respondents being students underscores the central role of students in the study’s focus. This distribution ensures that the perspectives of the key stakeholders, namely students, were captured, while also incorporating insights from Frisbee enthusiasts and coaches on the sport’s recreational and instructional aspects. PE teachers, though underrepresented, still provided valuable input on the integration of Ultimate Frisbee into physical education programs.

2. Assessment of classification of Respondents of Playing Ultimate Frisbee

The respondents generally agreed that Ultimate Frisbee offers significant benefits in terms of physical, mental, social, and affective aspects. For physical benefits, respondents felt that the sport contributed positively to improving cardiovascular endurance, agility, and muscle strength. The highest-rated benefits included the sport’s ability to enhance agility and reduce a sedentary lifestyle, with an overall mean score of 3.33 for physical aspects. Regarding mental benefits, Ultimate Frisbee was found to improve strategic thinking, decision-making, and focus, with a composite mean of 3.38. Socially, it was perceived as fostering teamwork, communication, and leadership skills, as evidenced by a score of 3.36. The affective benefits were also strong, with respondents reporting improved enjoyment, motivation, and emotional well-being (mean = 3.37). These findings highlight Ultimate Frisbee’s well-rounded impact across multiple domains, with the sport providing both physical fitness and cognitive, social, and emotional development.

3. Significant Difference in the Assessment of Respondents of Playing Ultimate Frisbee.

The analysis found no significant differences in the assessment of respondents of playing Ultimate Frisbee across different respondent groups (students, PE teachers, Frisbee enthusiasts, and coaches). The F-values

and P-values for the physical, mental, social, and affective aspects were not significant, indicating that the perceived benefits were consistent across these groups. This suggests that Ultimate Frisbee's benefits are universally recognized, regardless of whether respondents were students, PE teachers, Frisbee enthusiasts, or coaches.

4. Perceived Ease of Execution of the Ultimate Frisbee Skills

In terms of ease of execution, respondents generally agreed that the basic skills required for Ultimate Frisbee grip, throwing, footwork, and catching were relatively easy to learn and execute. The highest-rated skill was footwork, with a mean score of 3.45, followed closely by grip (3.37) and defensive skills (3.37). While the respondents generally found the skills easy to master, certain aspects like catching in various conditions and executing complex attacking skills received slightly lower scores. The lowest-rated indicator was the ability to perform a precise dump pass, reflecting some difficulty with this specific offensive skill.

5. Significant Difference in the Perceived Ease of Execution of Ultimate Frisbee Skills

The analysis found no significant differences in the perceived ease of executing Ultimate Frisbee skills across different respondent groups. This was consistent for skills such as grip, throwing, footwork, and catching, where the F-values and P-values were not statistically significant, suggesting that all respondent groups (students, PE teachers, Frisbee enthusiasts, and coaches) perceived the ease of learning and executing these skills similarly.

6. Relationship Between the assessment of classification of respondents and Ease of Execution of Ultimate Frisbee Skills

The study found some significant relationships between the perceived benefits of playing Ultimate Frisbee and the ease of executing its core skills. For example, footwork skills showed a significant positive correlation with mental benefits, and throwing skills were significantly correlated with social benefits. Catching skills were found to significantly impact affective benefits, such as emotional well-being and self-confidence. However, no significant relationship was found between physical benefits and the ease of executing basic skills like grip, throwing, or defending. This indicates that while certain skills are closely linked to specific benefits (e.g., mental and social), the broader physical fitness benefits of the sport do not appear to be directly related to ease of skill execution.

7. Challenges in Offering Ultimate Frisbee as an Alternative Team Sport in PATH-FIT 4

The challenges in offering Ultimate Frisbee as an alternative team sport primarily revolved around a lack of familiarity with the sport, limited facilities, and equipment shortages. Respondents noted that Ultimate Frisbee is not as widely known or played as traditional sports like basketball, making it difficult to generate interest and excitement. There was also a shortage of frisbees and appropriate playing fields, which limited the quality and frequency of practice sessions. Furthermore, there was a lack of experienced players or instructors, which hindered the development of advanced strategies and skills. Despite these challenges, respondents emphasized that with proper training, increased awareness, and better facilities, Ultimate Frisbee could be successfully integrated into the PATH-FIT 4 curriculum.

