Journal of Sport Behavior 2024
Vol. 47(1), 1-23

Article

An Examination of Hierarchical Leisure Constraint Effects on Sport Participation and Sport Preference from Adolescence into Early Adulthood

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Abstract: The aim of this study was to understand how hierarchical leisure constraints prohibited sport participation and influenced sport preferences during individuals' adolescent years, and how these constraint effects may change during their early twenties. A sequential explanatory mixed methods design was employed to (1) identify general changes in constraint effects on participation and then to (2) better understand how sport preferences may be impacted by these constraint effects. A sample (n=117) of female (n=36) and male (n=81) Georgia residents between the ages of 20-25 participated in the study. Twelve of the participants were interviewed following their completion of the online questionnaire. Survey data were analyzed using two-tailed dependent sample t-tests, while the interviews were analyzed through a reflective thematic analysis. Findings from analyses suggest that interpersonal and structural constraints are likely to become slightly more difficult to negotiate as individuals transition from adolescence into young adulthood and that their sport participation choices and overall sport preferences are unlikely to change significantly. In situations where sport preference and participation changes occur, individuals' changes often reflect their ability to relate to their new sport or sports through prior skills or knowledge that could be carried over from their adolescent sport participation.

Keywords: sport participation; adolescence; hierarchical leisure constraints; theory of planned behavior; mixed methods; socialization

Sport participation serves as a leisure form of physical activity, which can improve musculoskeletal health, control body weight, and reduce the symptoms of depression, while also decreasing the likelihood of some cancers, type 2 diabetes, and cardiovascular disease (World Health Organization [WHO], 2009). Furthermore, participation in team sports has been found to produce numerous positive social, psychological, and psychosocial health outcomes, with evidence that it may be more effective than individual sports in ensuring continued engagement in physical activity by adults (Andersen & Bakken, 2019). On the contrary, there is some evidence to suggest that participation in sport can have connections to burnout and other health consequences, specifically in youth who specialize in one sport (Brenner et al., 2019; Jayanthi et al., 2019). Although not highly studied, it is possible that there are connections between these outcomes and lifelong physical activity choices.

Individuals' levels of sport participation can be influenced by both sociodemographic and socioeconomic factors. In the United States (US), substantial disparities exist regarding how, and how often, individuals engage in physical activity when considering sex, race/ethnicity, and income level (Armstrong et al., 2018). More specifically, regarding sport participation, correlations have been found between individuals' social background variables and their levels of sport participation. For instance, individuals from a higher socioeconomic status (SES) are more likely to participate in leisure sports than individuals from a lower SES (Perks, 2020; Scheerder et al., 2005; Wheeler et al., 2019; Wilson, 2002; Xia et al., 2020). Those with higher income earnings are more likely to actively engage in multiple sports and be able to afford sports fees and other playing necessities, while those from lower-income households are less likely to afford costs associated with sport participation. Consequently, children from lower SES families are less likely to participate in organized sports than children raised in higher SES families. Recent research suggests that children raised in families with higher SES are 10 to 11% more likely to participate in sports clubs than children raised by unskilled workers, with partial explanation for this club participation discrepancy being attributable to factors such as cultural resources, immigrant origin, school(s) attended, and social context lived during adolescence (Anderson & Bakken, 2019).

Differences in sport participation related to sociodemographic and socioeconomic factors are likely to influence individuals' sports preferences as well. Many individuals have their greatest interest in sports in late elementary school or middle school, with their interest levels waning over time (Eime et al., 2016; King, 2020). Therefore, socialization effects—particularly those from parents and other family members—could be expected to influence both sport participation and sport preference, with there being a strong anticipated correlation between them. For instance, Haycock and Smith (2012) found that individuals are likely to inherit sporting habits and values from parents who actively invested in their sport experiences as an aspect of their family-based leisure relationships.

However, there is little to no understanding for how sport socialization effects related to sport participation change as individuals enter adulthood and transition into new social environments (e.g., college) and how those changes may influence sport preference. Thus, the relationship between sport socialization and sport preference during this life transition period—particularly with consideration to changes in sport participation—warrants research attention. One way to examine possible changes during this transition period is by investigating changes in hierarchical leisure constraint effects that function to prohibit sport participation (Crawford et al., 1991).

Literature Review

Hierarchical Leisure Constraint Theory

Hierarchical Leisure Constraint (HLC) theory (Crawford & Godbey, 1987; Crawford et al. 1991) describes and explains the relationship between constraints, leisure activity preferences, and subsequent leisure involvement. Intrapersonal constraints are self-imposed restrictions that consist of internal psychological states such as anxiety, fatigue, and perceived skill. Interpersonal constraints result when individuals are discouraged from leisure activity because of perceived difficulties with social interactions and relationships. For example, the lack of companionship during activity participation could function as an interpersonal constraint. Structural constraints include external, situational, or environmental barriers that discourage or prevent participation in sport and leisure activities. These barriers include lack of time, financial resources, work, and weather (Crawford & Godbey,1987; Godbey et al., 2010).

