

Understanding the Experiences of Student-Athletes with Disabilities: A Mixed Methods Study

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Experiences are the impressions developed through gaining, using, fostering, and sometimes disposing of a service or product. Recent years have shown an ongoing emphasis placed on experiences and their impacts; one of particular interest for this study are the experiences of para-collegiate student-athletes. Using the Experience Type Framework (ETF) and the Experience Impact Scale (EIS), the purpose of this study was to understand the experience of involvement in intercollegiate sports among student-athletes with disabilities. This study employed an explanatory sequential mixed methods design, using quantitative and qualitative data to understand the student-athlete with disabilities experience. Phase I (n = 30) used the EIS to measure the impact of para-collegiate sports experiences, while Phase II used semi-structured interviews (n = 11) to identify characteristics of para-collegiate sports experiences. Findings from Phase I indicated para-collegiate sports presented as highly impactful (23% meaningful and 77% transformative), and in Phase II, three overall themes emerged, one for each experience type: (1) importance of the disability community and development of lifelong friendships (memorable), (2) holistic growth on and off the court (meaningful), and (3) sense of purpose and self (transformative).

Keywords: adaptive sports, designed experiences, extraordinary experiences, para-collegiate sports, student-athletes

The National Collegiate Athletics Association (NCAA) provides 24 men's and women's sports to about 500,000 student-athletes across approximately 1,100 member institutions (NCAA, n.d.; Siegfried et al., 2021). There is a well-developed body of literature that has explored the impact of intercollegiate sports on traditional student-athletes (Briggs et al., 2021; Gayles, 2009; Gayles & Hu, 2009; Martin et al., 2017; Paule & Gilson, 2010; Saxe et al., 2017; Warner & Dixon, 2013, 2015). In general, findings indicate intercollegiate sport involvement to be highly impactful, both positively and negatively. For student-athletes with a disability, there are noticeably fewer intercollegiate sport opportunities. McCarty et al. (2023) notes that as of 2020 there were 42 universities providing some type of adaptive sports opportunity at any level (i.e., campus recreation, club sports, or varsity athletics) to students and community members. To be clear, the NCAA does not sanction any adaptive athletics programs, even though there are a few institutions that have programs embedded within their traditional athletic departments. Recent research has provided a rich description of the variety of structures of para-collegiate athletics programs (Townsend et al., 2025).

Despite this recent work providing such detail on program structures, little to no literature directly explores the impact of para-collegiate sports experiences on student-athletes with disabilities. A small series of studies have indicated student-athletes with disabilities are under-supported and underrepresented in the intercollegiate athletics scene (McCarty et al., 2023; McGinniss, 2020; Siegfried et al., 2021; Watson, 2020). Given the knowledge previously reported about the impact of intercollegiate sports on traditional student-athletes, it is rather likely these experiences are at least as impactful for student-athletes with disabilities as well.

Experiences are the impressions developed through gaining, using, fostering, and sometimes disposing of a service or product (Chang & Horng, 2010). They can be described as intentionally designed activities that foster emotional responses that impact a participant's behaviors, morals, and beliefs (Duerden et al., 2018). Everything a person does can be considered an experience. Some occur subconsciously (e.g., routines) while others occur consciously (Duerden et al., 2018). During the past decade an increasing emphasis has been placed on the study and design of experiences and their impacts (Duerden et al., 2015). Historically, experience research has been conducted using qualitative approaches and has lacked continuity regarding the language used to describe differing experiences across multiple fields of study, including tourism, marketing, and consumer behavior (Duerden et al., 2015). These inconsistencies have hindered researchers' ability to distinguish between experience types and virtually made it impossible to confidently classify their impacts (Chang & Horng, 2010; Duerden et al., 2015). The nature of the previous studies and lack of consistent language have resulted in a gap in literature.

Duerden et al. (2018) developed the Experience Type Framework (ETF), which addressed the inability to distinguish between experience types and subsequently led to the development of the Experience Impact Scale (EIS; Lundberg et al., 2021), the first instrument intended to classify experience type impacts as conceptualized by the ETF. The emergence of the framework and an associated measure has opened

the door for experience researchers to produce a deeper understanding of experience types and their impacts. One such activity worth exploring is involvement in para-collegiate sports. Therefore, the purpose of this study was to understand the experience of involvement in para-collegiate sports among student-athletes with disabilities using the Experience Type Framework.

Literature Review

Organized sport experiences are defined as structured activities in settings that foster training and facilitate competitions hosted by various service providers and organizations (i.e., clubs, medical clinics, and educational institutions) that are either privately or state-funded as an association or club (Albrecht & Strand, 2010; Appelqvist-Schmidlechner et al., 2021). Organized sports in the United States are prevalent and have been an important cultural event in modern times. Some describe organized sports participation as a childhood rite, traceable back to the late 1800s (Brady, 2004). The widespread nature and growth of organized sports in the United States is attributed to a number of historical and societal events, such as the establishment of the Young Men's Christian Association (YMCA) in 1851, and the passing of Title IX in 1972, which prohibited sex-based discrimination in educational programs receiving federal funding, including participation for women in organized sports (Albrecht & Strand, 2010). Approximately 56.1% of youth and young adults participated in organized sports nationwide in 2024 (Project Play, n.d.).

Sports are frequently recognized as a channel to provide health benefits across the lifespan, such as: improved psychological and physical health, increased social and emotional functioning, ongoing opportunities for personal and social entertainment and relationships, positive self-esteem, and overall greater quality of life (Appelqvist-Schmidlechner et al., 2018; Eime et al., 2013; Lower et al., 2013; Tamminen & Holt, 2012; Wagnsson et al., 2014). Additionally, Appelqvist-Schmidlechner et al. (2021) suggest organized sport and recreation experiences positively impact those who are socially vulnerable.

Individuals considered to be socially vulnerable have an altered or unfair relationship with various societal institutions, such as schools, healthcare, the labor market, and the justice system. This can be due to a series of negative experiences or lack of success in these institutions (Haudenhuyse et al., 2013). Over time, those negative experiences can accumulate and lead to social disconnection and feelings of stigmatization, discrimination, and beliefs of incompetence. Organized sports serve as an institution that provides opportunities for individuals to engage in supportive, meaningful, and positive institutional experiences, while challenging and addressing negative issues from other societal domains (Appelqvist-Schmidlechner et al., 2021; Haudenhuyse et al., 2013).

The nature of organized sports to combat factors of social vulnerability is particularly important for people with disabilities (PWDs). PWDs are at a high risk of social vulnerability as they often report they do not receive equal access to essential

resources (economic and social), experience far less autonomy and power than their able-bodied peers and are viewed to have almost no social capital (Peek & Stough, 2010). Despite PWDs frequently having negative experiences with institutions across society, many indicate organized sports participation assists in mitigating feelings of stigmatization and discrimination while facilitating positive self-image, identity, and self-perceptions of competence (Lundberg et al., 2011b; Mayer et al., 2014). The terms adaptive sports, adapted sports, disabled sports, and para-sports are often used interchangeably in the literature to describe sports opportunities for PWDs (Hardin & Pate, 2024). For the purpose of this manuscript, we use the term *adaptive sports* to refer specifically to organized sports experiences that have been modified to meet the needs of PWDs and serve as the core context of this study.

Adaptive Sports

The core philosophy of the adaptive sports movement is to maximize independent participation in sport and recreation by implementing the least restrictive modifications necessary (Lundberg et al., 2011a). These modifications may involve adjustments to rules, equipment, or instructional methods, all of which enhance the accessibility of sport and recreation activities to accommodate the needs and abilities of participants. Adaptive sports serve individuals with various disabilities and provide opportunities at multiple levels of competition, including recreational, competitive, and elite, each with distinct objectives and outcomes. These programs are offered in diverse settings, such as hospitals, municipal park and recreation centers, K-12 school systems, and universities (Lundberg et al., 2011b; Mayer et al., 2014).