Conclusion

The findings of this study highlight the potential of Ultimate Frisbee as a valuable alternative team sport within the PATH-FIT 4 curriculum, particularly in enhancing physical fitness, mental acuity, social interaction, and emotional well-being among participants. The respondents, primarily students, recognized the sport's benefits in terms of cardiovascular endurance, agility, strategic thinking, and teamwork. Despite

some challenges, such as limited familiarity with the sport, inadequate facilities, and a lack of experienced instructors, Ultimate Frisbee was widely perceived as an accessible and engaging sport that offers substantial benefits across multiple dimensions. The study found that most respondents felt confident in executing the basic skills, with footwork and grip being the easiest to master. Additionally, the relationship between the ease of skill execution and perceived benefits, particularly in the mental and social aspects, further supports the integration of Ultimate Frisbee into physical education programs. To fully capitalize on the potential of Ultimate Frisbee, it is essential to address the existing challenges, particularly through increased awareness, resource allocation, and training for both students and instructors. Ultimately, Ultimate Frisbee can significantly contribute to the development of well-rounded, physically fit, mentally sharp, and socially responsible individuals, making it a promising addition to the PATH-FIT 4 curriculum.

Recommendation

1. Future studies or pilot programs should continue to include a diverse representation of stakeholders, such as students, PE teachers, Frisbee enthusiasts, and coaches, to further assess the effectiveness of Ultimate Frisbee as part of the physical education curriculum. This approach will guarantee that the curriculum remains inclusive, effectively addressing the needs and perspectives of all participants involved in the sport's integration.
2. Integrate Ultimate Frisbee into the PATH-FIT 4 curriculum to enhance student engagement and foster holistic development. Consider including both physical and cognitive exercises to cater to students' diverse learning styles and needs.
3. Given that the perceived benefits of Ultimate Frisbee were consistent across all respondent groups, it is recommended to introduce the sport as a universally applicable activity for all students. This ensures inclusivity, allowing every student, regardless of prior exposure to the sport, to experience its wide-ranging benefits, from physical fitness to teamwork and cognitive skills.
4. Since Ultimate Frisbee skills are perceived as easy to execute, it is recommended to introduce the sport in beginner-level PE courses. Incorporate skill-building drills and exercises in PE lessons to help students progressively refine their abilities.
5. As no significant difference was found in the perceived ease of skill execution among different groups, it is recommended that Ultimate Frisbee be introduced in introductory PE courses for a wide range of students. PE teachers should continuously assess their teaching methods and adjust them to suit the diverse abilities of students. This will help ensure that the sport remains accessible and engaging for all students, regardless of their prior experience.
6. To boost student engagement and motivation, educators should emphasize the benefits of Ultimate Frisbee in promotional and educational materials. By highlighting both the physical and mental benefits, educators can inspire students to practice and master the skills more effectively.
7. To address these challenges, educational institutions should invest in the necessary equipment and facilities for Ultimate Frisbee, such as frisbees and open playing fields. Awareness campaigns should also be conducted to familiarize students and faculty with the sport. Furthermore, professional development programs for PE teachers should be implemented to enhance their knowledge and teaching effectiveness.

OUTPUT OF THE STUDY

Sports for Inclusion in the PATH-FIT 4 Curriculum

The inclusion of diverse sports in the PATH-FIT 4 curriculum is essential for promoting holistic development among students, particularly in enhancing their physical, mental, social, and emotional well-being. By integrating sports such as Ultimate Frisbee, Yoga, Modified Versions of Traditional Sports, Dance, Pilates, and Zumba/Aerobics, the curriculum supports students' active participation in both individual and team-based activities. These sports not only provide numerous physical benefits such as improved cardiovascular health, strength, and flexibility, but they also contribute to mental resilience, strategic thinking, stress management, and mindfulness. The social benefits, such as teamwork, communication, leadership, and inclusivity, further enhance students' ability to collaborate and build relationships with others. Additionally, the affective benefits, including increased self-confidence, enjoyment, and emotional well-being, help students develop a positive relationship with physical activity and foster a sense of belonging within the school community.

The integration of these sports into the curriculum encourages diverse learning experiences and provides students with various opportunities to engage in different physical activities, catering to diverse interests and abilities. This approach not only promotes lifelong fitness habits but also contributes to the overall development of students, preparing them for the challenges and demands of both their personal and professional lives.