Research using HLC theory has found that these three constraints are influential in determining both activity preferences and participation (Godbey et al., 2010). Jackson et al. (1993) suggested that engagement in leisure behavior was dependent upon successful negotiation of these constraint levels. These constraints are hypothesized to be negotiated hierarchically, with individuals negotiating intrapersonal constraints first, interpersonal constraints second, and structural constraints last (Crawford et al., 1991; Jackson et al., 1993). Since its introduction, HLC theory has maintained its explanatory viability for leisure behavior. Moreover, Godbey et al. (2010) concluded that the HLC theoretical framework is cross-culturally relevant and could be employed to examine forms of behavior other than leisure, with the potential for contextual expansion of the theory.

Hierarchical Leisure Constraints and Sports Participation

There is evidence that sport participation is strongly influenced by HLCs. Whether individuals struggle with accessibility, financial resources, anxiety, or social interaction restrictions, these constraints all have the potential to impact participation. While some constraints may have more impact on participation than others, all three types of leisure constraints are believed to be important in determining participation outcomes among individuals (Drakou et al., 2020; Halforty & Radder, 2015; Somerset & Hoarse, 2018).

Generally, structural constraints are the constraint type most likely to prohibit sport participation among individuals, while interpersonal constraints are also prohibitive, but to a lesser degree (Somerset & Hoarse, 2018). Intrapersonal constraints are less likely to prevent sport participation than the other two constraint types of HLC theory, as they would be the first types of constraints negotiated (Crawford et al., 1991; Jackson et al., 1993). From a structural constraint perspective, individuals perceive their leisure activities to be primarily constrained from issues pertaining to accessibility and serviceable facilities (Drakou et al., 2020; Halforty & Radder 2015). Interpersonal constraints such as pressures from their parents or coaches can contribute to young athletes quitting sport participation altogether, but positive interpersonal relationships can function to deter such intentions (Wendling et al., 2018). Of note, interpersonal constraints possess a more significant role in sport participation decisions among athletes who have suffered adverse childhood experiences (ACE; Brown et al., 2020). Interpersonal constraints are more likely to influence the sport participation choices of athletes who have experienced or have been victims of violence (e.g., parental, neighborhood); have been raised in an environment of financial hardship; have witnessed parental domestic violence, divorce/separation; have co-resided in households with adults who suffer from mental health or substance abuse; or

have received unfair treatment as result of their race/ethnicity (Brown et al., 2020). Within a student-athlete context, nearly two-thirds have endured at least one ACE that resulted in positive correlations between their ACE and anxiety, depression, perceived stress, injury/health problems, and substance use (Brown et al., 2020). Significant associations between all levels of ACE exposure and decreased sport participation have been identified in studies examining youths between 10 and 17 years of age (Noel-London et al., 2021).

Considering Hierarchical Leisure Constraints and Sport Preferences

Like sport participation, sport preference may be influenced by all three HLC types. Structural constraints—which can include, for instance, schools offering their students limited organized sport options in which to participate—could lead to individuals preferring certain sports over others. Income and social status can also influence sport preference (Hernandez et al., 2023; Kremer-Sadlik & Kim, 2007). For example, those individuals from low-income families may not have access to sports with more expensive equipment needs (e.g., ice hockey and golf). Furthermore, patterns of sport involvement are influenced by how individuals are socialized. Whether it be the culture, values, surroundings, or experiences from which individuals were engaged as adolescents, these factors impact sport involvement (Kremer-Sadlik & Kim, 2007). Consequently, these factors are also likely to affect sport preferences. Interpersonal constraints, including lack of companionship for activity participation, could lead some people to prefer individual sports. Intrapersonal constraints, including anxiety or perceived skill, may result in individuals preferring sports that allow them to negotiate those constraints more easily (Alexandris & Stodolka, 2004; Crossan et al., 2022; Godbey et al., 2010; Nadirova & Jackson, 2000).

Considering the Theory of Planned Behavior with HLC and Sport Preferences

The Theory of Planned Behavior (TPB) is used to understand individuals' intentions to engage in specific behaviors (Ajzen, 1991). TPB is an extension of the Theory of Reasoned Action (TRA) that incorporates the concept of perceived behavioral control to the original framework (Fishbein & Ajzen, 1975; Madden et. al., 1992). The theory suggests that individuals' intentions to perform certain behaviors are driven by a) their attitudes towards behaviors, b) subjective norms relating to the behaviors, and c) perceived behavioral controls. Individuals' attitudes towards behaviors refers to whether individuals possess a favorable or unfavorable evaluations of them (Ajzen, 1991). Social and environmental surroundings influence subjective norms by referring to individuals' beliefs about approval or disapproval of behaviors, and how those beliefs would be perceived among peers and others of personal importance. Perceived behavioral control refers to individuals' perceptions of how difficult it would be to enact specific behaviors (Ajzen, 1991).