For more than a hundred years, sports opportunities for individuals with disabilities have existed. In 1888, the first sports club for the deaf was established in Berlin, Germany. By 1911, the United States hosted its first physical disability event, the Cripples Olympiad, in New York (Weiler et al., 2021). In 1924, the inaugural International Silent Games, the first global competition for athletes with disabilities, occurred (Miller & Katz, 2015). In 1932, adaptive sports further expanded with the formation of the British Society of One-Armed Golfers. However, it was not until more than a decade later the global adaptive sports movement, particularly wheelchair sports, gained widespread momentum.

In 1948, Dr. Ludwig Guttman established wheelchair adaptive sports as part of the rehabilitative process for injured veterans. During this time, Dr. Guttman worked in Germany with patients who had acquired spinal cord injuries during World War II and found sports and recreation to be viable interventions for improving the lives of his patients (Slater & Meade, 2004). Dr. Guttman believed sport provided those with spinal cord injuries a sense of hope and worth (Brittain et al., 2013). Additionally, he believed sport had the power to change society's attitudes towards people with spinal cord injuries. In July of 1948, Dr. Guttman held the first organized wheelchair games at Stoke Mandeville Hospital. The games consisted of two teams competing in an archery demonstration. His work led to the first wheelchair Olympic Games, known as the International Stoke Mandeville Games (ISMG) for individuals

with spinal cord injuries in 1960, which later expanded to individuals with physical, cognitive, and intellectual disabilities in 1976 (Brittain et al., 2013). The ISMGs were later named the Paralympic Games in 1985. Now organized and sanctioned by the International Paralympic Committee (IPC), the Paralympic Games are held in the summer and winter directly following the Olympic Games in the same host city and venues, and provide many of the same elite sports competitions as are found at in Olympic competition in addition to a few that are unique to athletes with certain disabilities, such as goalball for visually impaired athletes and wheelchair rugby for athletes with quadriplegia (*International Paralympic Committee*, n.d.).

PWDs have not always had equal opportunities to participate in sports and recreation programs. The United States has attempted to address these issues through legislative action. Stemming from the Civil Rights Movement in the 1950s and 1960s, United States legislation has steadily increased access and opportunity for PWDs. Throughout history, several acts have been enacted and remain active to this day: the Civil Rights Act (Title VI, 42 U.S.C. § 2000d et seq.), the Architectural Barriers Act (PL 93-112; 42 U.S.C. §§ 4151—57), the Rehabilitation Act (29 U.S.C. § 701), Recreation for all Handicapped Children Act (PL 94-142), the Individuals with Disabilities Education Act (IDEA) (PL 94-142; 20 U.S.C. § 1400), the Americans with Disability Act (ADA) (PL 101-336; § 121, et seq.), and the Veterans Benefits Improvement Act (§ 3023), all mandate access and opportunities for individuals with disabilities.

Despite this legislation, opportunities for involvement in sports and recreation for PWDs continue to be limited and inequitable. As such, a 2010 study by the United States Government Accountability Office (GAO) revealed students with disabilities did not have equal opportunities to engage in extracurricular athletics programs associated with their schools (Comerford, 2018). In response, a Dear Colleague Letter written by the United States Department of Education Office of Civil Rights (2013) to educational institutions of all levels reminded administrators of the legal requirement to provide access and opportunity in school settings. It also outlined policies and practices that would promote equal opportunities for student-athletes with disabilities, such as (1) educating about Section 504 of the 1973 Rehabilitation Act, (2) not making athletic involvement decisions based on presumptions and stereotypes about disability, and (3) considering, at the least, separate or different athletic opportunities for student-athletes with disabilities if unable to integrate directly into existing athletics programs. Involvement of student-athletes with disabilities has steadily increased in high-school athletics since the 2013 Dear Colleague Letter (Comerford, 2018), yet is still far below what would be considered truly equal participation. As equity and access issues have become more visible across society, there is still a noticeable absence of para-collegiate sport programs for student-athletes with disabilities at the intercollegiate level (McGinniss, 2020; Townsend et al., 2025).

Para-Collegiate Sports

Para-sports are distinct disciplines within the broader category of adaptive sports and specifically refer to sports included in the Paralympic Games for indi-

viduals with physical disabilities (United States Olympic & Paralympic Committee [USOPC], n.d.). According to the USOPC, collegiate competition plays a critical role in the success of Team USA by fostering the development of athletes with disabilities. Para student-athletes compete at NCAA Division I, II, and III levels, as well as in club sports (United States Olympic & Paralympic Committee [USOPC], n.d.). According to the USOPC (n.d.), about 20 universities across 17 states offer para-collegiate sports opportunities for student-athletes with disabilities. These para-collegiate sports programs enable student-athletes to represent their institutions through competition, fostering inclusion and athletic excellence.

While the NCAA has recently taken steps to support student-athletes with physical disabilities—such as its 2022 collaboration with the United States Olympic & Paralympic Committee (USOPC) to engage institutions in adaptive sports and promote greater awareness, connection, and understanding across the collegiate landscape (NCAA, 2023)—its role in these efforts remains limited. As such, any adaptive athletics efforts are currently initiated by individual member institutions, and those inquiries are usually in response to requests from individual athletes or specific sport programs. NCAA member institutions can request reasonable modifications to sports rules to accommodate student-athletes with any type of disability, but broader systemic support remains absent, especially for student-athletes with physical disabilities. As such, the national governing bodies for some adaptive sports have taken on the responsibility to sanction the para-collegiate space. The first para-collegiate sport to take place was wheelchair basketball at the University of Illinois in 1970 and was sanctioned under the direction of the National Wheelchair Basketball Association (Siegfried et al., 2021). The United States Tennis Association (USTA) has sanctioned intercollegiate wheelchair tennis programs and tournaments since 1999 (Chiesa, 2020), although the Intercollegiate Tennis Association (ITA) has recently taken over those responsibilities (Intercollegiate Tennis Association, n.d.). Lastly, collegiate adaptive track and field is governed by the USOPC.

Despite the clear and direct language used in the Rehabilitation Act of 1973 regarding equal opportunities for students with disabilities as well as the GAO report and Dear Colleague Letter, institutions continue to receive criticism surrounding athletic opportunities for students with disabilities (McGinniss et al., 2020). This criticism focuses on the overall lack of awareness of adaptive sports and how it hinders social inclusion and full integration of student-athletes with disabilities on American college campuses. In 2015, the Eastern Collegiate Athletics Conference (ECAC) was the first NCAA member conference support intercollegiate adaptive sport programs for student-athletes with disabilities by providing championships for swimming, rowing, and track and field. Despite the early excitement regarding the ECAC's attempts at inclusion of adaptive sports, efforts failed to continue past their inaugural year, and no additional support has been provided regarding the ECAC adaptive sports championships (McGinnis et al., 2020).

Of the 1,100 institutions represented by the NCAA, 19% of their student bodies reported having a disability (9.3% report physical or mobility related disabilities), yet fewer than 0.5% (23 institutions) offer at least one adaptive sport program adja-

cent to NCAA sanctioned programs (i.e., wheelchair basketball, tennis, and track & field; Siegfried et al., 2021). McCarty et al. (2023) noted 16 public NCAA universities at different levels (i.e., DI, DII, and DIII) across 14 states offered para-collegiate sports; 68% of them offered only one sport, which was most often wheelchair basketball. Additionally, McCarty et al. (2023) identified the adaptive sport programs were housed under a variety of higher education departments (e.g., disability services, student affairs/student life, academic departments, campus recreation, and athletic departments). These findings were supported by more recent work that provided rich details of the structures and organization of seven different para-collegiate athletics programs (Townsend, et al., 2025). Although minimal, current para-collegiate sports literature indicates programs are devalued by the media, receive little support from their institutions, and are underrepresented by the NCAA (McGinniss et al., 2020; Siegfried et al., 2021; Townsend, et al., 2025; Watson, 2020), despite the NCAA's own inclusion statement that states they will provide programming across the diversity dimensions, including disability.