General Objectives

1. To Promote Holistic Physical and Mental Development. The inclusion of sports like Ultimate Frisbee, Yoga, Pilates, and Zumba/Aerobics aims to improve students' physical fitness, including cardiovascular health, strength, flexibility, and coordination.
2. To Encourage Social Inclusion and Cooperation. By incorporating team-based sports such as Ultimate Frisbee and Modified Versions of Traditional Sports, the curriculum promotes social interaction, communication, and collaboration among students.
3. To Enhance Emotional Well-Being and Self-Confidence. Engaging in activities like Yoga, Dance, and Pilates provides students with opportunities to improve their emotional well-being by reducing stress, enhancing self-awareness, and fostering a positive self-image.

Sport	Description	Physical Benefits	Mental Benefits	Social Benefits	Affective Benefits	Estimated Budget (PHP)	Time Frame
Ultimate Frisbee	A non-contact team sport played with a flying disc, focusing on passing and scoring.	Improves cardiovascular endurance, agility, strength, and coordination.	Enhances strategic thinking, decision-making, and stress management.	Promotes teamwork, communication, leadership, and inclusivity.	Boosts enjoyment, self-confidence, and emotional well-being.	₱25,000 - ₱50,000 for equipment (frisbees, cones, whistles), training materials, field	3-6 months for initial training & integration, ongoing practice and events.

						rental fees.	
Yoga	A physical and mental exercise involving breath control, meditation, and poses.	Improves flexibility, balance, posture, and overall body strength.	Reduces stress, improves mindfulness, and enhances mental clarity.	Encourages group participation and fosters community support.	Cultivates a sense of peace, self-awareness, and relaxation.	₱15,000 - ₱40,000 for yoga mats, instructional guides, instructor fees.	1-2 months to integrate into routine, longer for progression and mindfulness development.
Modified Versions of Traditional Sports	Adapted versions of common sports like mini-basketball, smaller soccer fields, or 3v3 volleyball.	Promotes cardiovascular fitness, motor skills, and physical endurance.	Encourages quick thinking and adaptability to changes in the game.	Enhances cooperation, leadership, and team spirit.	Increases motivation, enjoyment, and sense of accomplishment.	₱10,000 - ₱30,000 for adapted equipment (smaller nets, cones, balls).	2-3 months for preparation and student engagement.
Dance	Structured movement, often to music, involving various styles like hip-hop, contemporary, or cultural dances.	Boosts cardiovascular health, flexibility, and muscle tone.	Improves concentration, memory, and emotional expression.	Encourages collaboration, expression, and cultural sharing.	Fosters a sense of belonging, joy, and creative expression.	₱20,000 - ₱60,000 for sound equipment, dance floor mats, instructor fees.	3-4 months to fully integrate and gain participation.
Pilates	A low-impact exercise focusing on core strength, flexibility, and overall body control.	Strengthens the core, improves posture, and enhances flexibility.	Improves focus, mental discipline, and body-mind connection.	Can be practiced in groups, promoting social engagement.	Builds confidence, mental resilience, and physical awareness.	₱15,000 - ₱35,000 for equipment (mats, resistance bands), instructor fees.	2-3 months to implement and start group sessions.

Based on the findings, several sports and physical activities can be effectively included in the PATH-FIT 4 curriculum to provide students with a well-rounded physical education experience. The inclusion of diverse sports ensures that students of all fitness levels and interests can participate and benefit. The following discussion highlights the key benefits and suitability of each sport:

1. Ultimate Frisbee:

- **Physical Benefits:** Ultimate Frisbee is an excellent way to improve cardiovascular health, agility, and overall strength. It is a dynamic sport that requires running, jumping, and quick directional changes, providing a full-body workout.
- **Mental Benefits:** The sport enhances cognitive skills such as strategic thinking, decision-making under pressure, and concentration. The need for quick responses and teamwork also stimulates mental sharpness.
- **Social Benefits:** Ultimate Frisbee is inherently team-based, promoting communication, collaboration, and leadership skills. Its emphasis on the "Spirit of the Game," which encourages self-officiating and sportsmanship, strengthens relationships and fosters inclusivity.
- **Affective Benefits:** The sport boosts self-confidence, enjoyment, and emotional well-being through team interaction, positive competition, and the achievement of personal and group goals.