The findings of Alexandris et al. (2007) suggest that TPB explains the mediation effects of HLC Theory, indicating that the inclusion of perceived behavioral control is representative of HLC factors. Therefore, the effects of HLCs are captured by the theoretical propositions of TPB, with perceived behavioral control mediating their influence upon intentions. TPB states that individuals' intentions to perform certain behaviors are driven by their attitudes towards them. Thus, attitudes towards certain behaviors can be influenced by leisure constraints.

Bae et al. (2020) incorporated prior knowledge as a construct into a TPB framework to examine adolescent participation in new sports (e.g., tee-ball, floorball, free tennis). The researchers obtained data from a total of 238 students from four middle schools in Seoul, South Korea that were known to have students participating in new sports. Findings from the study found that the prior knowledge of a new sport positively influenced adolescents'

attitudes and intentions to participate in it, suggesting that developing marketing and educational strategies to increase adolescents' knowledge of such sport opportunities would likely encourage their adolescent sport participation. While perceived behavioral control also influenced adolescents' sport participation intentions, it was not found to possess a direct effect on adolescents' actual participation behavior.

Physical Activity and Sport Participation Entering Early Adulthood

Using data from the National Health and Nutrition Examination Survey from 2007 through 2016, Armstrong et al. (2018) examined physical activity patterns across three age stages (i.e., 12-17 years, 18-24 years, and 25-29 years). Key findings from the study were that female adolescents and young adults were not engaging in the recommended levels of physical activity (of which sport is a part) prescribed by the US Department of Health and Human Services (USDHHS, 2008). Moreover, there were noticeable disparities across race and income levels, with lower levels of physical activity reported by minorities and individuals from lower income households (Armstrong et al., 2018). Our study focuses on the failure of many adolescents to maintain the recommended levels of physical activity for their age range as they enter early adulthood from a sport participation perspective.

Research Purpose

There is a lack of research examining how changes in HLCs influence sport preferences and sport participation as individuals transition from adolescence into early/young adulthood. Our study addresses this research gap by examining how individuals perceive the effects of intrapersonal, interpersonal, and structural constraints to discourage or prohibit sport participation and influence their sport preferences as the leave adolescence and enter into early adulthood. By understanding how HLCs discourage individuals from participating in certain sports as adolescents, and how those constraints may change and influence their sport preferences as they mature into young adults, strategies can be developed for young adults to better negotiate and overcome various sport participation constraints.

For this study, in accordance with terminology established by WHO, an adolescent is defined as an individual who is 10 to 19 years in age while an adult is anyone older than 19 years of age (2013). Because definitions for early adulthood are less established, we have defined it as the age period consisting of individuals who are 20 to 25 years of age. This definition was determined with the rationale that brain development of executive control functions is not believed to fully mature in adults until approximately 25 years of age or later (Sowell et al., 1999; Sylwester, 2007).

The TPB, with consideration to HLC influences upon perceived behavioral controls, was used as the theoretical framework and lens from which the mixed method analyses were conducted. Consequently, the following research questions guided this study:

RQ1. What are perceived changes in HLCs from adolescence into early adulthood?

RQ2. How are sport participation and related preferences impacted by perceived HLC effects on participation?

Methods

Participants

Sample respondents were between 20 to 25 years of age and current Georgia (GA), US residents. Of the 478 total responses, there were 117 usable surveys that met study parameters. The average age of participants was 21 years of age, with 39% currently pursuing a college degree. A majority of the sample identified as male (69.2%). The race of the respondents sampled were predominantly Black/African American (47.8%) and White (39.5%), with respondents representing 46 different cities and towns in GA. Seventy-six percent of the sample had not pursued or had yet to earn a bachelor's degree, while 21% had earned their bachelor's degree. The remaining five percent had earned a graduate and/or terminal degree. Respondents skewed younger within the age range surveyed, with 60% being 22 years of age or younger.

Of the 117 respondents, 20 expressed a willingness to participate in follow-up interviews and provided us with their email addresses. Interviews (n=12) were conducted until saturation was reached. There were a total of five female and seven male interview participants, all of whom—with the exception of one doctoral student—were undergraduate students. Demographic information of interview participants is shared in Table 1. Pseudonyms were used in lieu of interview participants' actual names (see Table 1).

Table 1. Interview participant (n=12) demographic information

Interviewee	Age	Gender	Race	Education
Anna	20	Female	White	Some College
Kim	21	Female	White	Associate's degree
Sam	21	Female	White-Hispanic	Some College
Kya	20	Female	Black	Some College
Alexander	21	Male	Black	Some College
Jessie	25	Female	Hispanic	Some Doctoral
Liam	20	Male	Black	Some College
Cody	20	Male	Black	HS Diploma
Nick	22	Male	Black	Some College
Anthony	20	Male	Black	Some College
Kam	21	Male	Black	Some College
Josh	22	Male	Black	Bachelor's degree

Measures

Questionnaire items used to survey participants were adopted construct scales from prior studies (i.e., Halforty & Radder, 2015; Hubbard & Mannell, 2001), having been found reliable and valid previously. All items adopted for our study were measured using a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) with wording only modified for contextual alignment with the study. All items for the scales were adopted/modified except for those that were unapplicable (i.e., "Too busy with university studies") to both age contexts studied.