Today, many people in the United States view intercollegiate athletics as extraordinary and exclusive; some consider athletics programs to be the most respected characteristic of an institution (Madrigal & Robbins, 2020). It is not uncommon for students to base their decision to attend an institution solely on the strength of the athletic team(s). Existing knowledge about the impact of these experiences, however, is limited in its scope and primarily focuses on traditional athletes.

Experience Type Framework

The Experience Type Framework (ETF) constructs originated from literature in the field of tourism and other areas such as consumer behavior, leisure sciences, and neuroscience (Duerden et al., 2018). The ETF is grounded in the concept of *designed experiences*. Designed experiences are intentional, structured experiences that incorporate objective elements (settings, people, relationships, structure, and physical or symbolic objects). Regarding objective elements for this study, researchers are interested in para-collegiate program resources, as well as athlete and team dynamics. The ETF framework indicates that depending on a participant's interactions with the objective elements, the participants' subjective reaction and experience type will vary. When the objective elements of an experience do not grab and hold a participant's attention, the experiences are defined as subconscious (Duerden et al., 2018). Subconscious incidents occur when participants are distracted or the experience is no longer novel, causing the brain to respond automatically. Conscious experiences, on the other hand, attract and hold the individual's attention. There are two types of conscious experiences: ordinary and extraordinary (Duerden et al., 2018).

Ordinary experiences are described as common experiences that happen frequently in everyday life, and do not produce a strong emotional response, whereas extraordinary experiences do (Duerden et al., 2018). Extraordinary experiences are defined as a hierarchical order of three subtypes: memorable, meaningful, and transformative (Duerden et al., 2018). This definition provides a structured, inclusive,

consistent, and simple way of distinguishing between the extraordinary experience types.

Memorable experiences are experiences where the objective elements captivate the participant's attention and produce a strong emotional reaction. Similarly, meaningful experiences produce strong emotions and include an aspect of self-discovery. Finally, transformative experiences incorporate feelings of intense emotion, self-discovery, and foster personal changes within participants' values, beliefs, and behaviors (Duerden et al., 2018). The ETF is a cumulative process, with characteristics building across each subtype such that transformative experiences contain the significant characteristics of each of the previous subtypes in addition to its own unique characteristic(s). Intercollegiate sports are one example of highly designed experiences that have the potential to be quite impactful in the lives of participants. Therefore, the purpose of this study was to understand and describe the experience of involvement in para-collegiate sports among student-athletes with disabilities using the Experience Type Framework.

Method

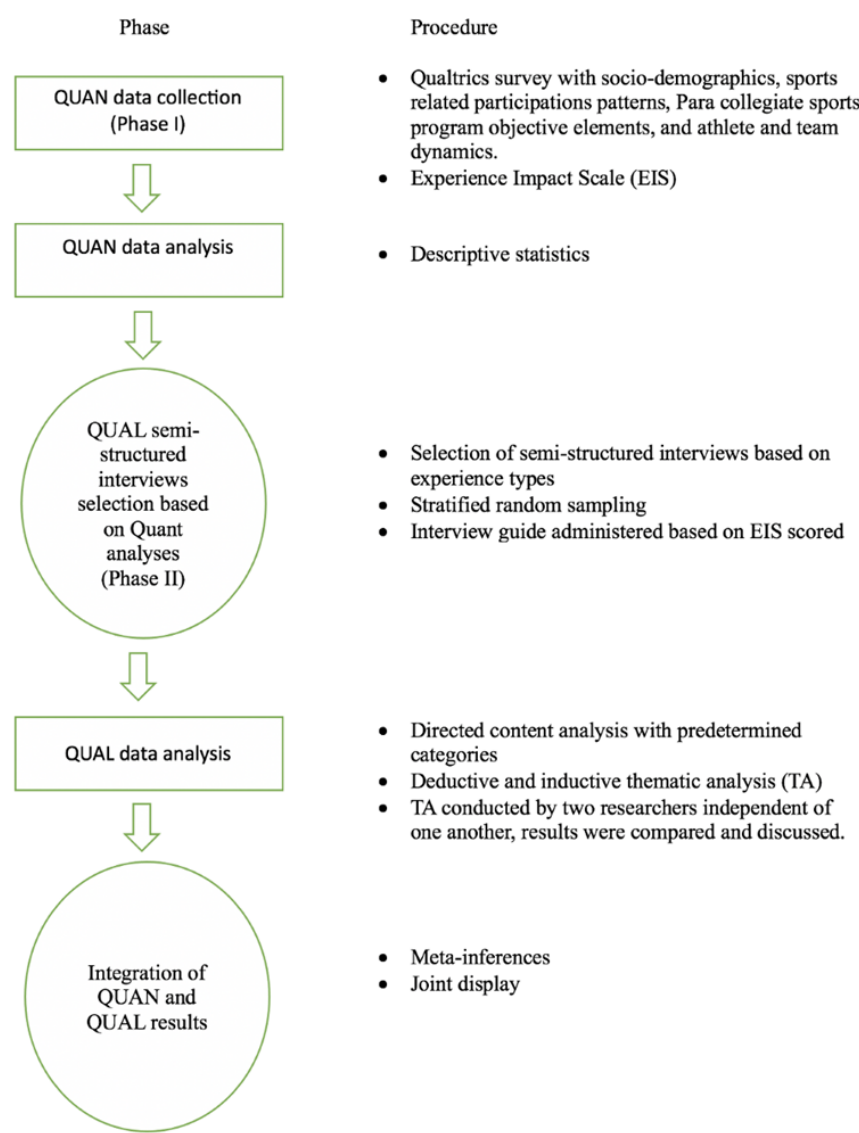
Design

This study was limited to universities that engaged in intercollegiate para-sport programs at the competitive level, which only included wheelchair basketball, wheelchair tennis, and adaptive track and field. This multi-phase explanatory sequential mixed methods study used quantitative and qualitative data to understand the student-athlete experience (see Figure 1). Phase I (QUAN) used the Experience Impact Scale (EIS) to measure the impact of para-collegiate adaptive sports experiences on student-athletes. Phase II (QUAL) consisted of 11 semi-structured interviews with student-athletes. These interviews were used to identify characteristics of the intercollegiate sports experiences in relationship to the experience types conceptualized by the ETF. The EIS precisely measured the impact of the para-collegiate sports experience, but by itself, it could not adequately describe the para-collegiate sports experience. While semi-structured interviews described the student-athletes experiences, they could not precisely measure the impact of the intercollegiate sports experience. Therefore, this mixed method approach allowed researchers to integrate findings from the EIS and the semi-structured interviews and provided a specific and comprehensive understanding of the intercollegiate student-athlete experiences.

Participants

This study focused on the experiences of para-collegiate student-athletes. As such, inclusion criteria for this study were as follows: (1) participants were required to be current para-collegiate student-athletes from at least one of three adaptive sport disciplines; (2) participants were required to currently be attending one of 18 univer-

Figure 1
Mixed-Methods Study Design



sities in the United States that had intercollegiate adaptive athletics programs (See Table 1). Table 1 was developed through extensive online searches of para-collegiate sports programs that offered at least one of the previously mentioned sports disciplines. The table did not include institutions that offered adaptive sports disciplines at the campus recreation or intramural level (i.e., with no intercollegiate competition). By reviewing publicly available adaptive sports program websites and rosters and inferring to fill in gaps from missing or out-of-date rosters and programs, best estimates indicate approximately 250 intercollegiate adaptive student-athletes were competing across the 18 institutions identified in Table 1. Participants were recruited by non-probability sampling (purposive) from these institutions.