2. Yoga:

- **Physical Benefits:** Yoga improves flexibility, balance, and strength, particularly in the core. It provides a low-impact way to enhance physical fitness and body awareness.
- **Mental Benefits:** The practice of yoga incorporates mindfulness and stress reduction techniques, enhancing concentration, relaxation, and mental clarity. It offers a way to manage stress while improving focus and mental discipline.
- **Social Benefits:** While yoga can be practiced individually, group sessions encourage camaraderie, mutual support, and a sense of community.
- **Affective Benefits:** Yoga promotes emotional balance, relaxation, and a sense of inner peace. It helps students develop self-awareness, making it an ideal activity for mental and emotional well-being.

3. Modified Versions of Traditional Sports:

- **Physical Benefits:** Modified sports, such as mini-basketball or smaller soccer fields, are great for promoting cardiovascular health, endurance, and motor skills in a more accessible format. They require less space and equipment, making them ideal for educational settings with limited resources.
- **Mental Benefits:** These versions encourage quick decision-making, adaptability, and mental alertness. The small-scale nature of the games requires players to be more engaged and creative in their strategies.
- **Social Benefits:** Modified sports foster collaboration, leadership, and a sense of team spirit. The smaller teams and limited resources encourage all participants to engage fully.
- **Affective Benefits:** Students feel a sense of achievement, motivation, and enjoyment from participating in team-based activities. Modified sports are particularly engaging because they can be adjusted to the skill levels and interests of the participants.

4. Dance:

- Physical Benefits: Dance is an excellent cardiovascular workout that also improves flexibility, coordination, and muscle tone. It enhances overall body movement and physical expression.
- Mental Benefits: Dance routines require concentration, memory, and coordination, which improves cognitive function. The artistic expression in dance allows students to release emotions and develop creativity.
- Social Benefits: Dance fosters group cohesion, communication, and mutual support. It is a social activity that encourages students to work together in a fun and collaborative setting.
- Affective Benefits: Dance boosts self-esteem, joy, and emotional well-being. It offers an outlet for self-expression, creativity, and cultural sharing, which can be especially beneficial for building a positive self-image.

5. Pilates:

- Physical Benefits: Pilates strengthens the core, enhances posture, and improves flexibility, providing a balanced and low-impact form of exercise. It complements other activities by focusing on body control and muscle endurance.
- Mental Benefits: Pilates requires focus and mental discipline, helping students improve their body awareness and coordination. It also offers stress relief through mindful movement.
- Social Benefits: Pilates classes can be conducted in groups, offering opportunities for social interaction and support while improving fitness.
- Affective Benefits: Pilates enhances self-awareness, confidence, and overall physical health. It allows students to connect with their bodies, which can contribute to improved emotional well-being.

6. Zumba / Aerobics:

- Physical Benefits: Zumba and Aerobics are energetic, high-impact activities that provide an excellent cardiovascular workout. They help improve endurance, flexibility, and muscle strength in a group setting.
- Mental Benefits: These dance-based fitness classes are known to boost mood and reduce stress, offering a fun way to stay fit and energized. The fast-paced nature requires mental focus, which enhances concentration and mental clarity.
- Social Benefits: These activities are group-oriented, fostering a sense of community and support. They provide opportunities for students to make new connections and collaborate in a fun environment.
- Affective Benefits: Zumba and Aerobics are both motivating and enjoyable, encouraging students to stay active and engaged. They promote positive emotions, self-confidence, and a sense of accomplishment.

The findings of this study strongly support the inclusion of Ultimate Frisbee in the PATH-FIT 4 curriculum due to its significant physical, mental, social, and emotional benefits. Ultimate Frisbee improves cardiovascular endurance, agility, strength, and coordination, while also enhancing strategic thinking, decision-making, and stress management. Its emphasis on teamwork, communication, and inclusivity makes it a socially enriching activity, while its non-contact nature promotes enjoyment, self-confidence, and emotional well-being. Moreover, the sport is accessible and easy to execute for students of varying skill levels, making it an ideal choice for physical education programs. Alongside Ultimate Frisbee, other alternative sports such as yoga, modified versions of traditional sports, dance, Pilates, and

Zumba should also be considered for inclusion in the curriculum. These activities provide a variety of benefits, including improved flexibility, mental clarity, social interaction, and stress relief, contributing to a well-rounded approach to student health and fitness. Educational institutions should allocate the necessary resources and facilities to support these sports and ensure that all students have the opportunity to participate. Additionally, awareness campaigns and introductory classes should be organized to increase familiarity with these activities, fostering enthusiasm and encouraging broader participation. By diversifying the sports offered in the PATH-FIT 4 curriculum, schools can create an engaging and inclusive environment where students can develop their physical, mental, and emotional well-being.

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