Intrapersonal Constraints

Six items were adopted from Halforty and Radder (2015) to measure intrapersonal constraints (adolescent α = .89, young adult α = .84), consisting of: (1) Playing sports is too tiring; (2) I'm afraid of playing sports because I feel as if I might get hurt; (3) I am not confident enough to play sports; (4) I do not enjoy sports offered locally; (5) I am not interested in participating in sports; (6) I do not like any of the sports activities offered to me.

Interpersonal Constraints

Three items were adopted from Hubbard and Mannell (2001) to measure interpersonal constraints (adolescent α = .79, young adult α = .71) , consisting of: (1) I don't have friends or acquaintances with whom to participate in sporting activities; (2) People with whom I would participate in sporting activities with schedules are different than mine; (3) The people I would participate in sporting activities with live too far away.

Structural Constraints

Sixteen items (Drakou et al., 2008; Halforty & Radder, 2015) were adopted to measure structural constraints within the current study that captured the following constraint constructs: lack of time, lack of access, and lack of facilities.

Time and Scheduling. Time and scheduling items representing lack of time consisted of the following three questions (adolescent α = .89, young adult α = .69): (1) Do you ever have to miss practice due to no one having time to pick you up; (2) Does your practice schedule fit in with your working schedule; (3) Are you too busy with work to attend practices.

Accessibility. Accessibility items representing lack of access consist of the following five questions (adolescent α = .82, young adult α = .80): (1) Are you offered different opportunities to participate in any sports; (2) Do you struggle with transportation to and from practice; (3) Do you own a source of transportation to go to and from practice; (4) Do you struggle with the cost of transportation to take you to and from practice; (5) Do you struggle with paying for the cost of your sporting fees.

Lack of Facilities/Resources. Items representing lack of facilities and/or resources consist of the following eight questions (adolescent α = .83, young adult α = .84): (1) Do you participate in any sporting activities offered locally; (2) Do local areas around you offer a variety of sports; (3) Are the athletics offered locally well-funded; (4) Is the sporting equipment poorly kept in local areas; (5) Is the sporting equipment outdated/inadequate; (6) Is there a sufficient amount of equipment for every team member; (7) Is there limited sporting equipment for team members; (8) Are the practice areas overcrowded.

The questionnaire also included vetting questions, demographic questions, and sport background questions. Qualtrics software was used to build, distribute, and collect data from questionnaire respondents. At the end of the questionnaire, if survey respondents were willing to be interviewed, they were asked to provide their email address.

An interview guide was developed to conduct the semi-structured interviews, which was designed to explore how constraints influenced preferences and participation behaviors of interview participants as adolescents and young adults (See Appendix A).

Procedure

A sequential explanatory (quantitative-qualitative) mixed methods approach was used to address our research questions. HLCs were examined from both past (i.e., adolescent) and current day (i.e., early adulthood) contexts. The use of this approach was employed to

identify if sports participants perceived their constraint effects to change as they entered early adulthood and whether those changes had sport preference implications.

To identify possible changes in sport participation constraints (i.e., RQ1), the quantitative portion of this study tested the following three hypotheses:

H1. There will be statistically significant differences between interpersonal leisure constraints from adolescence to early adulthood.

H2. There will be statistically significant differences between intrapersonal leisure constraints from adolescence to early adulthood.

H3. There will be statistically significant differences between structural leisure constraints from adolescence to early adulthood.

Themes for explaining sport participation constraint effects on sport preference were identified through qualitative analysis of follow-up interviews using TPB as an analytical framework (i.e., RQ2).

Following IRB approval from our university, the study questionnaire was distributed across fitness and sport-focused group pages—including GA-specific fitness and sport-focused group pages (e.g., r/sportsarefun)—on several social media platforms (i.e., Reddit, Facebook, Instagram) to reach permanent GA, US residents from 20 to 25 years of age with some sport interest and previous sport participation background, having played sports either recreationally or competitively. To actively address concerns regarding the underrepresentation of the Black/African American population in health-related research studies (Watson et al., 2016), our study was delimited and restricted to GA residents. Nearly 32% of GA's population of 11,019,186 people are Black/African American (World Population Review, 2023).