Data Collection Procedures

Upon IRB approval, the researchers directly contacted team officials associated with the identified sports disciplines at each of the 18 universities to gain permission to share the study information with their student-athletes. A team staff member dis-

Table 1
Para-collegiate Sports Program and Estimated Number of Athletes Per Team

	Men's Wheelchair Basketball	Women's Wheelchair Basketball	Wheelchair Tennis	Adaptive Track & Field	Total Estimated # of Athletes
Auburn University	14		6		20
Clemson University			3		3
City University of New York	8	7			15
Eastern Washington University	6				6
Edinboro University	15				15
Michigan State University			Unknown		Unknown
San Diego State University			Unknown	Unknown	Unknown
Southwest Minnesota State University	9				9
University of Alabama	13	12	5		30

University of Arizona	14	7		14	35
University of Illinois	11	10		20	41
University of Michigan			3	8	11
University of Missouri	8				8
University of Nebraska- Omaha	6				6
University of Texas-Arlington	14	12			26
University of Virginia			4		
University of Wisconsin-Whitewater	7	9			16
Virginia Tech			2		
Total Estimate	125	57	23	42	247

seminated the study information through a method of their choosing (i.e., general team meeting, internal team email, or additional forms of communication). Participation in this study was voluntary, and student-athletes who completed Phase I (initial and follow-up survey) received a \$10 e-gift card. Those who completed Phase II (semi-structured interview) received an additional \$25 e-gift card.

Phase I: Quantitative Phase

Quantitative Data Collection

In Phase I, participants completed a research questionnaire comprising the Experience Impact Scale, socio-demographics, sports-related participation patterns, para-collegiate program resource objective elements, and athlete and team dynamics objective elements.

Experience Impact Scale. The Experience Impact Scale (Lundberg et al., 2021) was the first instrument to classify extraordinary experience types as conceptualized by the ETF. The scale was developed through an indicative qualitative method (observed patterns from research data used to generalize a theory) utilizing data from 62 study abroad students, and an expert panel established initial content-related evidence of validity. Participants were asked to respond to the 10 items based on a yes/no rating scale (i.e., Guttman’s scaling; Guttman, 1944). Each statement on the

EIS represented a general type of experience they may have had and offered several characteristics that represented that experience (see Table 2). The EIS was scored by adding the number of yes responses to the 10 items. Participants who scored a 1 were considered to have had an ordinary experience; 2-4 memorable, 5-7 meaningful, and 8-10 were considered transformative. For this study, the questionnaire directed participants to reflect on their intercollegiate sports experiences and indicate if the characteristics of each type of impact were part of their experience (responding yes or no).

Demographics and Objective Elements. Phase I collected four types of student-athlete demographics: socio-demographics, sports-related participation patterns, adaptive sports program resource objective elements, and athlete and team

Table 2
Experience Impact Scale

1	It was regular, common, not memorable.
2	It was memorable. It created emotion and an impression due to being new, complex, or unusual .
3	It was memorable because it created emotion and an impression or an appreciation for the value of the experience or place.
4	It was memorable because it created emotion and strong impressions or a connection that became more personal or real for me.
5	It was meaningful because it led to insights about new accomplishments, new skills or attributes that may influence my self-awareness or promote personal growth.
6	It was meaningful because it led to insights about people, relationships , or the understanding of others that may influence my self-awareness or promote personal growth.
7	It was meaningful because it led to insights about myself and my character that have begun to influence my self-awareness or promote personal growth.
8	It was transformative because it led to a change in perspective or attitude about who I am and to a desire to change my behavior .
9	It was transformative because it led to a change in perspective related to who I am or my identity and I have made or am making significant changes in my behavior .
10	It was transformative because it led to a change in some aspect of who I am , my identity , or my core values and has resulted in lasting behavior changes .

Note. Words are bolded as they have been intentionally designed to be by the EIS developers.

dynamics objective elements. When gathering socio-demographics researchers collected information regarding the participants age, sex, race, health condition, length of disability, type of disability, what university they attended, and year in school. Regarding sport-related demographics, researchers gathered information regarding the sport they played, how long they have played, how many seasons at the varsity level, how many days a week they practiced and for how many hours per week. When examining adaptive sport program resource objective elements, students were prompted to respond yes/no (dichotomous response option) regarding whether or not they had access to the following resources: academic support services, athlete scholarship or compensation, access to sports medicine team, elite training opportunities, involvement in media days, leadership development opportunities, nutrition service, professional development opportunities, strength and conditioning, support for name/image/likeness activities, use of varsity athletic facilities, and use of institutional athletics apparel. These characteristics have been discussed in depth in the literature surrounding traditional student-athlete experiences, and thus provided a base of information to explore para-collegiate student-athlete experiences (Bandre, 2011; Eisner, 2014; Gayles, 2009; Karpinski, 2012). Lastly demographic information regarding athlete and team dynamics objective elements was also gathered. Athletes identified (again through a yes or no response option) if the following characteristics were present during their para-collegiate sports experience: athlete burnout/exhaustion, coach provided training/instruction/positive feedback, individual athletes define success based on their comparison to peers, individual athletes define success based on their own effort and improvement, high levels of performance anxiety and tension, low levels of performance anxiety and tension, positive relationship with coaching staff, sense of boredom among athletes, sense of athletic identity, sense of school pride, sense of social support from teammates, and team satisfaction/pride. Similarly, these characteristics have been explored extensively in traditional collegiate sports literature and were thus relevant to this exploration of para-collegiate student-athlete experiences (DeFreese & Smith, 2013; Gayles, 2009; Griffith & Johnson, 2002; Ho, 2018; Madrigal & Robbins, 2020; Smith et al., 2005).

Quantitative Data Analysis

Analysis was completed using SPSS version 29. Researchers cleaned the dataset and removed 17 participants due to non-responses to the EIS. Histograms were used to scan for outliers across all variables, confirming normality and establishing the dataset was outliers-free. Descriptive statistics (frequencies, means, and standard deviations) were performed to describe the sample and explore the inherent elements of the research variables.

Phase II: Qualitative Phase

Qualitative Data Collection

For Phase II, researchers used stratified sampling to select 20 respondents from Phase I who indicated they were interested in participating in semi-structured in-

interviews. Participants were picked randomly from each subset of experience types (meaningful and transformative) and were invited to participate in a semi-structured interview. Researchers had planned to select student-athletes from each experience type identified in the ETF (i.e., ordinary, memorable, meaningful, and transformative), but no participants indicated they had an ordinary or memorable experience. Researchers conducted 11 semi-structured interviews (five meaningful and six transformative) to meet saturation. Data saturation was determined by the use of multiple methodological approaches such as data triangulation, member checking, and analytic reflection, all of which are strategies that are well-established in qualitative research (Hennink et al., 2007). Thematic saturation was confirmed when no new themes emerged from the semi-structured interviews, again, consistent with established qualitative research practices (Hennink et al., 2007).

Interview Protocol

Semi-structured interviews were used to understand further and identify characteristics of the para-collegiate sports experiences (see Table 3 for the interview guide). Lundberg et al. (2021) established 10 descriptive statements in line with the ETF: three statements for each extraordinary experience type (memorable, meaningful, and transformative) and one representing an ordinary experience type. The interview guide for this study was designed to mirror the descriptive statements established by Lundberg et al. (2021). One broad question was asked for each experience type (i.e., describe the memorable impact(s) that your para-collegiate sports experiences have had on your life) and followed up with three additional probing questions that reflected the three descriptive statements corresponding with that experience type.