Survey respondents who expressed a willingness to participate in follow-up interviews were then contacted to schedule an online, semi-structured interview using the Zoom video conferencing platform. The lead researcher conducted interviews with a semi-structured format given that the study was exploratory in nature. Data collection continued until interviews reached data saturation (Glaser & Strauss, 1967), where no new codes were being produced and similar themes occurred. Each interview lasted between 30 to 45 minutes in length. The interview transcripts were then used by the entire team to conduct reflective thematic analysis of data (Braun et al., 2016). This process involved the independent review of transcripts in several rounds by two members of the research team, including the lead researcher who conducted the interviews. In the first round, transcripts were read without any codes applied. In subsequent rounds, specific codes were applied independently. This continued until each researcher felt they had exhausted all possible codes. A final round included examining the data from the lens of constraints defined in the quantitative portion of the study, namely intrapersonal, interpersonal, and/or structural constraints. From there, the two researchers met to construct possible themes by examining the independent codes for consistency and relevance to the aims of the study and theoretical frameworks used to guide the study. After agreeing upon themes and categorizing data, a third member of the research team independently examined and confirmed both the themes and associated data for consistency.

Results

Quantitative Analysis and Findings

Quantitative data analysis was conducted through use of two-tailed, dependent sample t-tests, comparing mean averages of perceived adolescent and early adulthood constraint effects.

Intrapersonal Factors

Intrapersonal constraints from adolescence (M = 2.04, SD = 0.92) and early adulthood (M = 2.02, SD = 0.80) were statistically insignificant, $t(116) = -0.303$, $p = .763$. Therefore, survey respondents perceived no difference in negotiating their intrapersonal constraints following their transition into early adulthood. Thus, H1 was not supported by these results. The mean averages suggest that, in general, individuals' individuals' intrapersonal constraints were perceived to have little impact on their sport participation choices (i.e., they were easy to negotiate). When considering that HLC theory posits intrapersonal constraints to be the first negotiated and given that survey respondents expressed sport interests and sport participation backgrounds, this result was likely. Stated differently, it can be deduced from an HLC theoretical perspective that survey respondents have negotiated their intrapersonal constraints previously, whereas lifelong, non-sport participants may never have negotiated these constraints successfully.

Interpersonal Factors

Interpersonal constraints from adolescence (M = 2.04, SD = 0.90) and early adulthood (M = 2.83, SD = 0.97) were statistically significant, $t(116) = 8.08$, $p < 0.001$; thus, confirming support for H2. The differences in mean averages suggest that, in general, interpersonal constraints were perceived to be more difficult for individuals to negotiate as young adults than when they were adolescents.

Structural Factors

Structural constraints were conceptualized into three factors: (1) time and scheduling, (2) accessibility, (3) and facilities (resources). Statistically significant differences were found between adolescence (M = 2.03, SD = 0.95) and early adulthood (M= 2.36, SD = 0.88) time and scheduling constraint factors, $t(116) = 3.35$, $p < .001$, and between adolescence (M = 1.89, SD = 0.74) and early adulthood (M = 2.04, SD = 0.81) accessibility constraint factors, $t(116) = 2.35$, $p < .05$. The facilities (resources) constraint factors for adolescence (M = 2.58, SD = 0.80) and early adulthood (M = 2.74, SD = 0.77) were marginally significant $t(116) = 1.90$, $p = .06$.

Survey respondents perceived their structural constraints to be slightly more difficult to negotiate than when they were adolescents, supporting H3. Based on mean average differences of structural factors, perceived constraints related to time and scheduling availability increased the most from adolescence into young adulthood (i.e., 0.23); whereas the mean average differences for structural constraints related to accessibility and facilities (resources) increased to a lesser degree than those related to time and scheduling—but to a similar degree to each other (i.e., 0.15 and 0.16, respectively).

Overall, based on the mean averages of HLC constraint types, the most difficult sport participation constraints for young adults to negotiate were interpersonal constraints (M = 2.83) and structural constraints related to facilities and resources (M = 2.74). Interestingly, while intrapersonal constraints were perceived by survey respondents to be the easiest

constraint types to negotiate as young adults (M = 2.03), structural constraints related to time and scheduling were perceived to be similar in ease to negotiate (M = 2.04).

Qualitative Analysis and Identified Themes

Reflective thematic analysis of the twelve interview transcriptions identified five themes that helped explain young adults' sport preferences and participation choices. The identified themes could be considered perceived behavioral controls as conceptualized through TPB, and all possess a connection to interview participants' sport participation influences as adolescents. These themes are introduced below based on their prevalence among interview participants (see Table 2).