Before conducting the interviews, researchers piloted the interview guide via Zoom with a former traditional intercollegiate student-athlete. Minor adjustments were made based on participant feedback. The researcher conducted the interviews via Zoom, allowing audio and video recording using Zoom and a digital audio recorder as backup. Audio files were primarily transcribed through Zoom, except one that needed to be sent to a transcription company (Ubiquitous On Demand) due to poor sound quality.

When starting the interviews, the PI introduced themselves and explained the purpose of the study. Afterward, the researcher asked open-ended questions following the interview guide. The researcher used probes to gain further detail and clarification about each experience type throughout the interview process (Creswell & Creswell, 2018). The researcher closed the interviews by asking participants if they had any final thoughts to share about their para-collegiate sports experiences, thanked them for their time, assured confidentiality, and asked if they could follow up with them to ensure transcripts matched what they said or heard in the interview.

Table 3

Interview Guide

Aim: To further understand and identify characteristics of the para-collegiate sports experiences related to their extraordinary experience types.

You all identified that your para-collegiate sports experience as:

Memorable

Describe the memorable impact(s) that your para-collegiate sports experiences have had on your life.

Probes:

- ☐ What about the para-collegiate sports experience created emotion and impression due to being new, complex, or unusual?
- ☐ What about the para-collegiate sports experience created emotion and an impression or an appreciation for the value of the experience?
- ☐ What about the para-collegiate sports experience created emotion and strong impressions or a connection that became more personal or real?

Meaningful

Describe the Meaningful impact(s) that your para-collegiate sports experiences have had on your life.

Probes:

- ☐ What about the para-collegiate sports experience led you to have new insights into new accomplishments, skills, or attributes that have influenced your self-awareness or personal growth?
- ☐ What about the para-collegiate sports experience led you to have insights about people, relationships, or understanding of others that influence your self-awareness or personal growth?
- ☐ What about the para-collegiate sports experience led to insight about yourself and your character that has influenced your self-awareness and personal growth?

Transformative

Describe the transformative impact(s) that your para-collegiate sports experiences have on your life.

Probes:

- ☐ What about the para-collegiate sports experience led to changes in your perspective or attitudes of who you are and fostered a desire to change your behaviors?
- ☐ What about the para-collegiate sports experience led you to changes in your perspectives about your identity and have made or are currently making significant changes in your behaviors?
- ☐ What about the para-collegiate sports experience led to you having changes in your core values and has resulted in lasting behavioral changes?

Wrap-Up

- Thank you for your time.
- I assure you that you and what you shared here today will be kept confidential.
- Can I follow up with you all regarding the transcriptions from this interview to ensure the transcription matches what you said or heard today?

Qualitative Data Analysis

Thematic analysis was used to analyze Phase II data from the semi-structured interviews. The thematic analysis allowed the researchers to identify, analyze, and report factors influencing the para-collegiate student-athletes' experiences (Castleberry & Nolen, 2018). Trustworthiness and validity of the data were determined by researcher triangulation, member checking, and peer debriefing (i.e., methodological practice, analysis techniques, and clarity of the research process).

Thematic analysis was conducted by two researchers, independent of one another. Upon completion of the thematic analysis, the results were compared and discussed (i.e., triangulation). First, the researchers independently reviewed the transcripts, identifying themes, patterns, and key findings. They then met to compare findings, discuss areas of agreement and disagreement, and explore reasons for differences in interpretations. The researchers agreed on all findings from the thematic analysis except for one item. After a discussion that included re-examining findings in the context of the data, they mutually agreed the item did not belong, and it was disregarded from the thematic analysis. The final step involved integrating findings from each researcher into a cohesive analysis.

Regarding member checking, researchers first cleaned the transcripts from the individual interviews and sent each participant a copy, asking them to review and edit as needed. Five of the 11 participants responded to this first round of member checking and did not have any feedback or find any discrepancies in the transcripts. Secondly, researchers summarized each interview and emailed the individual summaries to the participants to ensure that the researchers had interpreted the student-athlete experience accurately. Six of the 11 participants responded to the secondary member checking, none of which had any concerns regarding the interpretation of their experiences.

Peer debriefing occurred repeatedly as researchers had ongoing and consistent meetings and check-ins throughout the entire process to ensure methodological practices were current and being followed.

Mixing of Quantitative and Qualitative Data

Creswell (2022) states explanatory sequential mixed methods designs are most appropriate for studies that use established instruments, as was the case in this study, which employed the Experience Impact Scale (EIS). Consistent with the structure of explanatory sequential mixed methods research, this study first collected quantitative data, followed by qualitative data, to further interpret and expand upon the initial findings (Creswell, 2022).

The quantitative phase identified para-collegiate student-athletes' experience types and informed the development of targeted questions for the qualitative follow-up, which consisted of semi-structured interviews. Because the qualitative phase was designed based on the results of the quantitative data, and the qualitative findings were used to provide deeper insight into the quantitative results, this study followed an explanatory sequential mixed methods structure (Creswell, 2022).

Findings from the quantitative and qualitative phases were combined to draw meta-inferences on how the findings from the qualitative phase explained the quantitative results. A joint display (see Table 5) was developed to present mixed methods findings, focusing on how the qualitative results enhanced or clarified the quantitative results (Creswell, 2022).

Results

Quantitative Results

Sample

A total of 30 surveys were collected. Additionally, 61% of United States para-collegiate sports programs were represented in the sample. A slight majority of the sample was female (60%). Racial diversity was primarily represented by White participants (23 participants) followed by 7 participants who identify as Asian or Asian Indian, Hispanic, Latinx, or Spanish origins. Disabilities were either acquired (43.33%), congenital (53.33%), or both (3.33%). Participants varied across academic years, with a relatively uniform distribution among freshmen, juniors, seniors, and graduate students, but fewer sophomores.

Sports Related Participation Patterns

Participants were recruited from 18 universities, 11 of which were represented in this sample. The majority of the sample participated in wheelchair basketball (60.0%), followed by adaptive track and field (26.7%), lastly wheelchair tennis (13.3%), which is representative of the para-collegiate student-athlete population, as wheelchair basketball athletes account for 72.0% of the population. Length of participation and seasons played at the intercollegiate level varied, with a notable duration of three to four years and seasons being most common (40.0%). The majority of the sample practiced five days a week (46.7%). Additionally, the majority of the sample indicated they practiced between 11 to 15 hours per week (36.7%).

Objective Elements

In addition to collecting socio-demographics and sports-related participation pattern data, researchers were interested in a number of para-collegiate program resource objective elements as well as athlete and team dynamic objective elements. As mentioned previously, designed experiences incorporate a number of objective elements (settings, people, relationships, structure, and physical or symbolic objects) and how the participant interacts with them may determine what type of experience they have.

Para-Collegiate Program Resources. The survey conducted among para-collegiate student-athletes highlighted varied access to program resources (see Table 4).

Table 4
Para-Collegiate Program Resources

Objective Element	NO n (%)	YES n (%)
Academic support services (i.e., tutoring, etc.)	9 (30%)	21 (70%)
Athletic scholarships or compensation	11 (36.67%)	19 (63.33%)
Access to a sports medicine team (i.e., physicians, athletic trainers, sports psychologists, etc.)	10 (33.33%)	20 (66.67%)
Elite training opportunities (i.e., high quality coaches, facilities, equipment, etc.)	11 (36.67%)	19 (63.33%)
Involvement in media days (i.e., photo shoots, etc.)	16 (53.33%)	14 (46.67%)
Leadership development opportunities	25 (83.33%)	5 (16.67%)
Nutrition services	15 (50.0%)	15 (50.0%)
Professional development opportunities (i.e., micro-internships, resume building activities, etc.)	23 (76.67%)	7 (23.33%)
Strength and conditioning	7 (23.33%)	23 (76.67%)
Support for Name, Image, Likeness activities	24 (80.0%)	6 (20.0%)
Use of varsity athletic facilities	21 (70.0%)	9 (30.0%)
Use of institutional athletics apparel (i.e., Nike, Adidas, etc.)	15 (50.0%)	15 (50.0%)

Athlete and Team Dynamics. The study identified a diverse range of objective elements related to athlete and team dynamics among the student-athletes (see Table 5). Overall, student-athletes reported predominantly positive extraordinary experiences in para-sport participation. However, nearly half (46.67%) reported they experienced athlete burnout or exhaustion.

Para-Collegiate Student-Athlete Experience Types

Findings from the EIS indicated para-collegiate sports presented as highly impactful (meaningful = 23%; transformative = 77%) to these student-athletes. No participants indicated their experience was ordinary or memorable. In other words, the para-collegiate sports experience invoked strong emotional responses and impressions on the student-athletes, they gained personal insights about themselves and others, and for most, the experience changed their values, beliefs, behaviors, and identities.

Table 5
Athlete and Team Dynamics Objective Elements

Objective Element	NO n (%)	YES n(%)
Athlete burnout/exhaustion	16 (53.33%)	14 (46.67%)
Coaches provided training, instruction, and positive feedback/reinforcement	4 (13.33%)	26 (86.67%)
Individual athletes define success based on their comparison to peers	18 (60.0%)	12 (40.0%)
Individual athletes define success based on their own effort and improvement	7 (23.33%)	23 (76.67%)
High levels of performance anxiety and tension	17 (56.67%)	3 (43.33%)
Low levels of performance anxiety and tension	22 (73.33%)	8 (26.67%)
Positive relationship with coaching staff	5 (16.67%)	25 (83.33%)
Sense of boredom among athletes (i.e., skipping practice)	26 (86.67%)	4 (13.33%)
Sense of athletic identity	8 (26.67%)	22 (73.33%)
Sense of school pride	13 (43.33%)	17 (56.67%)
Sense of social support from teammates	2 (40.0%)	18 (60.0%)
Team satisfaction/pride	12 (40.0%)	18 (60.0%)

Qualitative Results

Sample and Qualitative Data Collection

Twenty participants were contacted for an interview, 11 student-athletes (see Table 6) responded and participated in the semi-structured interview process. Nine of the 18 universities that offer para-collegiate sport programs were represented in the interview sample and the majority of the student-athletes played wheelchair basketball (45.4%), followed by wheelchair tennis (27.3%), and adaptive track and field (27.3%). Thematic analysis produced results organized into three categories that aligned with the ETF: memorable, meaningful, and transformative experience types. One overarching theme emerged for each category (three total themes).

Category 1: Memorable

Regarding memorable experiences, Lundberg et al. (2021) suggested memorable experiences are those that produce an impression (sometimes strong impressions). When inquiring about memorable experiences, researchers were focused on three attributes: (1) new, complex, or unusual, (2) value, and (3) connection that became more personal or real. One theme emerged from the student-athletes' semi-structured

Table 6
Student-Athlete Demographics

Student-athlete	Sex	Age	Disability Type	Sport	Year in School	EIS Score
1	Female	20	Acquired	Adaptive Track & Field	Junior	Transformative
2	Female	19	Acquired	Wheelchair Tennis	Junior	Transformative
3	Male	18	Congenital	Wheelchair Basketball	Freshman	Meaningful
4	Male	20	Congenital	Wheelchair Basketball	Freshman	Transformative
5	Female	18	Congenital	Wheelchair Basketball	Freshman	Meaningful
6	Female	22	Acquired	Wheelchair Basketball	Senior	Transformative
7	Female	27	Congenital	Wheelchair Basketball	Senior	Meaningful
8	Male	24	Congenital	Adaptive Track & Field	Senior	Meaningful
9	Male	24	Acquired	Wheelchair Tennis	Graduate Student	Transformative
10	Female	23	Congenital	Adaptive Track & Field	Graduate Student	Transformative
11	Male	20	Acquired	Wheelchair Tennis	Junior	Meaningful

interviews: the importance of the disability community and development of lifelong friendships.

Theme 1: Importance of the Disability Community and Development of Lifelong Friendships. The para-collegiate sports programs for many provided them with the opportunity to interact and be with people who were similar to them. These opportunities created strong impressions and laid the foundation for memorable experiences to occur. Student-athletes attributed the impact of being part of the community to simply having the opportunity to connect with peers differently.

Student-athlete 1 stated: “Yeah, just being able to connect with athletes with different abilities and backgrounds.” For some, those connections with peers of differing abilities fostered interpersonal connections that were vital to their memorable experience. Student-athlete 9 stated: “I think the most important part is the interpersonal relationships that you form and that you’re able to grow because of it.”

Additionally, being part of the disability community allowed student-athletes to relate to peers in a different way than with able-bodied peers, as they all had something in common: a disability. The disability community fostered deep connections to peers and led to lifelong friendships. Regarding the connections made from being in the disability community, one student-athlete stated:

The fact that [we] all have something in common. That’s the fact that [we’re] all disabled. So, you know that definitely kind of breaks a barrier that I feel like is there for a lot of other relationships that you have in life. So, when that barrier is already broken, because you already all have that in common, I think that helps create a more, a deeper like relationship with those people. It goes deeper than you would with, you know, your average friends, because you can have that in common. (Student-athlete 5)

Another stated:

I’ve made definitely lifelong friends now that play tennis and different colleges like at nationals, and being with them, seeing them like every month at each tournament has been really cool and seeing them grow as well. (Student-athlete 2)

Furthermore, the para-collegiate sports experience seemed to allow them to develop friendships that later formed into bonds similar to a family. Student-athlete 6 stated “some of my teammates are like family to me now, you know. I do live...with a couple of my teammates as well. So, like, you know, we have that connection as well.”

Another student-athlete described their experience in this way:

I mean, basically just basically becoming friends, and then becoming families with other teams basically having that bond between each other and being able to share memorable moments. Being a family and making sure that you know everybody has fun with it, and also being there for people that need it. (Student-athlete 4)

Category 2: Meaningful

Lundeberg et al. (2021) suggest meaningful responses are similar to memorable experiences in regard to participants reporting impressions and emotional responses. In addition to gaining new insights into accomplishments, the individuals had opportunities for skill development that impacted both themselves and others, and personal character that influenced their self-awareness and promoted personal growth. One overarching theme emerged from the semi-structured interviews: holistic growth on and off the court.

Theme 2: Holistic Growth on and off the Court. Student-athletes overwhelmingly attributed their meaningful para-collegiate sports experience to the growth

(physically, mentally, and emotionally) they identified in themselves on the court and in their everyday lives. One student-athlete described this impact of their para-collegiate experience in the following way:

I believe that outside of just straight up, getting better at basketball, right...I have become...I think I've learned a lot more about my body and taking care of it in terms of my disability... because one of the programs that we do participate in is it's kind of a blend between weight room time and physical therapy kind of. We do a lot of stretching and physical therapy type exercises, and I think that has helped me learn a lot about...how to better take care of my body in terms of doing things that an average person wouldn't recommend to do that I would need to do because of my disability to stay healthy. That also goes with my mental health as well. (Student-athlete 5)

Similarly, another student-athlete indicated their para-collegiate sports experience was motivating across their life:

It has motivated me, and, like maybe become more attached not just in track and field, but just in every part of life, I mean, you're gonna...have to have a great work ethic. You're gonna have to be on time to everything. You're gonna have to work as hard as you can to get that job, you know... It translates into life of what I'm doing with my sport. (Student-athlete 10)

Additionally, others indicated the para-collegiate sports experience helped them develop their interpersonal skills:

Like my personal character wise. I would say that becoming, I've been captain of the team for the last five years of my career. So that has allowed me to become a leader, and grow as a leader.... It has allowed me to work on my character of leadership, but also my character of communication, you know, talking well with others, helping others as well. (Student-athlete 6)

Furthermore, student-athletes attribute their meaningful experiences and impacts to opportunities that foster and increase their independence:

Just like being independent and like going to tournaments and stuff. That was definitely a new experience for me, because I usually don't do that. And now I can like go on flights by myself with the team. And so that's given me the opportunity to be independent. (Student-athlete 2)

Another student-athlete made similar statements:

It creates a sense of like independence. Being able to do things by yourself without having, like your parents, or ... a personal assistant type always come around and like, try to do things for you. I think sports just gives us another way of like us figure it out, and your teammates want you to be independent. (Student-athlete 8)

Category 3: Transformative

Similar to the meaningful category, transformative experiences have characteristics of the previous two experience types, but at the core of transformative experience types is change. This change is on a continuum from aspiring to change to fully adapting life changes regarding perspectives or attitudes about who they are,

their identity, and core values (Lundberg et al., 2021). One theme emerged: sense of purpose and self.