The More I Know; The More Willing I Am to Try—If I Can

Eleven of the 12 interview participants expressed a greater willingness to participate in a sport the more they learned about it, provided it was possible for them to negotiate structural constraints (e.g., accessibility, equipment costs, fees, facilities). As adolescents, many of the interview participants played sport to which they had been exposed either first and/or most. For example, when Kya was a high school student, she saw a poor participation trend with the girls' soccer team when compared to other girls' teams, and attributed it to when many of the girls in the area had been introduced to the sport:

> *"Our [high school] soccer numbers were always lower and that may be because it's not offered in middle school. Middle school didn't have soccer and volleyball…anything like that. It's not offered until you get to high school, and by that point you were probably good at track, basketball, or football already…. I think having a lack of access growing up created a situation where there were many who did not want to try out for those sports…like volleyball. Most of my high school's girls never held a volleyball before" (Kya).*

Later in the interview, when speaking about her own experience playing volleyball, Kya shared her thoughts on why she became involved in volleyball while many girls in her area did not. She believed that her exposure to the sport while attending a private middle school introduced her to it earlier than most of her peers:

> *"I attended a private Christian school that offered volleyball and a lot of schools around here don't … kids in this area don't even play club. Younger kids in other areas start earlier" (Kya).*

The adolescent sport experiences of interview participants were often influential in their decisions to try new sports as young adults. Those who started playing new sports as young adults frequently mentioned how their new sports required fundamental skills that were the same or similar to what they had learned from playing sports in their adolescence. For example, Anna acknowledged that her current sport preferences of pickleball and racquetball had been influenced by her participation in tennis as an adolescent. Her sport background facilitated her willingness to try the two sports because she felt they required players to possess fundamental mechanics to tennis:

> *"Because I already have background [in tennis], sports like pickleball and racquetball—because tennis is the same motion, it made me better—were easier to pick up. Because I wouldn't be able to play basketball for my life [with no prior background]. It definitely has made the sports I picked up easier" (Anna).*

Table 2. Participant theme identification

Interviewee	(1)	(2)	(3)	(4)	(5)
Anna	X	X	X	X	X
Kim	X	X	X		X
Sam	X	X	X	X	
Kya	X			X	X
Alexander	X		X		
Jessie	X	X	X	X	X
Liam	X				
Cody		X			X
Nick	X	X	X	X	
Anthony	X	X	X	X	
Kam	X	X	X	X	
Josh	X	X	X	X	X

Themes by column: (1) The More I Know; The More Willing to Try—If I Can, (2) What I Believe I Can Do or Should Do Influences What I Will Try, (3) I Prefer to Play with My Peeps, (4) My Parents Would or Could Do It. Now I Do, (5) Adulting is Hard, So I Tend to Stick with What I Know

With interview participants possessing at least some college background, several commented on how they were introduced to sports through their college's recreation center and intramural programs. Alexander commented on how his college recreation center and its affiliated programs have allowed him to negotiate structural constraints for participating in several new sports, like golf or tennis:

> *"Now that [I'm in college], there are many different sports. You can play intramural sports, or just go out and like practice [a new sport]. Like now, I can be more equipped to golf or play tennis versus like [when I was an adolescent] usually playing football and basketball my whole life. We didn't have those opportunities in my community as a kid so now I'm here. I can learn more new sports I wasn't really exposed to in the past" (Alexander).*

Overall, prior background of a sport regularly facilitated interview participants' preferences to learn about it and try playing it, as long as their structural constraints could be negotiated. Their prior knowledge helped them start playing their new sports at a performance level competitive with others who played (i.e., it gave them a "high floor"), which likely encouraged them to continue their sport participation.

What I Believe I Can Do or Should Do Influences What I Will Try

Nine of the 12 interview participants admitted that they gravitated towards sports that they believed they could or should play based on either their physical features, upbringing, or previous success. Another way that this theme could be conceptualized is that individuals were more likely to prefer sports where their intrapersonal constraints were the easiest to negotiate. For instance, Anna expressed a preference for team sports, yet admitted "I would gravitate towards sports where I was happier. Track was an individual sport, but I did really well in it—so, I was happy."

Nick and Kam expressed that they were confident in their sport playing abilities at a young age, receiving constant encouragement for playing sports as adolescents. Nick commented on how his youth football coaches would tell him that he had "a true talent"

playing sports. Kam focused on track because, as he shared, "that's the one [sport] I had the most encouragement to do."

Jessie was involved solely with softball. When asked how she became so invested in the sport, she replied:

> *I had already played. Easy access, because the church offered it for cheap and it was just something that I kept up with all throughout my life, so it's the one [sport] I knew I could do (Jessie).*

While Jessie never commented on receiving encouragement from others to play softball, her early introduction to the sport allowed her to develop confidence in her ability to play it, alleviating anxieties that she regularly encountered when introduced to new sports or general tasks. When asked if she ever felt any insecurities that affected her sport participation, she replied:

> *"Oh yeah, one hundred percent!...I always have that anxiety of 'What if I do it wrong and I mess up?,' like it's honestly applies to my daily life. For example, there is a new skill I have to learn and it's, like, 'Well, crap. I have to get it right on the first try, or I'm a failure.' So, that's definitely traveled with me" (Jessie).*

Several interview participants communicated that their perceptions of their ease or difficulty in performing a sport were based on their physical features. For example, Josh's two favorite sports as a youth were basketball and football. Originally, basketball was his favorite sport, but he began to prefer football more as he aged. Based on his interview, how he viewed himself physically influenced his high school sport participation, which corresponded with his sport preference changes. The only sport offered at his elementary school was basketball, but he chose not to play. His reasoning was that:

> *"I wasn't confident enough in my basketball skills because I was on the bigger side. I felt like it was a 'skinny guy' sport. So, it wasn't for me…and then, I'm short, not tall" (Josh).*

Being Black, Josh also felt that basketball and football were sports that catered to the Black community, tying into Black culture; sharing his thought that "the culture is always going to have an effect on [sport preferences]."