Theme 3: Sense of Purpose and Identity. Student-athletes described the para-collegiate sports experience as facilitating a transformation in their personal belief, sense of self, and mindset. The para-collegiate sports experiences altered the student-athletes' future as they changed career paths or developed a strong desire to continue to be involved in and advocate for adaptive sports. Student-athlete 6 suggested "playing...college basketball made me realize I also wanna continue coaching and being involved in the sport. Even when I'm done playing as well." Additionally, student-athlete 2 stated, "I would like to get a job in adapted sports when I graduate and help things like this grow, because I know how hard it is and how much work goes into it." Another student-athlete described their shift in beliefs, self, and perspectives as:

I went from someone that's very, that was very shy and introvert, you know. that completely did a [360] it's given me perspective of what, in my opinion matters in life. Cause I feel like I was wasting my time a lot on frivolous stuff, caring a lot about what people think. And lots of times is like over analyzing what's expected, what's expected of me, and because I've gained more confidence to myself, it's more about what I'm able to offer. (Student-athlete 9)

Lastly, a change in one's identity is a characteristic of the highest level of a transformative experience, student-athletes described their change in identity in the following way:

I want to, you know be a person that's bigger than myself, and that drove me to change... my perspective on my athletic career.... I'm very self-aware of my identity, but I think like I kinda said before that I think it changed me. I'm not just a student. I am an athlete... And I am a student-athlete. (Student-athlete 10)

Additionally:

Honestly, it was a big mindset change for me, you know, growing up, you know, as a person with a disability, you know you are constantly being told you know you can't do something, or you'll never do this, or you never do this. So adaptive sports really transformed my mind set. Oh, I can be a college athlete. Oh, I can get a scholarship. Oh, I can graduate with a 4.0. Like, you know all that stuff, but really transform my mind set when it comes to confidence on the court as well as off the court, and you know, being able to in daily life.... So, I would add more into that in a way that now that I've changed my personal mindset, and how I can succeed in life, and I don't have to listen to this people that told me I can't. (Student-athlete 6)

Mixed Results

Table 7 shows a joint display which summarizes the two datasets and the meta-inferences from the data integration process. The joint display provides explanation and further details to each of the three experience types.

Table 7
Joint-Display

Quantitative Results	Qualitative Results	Meta-Inferences
	Theme: Holistic growth on and off the court.	
7 out of 30 reported a meaningful para-collegiate sports experience (23%)	<p><i>"I believe that outside of just straight up, getting better at basketball, right...I have become...I think I've learned a lot more about my body and taking care of it in terms of my disability.... That also goes with my mental health as well." (Student-athlete 5)</i></p> <p><i>"It creates a sense of like independence. Being able to do things by yourself without having, like your parents, or ... a personal assistant type always come around and like, try to do things for you. I think sports just gives us another way of like us figure it out, and your teammates want you to be independent." (Student-athlete 8)</i></p> <p><i>Just like being independent and like going to tournaments and stuff. That was definitely a new experience for me, because I usually don't do that. And now I can like go on flights by myself with the team. And so that's given me the opportunity to be independent. (Student-athlete 2)</i></p>	<p>Quantitative and qualitative findings concurred on para-collegiate sports being a meaningful experience among student-athletes with disabilities.</p> <p>Student-athletes attribute their meaningful para-collegiate sports to seeing success on the court or track and field and in their everyday lives. The para-collegiate sports experience not only developed physical skills but also provided opportunities for personal growth, both mentally and emotionally. Additionally, the para-collegiate sports experience fostered independence amongst the student-athletes.</p>

Theme: Sense of purpose and self.

23 out 30 reported
a transformative
para-collegiate
sports experience
(77%)

"it's given me perspective of what, in my opinion matters in life" (Student-athlete 9)

"I want to, you know be a person that's bigger than myself, and that drove me to change of my perspective on my athletic career.... I'm very self-aware of my identity, but I think like I kinda said before that I think it changed me. I'm not just a student. I am an athlete... And I am a student-athlete." (Student-athlete 10)

"Honestly, it was a big mindset change for me, you know, growing up, you know, as a person with a disability, you know you are constantly being told you know you can't do something, or you'll never do this, or you never do this. So adaptive sports really transformed my mind set. Oh, I can be a college athlete." (Student-athlete 6)

Quantitative and qualitative findings concurred on para-collegiate sports being a transformative experience among student-athletes with disabilities.

Student-athletes attribute their transformative para-collegiate sports to transforming their mindset and identity. The para-collegiate sports experience allowed student-athletes to see what they and their peers are capable of, changed their personalities, altered career paths, and fostered a sense of confidence and identity development.

Discussion

Study Overview

This study aimed to understand the experiences of student-athletes with disabilities in para-collegiate sports using the Experience Type Framework. The study focused on university resources, athlete and team dynamics, and overall experiences using the EIS. Interviews provided further insight into individual experiences. Several areas were identified for discussion, including access to resources, relationships and dynamics, the disability community, athlete development, overcoming stigma, identity formation, and the need for expanding para-collegiate sports programs.

Access to University Resources

When examining para-collegiate program resources, results were mixed regarding access to athletic departments and university program resources, aligning with previous para-collegiate sports literature (Siegfried et al., 2021). Siegfried et al. (2021) indicated that despite the slight growth in para-collegiate sports, disparities in the number of programs still exist, and the resources they receive are inequitable. Findings indicated that para-collegiate student-athletes had access to some university athletics resources such as academic support services, athletic scholarships or

compensation, sports medicine team and elite training opportunities, strength and conditioning, and nutrition.

Despite these findings, not every student-athlete had the same access to these resources across their different programs, and those with access did not have access at the same levels as able-bodied student-athletes. Less than 50% of the para-collegiate student-athletes had access to media days, leadership development opportunities, NIL activities, and varsity athletic facilities. If the expectation is for equity in collegiate sports experiences for students with disabilities, as has been called for (Lakowski, 2011; McCarty, et al, 2023; McGinnis, et al., 2020), then these disparities are cause for concern. Previous literature has identified these as essential resources provided to able-bodied student-athletes participating in NCAA-sponsored programs (Bandre, 2011; Eisner et al., 2014; Gayles, 2009; Karpinski, 2012), yet they are largely unavailable to para-collegiate student-athletes. Lack of access to these resources impacts student-athletes' visibility, individual development, and professional sports opportunities. Universities currently providing para-collegiate sports programs should address these disparities to ensure student-athletes with disabilities have equitable athletic opportunities. "Standardization and inclusion within the existing infrastructures of interscholastic and intercollegiate athletics for persons with disabilities must become a goal that we all support and encourage in unison" (Lakowski, 2011, p. 99).