I Prefer to Play with My Peeps

Through their interviews, experiences communicated by nine of the 12 interview participants suggested that positive social group interaction functioned as a strong determinant for positive sport experiences during adolescence. For some interview participants, like Anthony and Kim, sports were their primary outlet for social interaction with friends. Anthony felt that he was "kind of sheltered" as a youth, so sport participation served as a medium through which he could socialize with others and establish friendships:

> *"I just enjoyed, like, hanging out with my friends…I didn't go out a lot so playing sports was one of the main ways I got to hang with my friends" (Anthony).*

Kim was homeschooled for much of her adolescence, and her participation in archery competitions allowed her to establish a nonlocalized community of friends:

"I think for me…that's why I probably went and did archery more. Because we were all from different areas, and so we all kind of had our own group [when together], even though we weren't meeting every day" (Kim).

Conversely, the perceived or actual lack of social camaraderie within various sport contexts could function as a sport participation deterrent (i.e., interpersonal constraint) for adolescents. Alexander shared that, before he went to college, he was hesitant to try sports that were not popular in his small town. According to him, as a youth, he would be "shunned a little bit" whenever he tried a sport that was not popular in his community. While Kim had some interest in soccer, she chose not to play the sport in high school because she felt that it would be difficult establishing friends on the team. According to her, "they all have their own friend groups [already]," having developed their social groups in public schools while she was being homeschooled.

As young adults, several interview participants shared that they were more open to trying new sports when they were being asked to participate by individuals in their social networks. For example, Jessie felt more capable of negotiating her intrapersonal constraints (i.e., anxiety engaging in new activities) when the other sport participants were her friends (i.e., positive interpersonal reinforcement):

"If my friends want to go on a trip and they say, 'Oh, you want to mess around on the beach and hit the [volleyball] around a couple times,'—that's fine. I don't have any qualms against joining in sports, as long as I am comfortable with the people around me" (Jessie).

This criteria for trying new sports as a young adult was also shared by Sam, who does not participate in any sports currently. During her interview, she implied that any sport participation in which she would engage as a young adult would likely differ from her adolescent sport participation. When asked what would lead her to play sports now, she answered "my friends or my boyfriend," implying her motives for sport participation are strictly social.

In summary, positive social group encouragement appeared to function as a catalyst for both engaging in new sports and establishing enduring sport participation behaviors for interview participants as adolescents and as young adults.

My Parents Would or Could Do It. Now I Do.

For eight of the 12 interview participants, their adolescent sport participation was significantly influenced by their parents. In many of these cases, influences related to their parents' sport background, whether direct (i.e., forced) or indirect (e.g., aspirational emulation, learned sport socialization effects, etc.), led interview participants towards similar sport participation backgrounds.

Anna's mother was a tennis coach, which led to her receiving free tennis instruction (i.e., negotiated structural constraint) at a young age (i.e., pre-middle school). With her mother being a tennis coach, Anna implied that her mother wanted her and her siblings to focus on tennis, rather than playing a variety of sports. Her mother would allow them to participate in other sports; albeit discouraged. Over time, Anna felt that by asking her mother to play other sports, she was "like, betraying her a little bit." In high school, while other sports (i.e., softball and volleyball) interested her, she ran track and played tennis with her sisters.

In the past couple years, Anna's mother was influential in her trying pickleball:

"My mom became a pickleball representative. They sponsored her, so then I started playing it, and then [the whole family] started playing it" (Anna).

With pickleball requiring fundamental skills that mirror tennis, it was relatively easy for Anna to learn the new sport. When she plays pickleball, she does not feel the anxiety or stress that she felt when she played poorly during organized tennis matches. Based on her interview, the pressures that her mother placed on her to play tennis in her adolescence may have led her to stress about her performance in the sport. As a young adult, Anna still feels stress when she plays—but she plays pickleball and racquetball more than tennis. When comparing her experience playing pickleball and racquetball versus tennis, Anna shared that:

"I've noticed that even when I start losing [in pickleball], I don't really get mad about it. It's kind of like, I just remind myself it's for fun. With tennis, I still get mad, but I don't play nearly as often. But with other sports that I didn't grow up playing, I'm kind of like this is for fun. It's not a big deal if you win or lose and it's more fun to play sport now, I think" (Anna).