We acknowledge a few important points that may make the feasibility of full inclusion of para-collegiate student-athletes with disabilities into the existing infrastructures challenging. First, the changing landscape of the traditional college sports system, especially with regards to the recent *House v. NCAA* class-action settlement that will result in revenue sharing with student athletes (NCAA, 2025). This will fundamentally change the financial landscape of NCAA Division I college athletic departments. Recent research has revealed that para-collegiate programs have a diverse funding portfolio to include donors, grants, fundraising, and extremely limited institutional financial support (Townsend et al., 2025), with donors and alumni being the primary financial supports of programs. This diverse funding strategy mirrors traditional collegiate athletics departments (Brown, 2021), with the major difference being the primary revenue stream for these programs is broadcast rights (Fried, et al., 2025). It is unclear how the House settlement will change the funding portfolios of traditional collegiate athletics departments, and whether or not resources will be able to spread to para-collegiate programs as those portfolios change.

Second, Townsend et al. (2025) also described the location of many para-collegiate programs as not being housed in traditional athletic departments, and instead are found in academic units, disability services offices, or campus recreation units. They point out that "because the NCAA does not sanction adaptive intercollegiate athletics, which has been discussed at length elsewhere (Fay, 2011; Larkin et al., 2014; McCarty et al., 2023), program leaders have had no choice but to align their programs with institutional partners who are supportive of their efforts but who do not necessarily prioritize adaptive athletics. The lack of focus on athletics in these

locations often resulted in inadequate allocation of resources for the adaptive athletics programs” (p. 19).

Some may argue then, that these programs should not have access to traditional athletic department resources. Nevertheless, this should not dissuade universities from allocating resources to support para-collegiate athletics programs, and university and program leaders should work to mobilize resources across campus to support these programs and their student-athletes.

Relationships and Team Dynamics

In regards to athlete and team dynamics, para-collegiate athletes described mixed attributes of their experiences; this is similar to able-bodied student-athletes as the literature reports various dynamics from program to program (Defreese & Smith, 2012; Gayles, 2009; Griffith & Johnson, 2002; Ho, 2018; Madrigal & Robins, 2020; Smith et al., 2005). One item of interest should be considered for further examination as para-collegiate student-athletes suggested that they experience high levels of burnout. These findings are not unique to para-collegiate athletes, as athlete burnout can be found in the traditional collegiate sports literature. The literature attributes athlete burnout to increased demands on athletes’ success, paired with social and academic pressures (Dubuc-Charbonneau & Durand-Bush, 2018). Dubuc-Charbonneau & Durand-Bush (2018) posit, the previously mentioned heightened demands and pressures led to chronic stress, which is a cause of athletic burnout. Other factors contributing to athlete burnout include external pressure, power dynamics, excessive training, boredom, and lack of social support (Dubuc-Charbonneau & Durand-Bush, 2018). As mentioned previously, para-collegiate student-athletes reported a lack of support from athletic departments and universities, which may be a contributing factor to the para-collegiate student-athlete experience and should be further examined.

The Disability Community

Research has indicated adaptive sports provide an outlet for people with disabilities to connect with other people with disabilities, increase social interactions, and allow for emotional expression (Zabriskie et al., 2005). For some student-athletes in this study, the para-collegiate sports experience was the first time they were able to interact with peers with a disability. Many identified they no longer felt alone, aligning with findings from other studies stating that adaptive sports involvement promotes a sense of belonging and community (Lundberget al., 2011; Stanojevic et al., 2023). Student-athletes reported being part of this disability community allowed them to connect with peers in a way they could not with their able-bodied peers.

Physical and Emotional Development

In addition to being part of the disability community, student-athletes identified personally holistic growth (physically, mentally, and emotionally) as a key characteristic of their extraordinary experiences. Student-athletes reported they increased their physical sports-related skills, as expected. However, this improved functioning off the court (i.e., endurance in pushing their wheelchairs around their communities

and putting groceries in their cars). In addition to physical skills, student-athletes reported the para-collegiate sports experiences fostered a sense of independence they would not have gained if they had not been in the program. These findings highlight the importance of adaptive sports in promoting and increasing the overall well-being, daily functioning, and quality of life of individuals with disabilities. These findings align with previous literature identifying that participation in adaptive sports influenced positive physical well-being and health, interpersonal and social relationships, and intrapersonal beliefs and attitudes (Lape et al., 2018).

Overcoming Stigma and Identity Formation

Para-collegiate sports pushed student-athletes to their limits, revealing what they and others with disabilities are capable of, leading to changes in mindset and identity. Often stigmatized and seen as inferior, sports offered an outlet for authenticity and high-level competition with peers (Lundberg et al., 2011b). These opportunities fostered confidence, challenged their perceptions, and align with previous studies that state adaptive sports reduce stigma and social barriers (Vermillion, 2013; Watson, 2020). These changes in perceptions facilitated changes in their identities. Lundberg et al. (2011b) indicated that organized activities are ideal for developing one's identity through new experiences, societal feedback, and skill and social development. Thus, para-collegiate sports provide the ingredients for student-athletes to discover or rediscover themselves.

The Need for Expansion of Para-Collegiate Sports Programs

Although para-collegiate student-athletes identify their experiences as extraordinary, there remain only 18 universities at the time of this study that provide inter-collegiate sports programs for students with disabilities, compared to the over 1,100 programs provided by the NCAA for able-bodied students. Despite their benefits, adaptive sports receive little recognition from the media and the NCAA (Watson, 2020). Adaptive sports play a vital role in the visibility and voices of the ever-growing student body with disabilities. Universities must grow para-collegiate sports programs in order to be responsive to federal legislation requiring equal opportunities for student-athletes with disabilities.

Para-Collegiate Sports as Extraordinary Experiences

Despite varied access to university resources and potential athlete burnout, results showed para-collegiate sports opportunities led to primarily transformative, extraordinary experiences. Student-athletes credited this to being part of the disability community, forming lifelong friendships, and holistic personal growth, which shifted their mindset and identity. These findings align with a previous study (Whaley et al., 2023) showing that 142 adaptive sports participants described their experience as extraordinary and transformative, supporting that para-collegiate sports promote personal improvements for student-athletes with disabilities.

Limitations and Future Research

While this study contributes valuable insights to adaptive sports literature and suggests directions for future research, limitations exist. The complexity of the Guttman scale may have caused errors, as participants needed more instructions on responding correctly. Additionally, the self-selection of participants could have introduced reporter bias into the findings.

This study calls for continued research on para-collegiate sports experiences. Future studies should examine program resources and athlete and team dynamics, exploring potential relationships with EIS scores. Identifying predictors (e.g., program characteristics) impacting EIS scores could help develop para-collegiate programs that foster extraordinary experiences. Further research should clarify burnout and lack of social support among para-collegiate athletes to determine if these are broader trends or unique to this sample.

Conclusion

This study, the first to use the Experience Type Framework to examine the impact of para-collegiate sports, revealed both challenges and extraordinary impacts of para-collegiate student-athlete experiences. Key findings show disparities between para-collegiate and able-bodied intercollegiate programs in access to athletic departments and university resources, leading to negative repercussions like lack of visibility and program development. Addressing these disparities can create more equitable opportunities for student-athletes with disabilities. Despite these challenges, para-collegiate sports facilitated primarily transformative, extraordinary experiences, as indicated by EIS quantitative data.

Participants' narratives highlighted the transformative power of their para-collegiate sports experience, emphasizing a strong sense of community, personal growth, and identity formation. This study underscores both the successes and areas for improvement in para-collegiate sports, advocating for more inclusive and supportive athletic departments and universities. It calls on athletic departments, universities, and the NCAA to take action toward creating equitable intercollegiate sports programs for all student-athletes.

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