For two of the other interview participants, their fathers were highly involved in their sport participation by training or playing with them. During the summers, when Jessie's father, a teacher, was out of school, he would train Jessie and her brother with softball/baseball drills. Kam's father possessed a sports background in basketball and football, and as Kam grew up, he would invest his time in sharing his sport background with his son. According to Kam:

"We'd be shooting a basketball from sunup to sundown, or we'd be out there, and he'd throw me passes (i.e., football). He showed me how to run certain routes, throwing passes, and stuff like that" (Kam).

As an adolescent, Kam shared that his father's sport interests were visible to him, and that his exposure to those sports influenced his own interests (i.e., socialization effect):

"Honestly, I was really more into basketball before I started actually playing sports, I was more into basketball because my dad was into it. That's my dad's favorite sport. So, it's like a passed-on behavior type thing. That is what he had me watching most of the time" (Kam).

When asked about whether his sport preferences had changed any as a young adult, Kam shared that his sport interests were still aligned with his father's:

"*I am definitely sticking to those same sports [that my father played]. I don't know if it has to do with my father's blood being in me, anything like that, but the sports he played…I definitely have a passion for all of them in their own respective space" (Kam).*

When interview participants' parents were actively involved with their adolescent sport experiences, they continued to participate—albeit, in varying degrees and capacities—in the sport of their childhood. While Anna expressed frustration regarding her mother's influence in her tennis background, she acknowledged that she still plays on occasion. Recently, her mother's interest in pickleball became an interest of hers. While Jessie no longer plays softball, she now coaches a softball team with her father. Kam is still heavily invested in the sports that his father introduced to him as an adolescent.

Adulting is Hard, So I Tend to Stick with What I Know

Five of the 12 interview participants felt that increases in their responsibilities as young adults limited their time for participating in sport activities. These interview participants were full-time college students and acknowledged greater accessibility to a larger selection of sports than when they were adolescents through their colleges' recreation centers and intramural programs. However, work schedules and the academic demands of being college students limited their ability to utilize these resources.

> *"Being [in college], I am able to access a lot more sports…and I know they have intramural sports where you can play on a team, or, like, even by yourself, you can try [sports] free a lot of times. I think it is a nice option to have, but I also think that college is a lot of work…it also gets harder as you get further into college, since you have a lot more work to do" (Sam).*

When asked about the regularity of her sport participation as a young adult compared to her adolescence, Anna informed the interviewer that she participated in sports much less. She added that "because I have to work and also take classes, I can't participate in as many things." She further elaborated by saying that "I work 25 hours a week and I'm taking 16 credit hours [of course load], so anytime I have outside of that I'm either cooking, or cleaning, or sleeping."

Josh said that still prefers the sports that he played in his youth, but he rarely finds the time when he can play. He shared that his sport participation is impromptu, and typically takes the form of playing basketball recreationally with friends:

> *"I work five days a week. My schedule is pretty hectic, so I kind of don't have time. And then, when I do have time, I'm really trying to just chill; trying to rest; trying to sleep—I'll be tired" (Josh).*

These interview participants, if still active in sports, tended to participate in the same sports that they played as adolescents. In the case of Anna, her sport participation still included tennis—albeit less—while also incorporating two racket-like sports (i.e., pickleball and racquetball) that allowed her to use the fundamental skills (i.e., the swinging motion and approach to a ball) that she had already developed as a tennis player. During her interview, Kya, who was less active in sports as a young adult, was asked why:

> *"I think for several reasons. I think one, I was a little burnt out between school and volleyball and, two, I guess I was just tired of the traveling" (Kya).*

Yet, when asked about the sports she had played since entering college, she said that she was "still trying to pursue volleyball in college through clubs and stuff, so that kind of stayed the same."

One interview participant, Cody, was a student-athlete at his college. As a track athlete, it was necessary for him to train year-round. With his responsibilities as a scholarship athlete and student, he did not believe he had time to participate in other sports. For example, because of his sport-related travel commitments, he would occasionally miss classes to participate in track meets. To avoid falling behind, he would use the available time to work on his school assignments in advance.

As mentioned before, Jessie no longer played softball, but she now coaches with her father. She had to establish boundaries on her coaching commitments with her father,

because, as she shared in her interview, "I get off late [during the week from classes] and I still have assignments and others stuff…there's definitely more boundaries now."

Discussion

When considering the findings of the quantitative and qualitative analyses together, there is an interesting story that emerges. Based on the analysis of survey respondent scores, t-test median averages of HLCs would suggest that young adults perceived interpersonal constraints more difficult to negotiate than structural constraints. These findings challenge the hierarchical ordering proposed by Crawford et al. (1991) for these constraint types. Adolescent scores for the perceived constraint types were more aligned with the theorized ordering, though the negotiation of intrapersonal and interpersonal constraints were perceived to be the same based on score. However, an explanation can be posited when reflecting on the findings of qualitative analysis to better understand the quantitative results.

We posit that interpersonal constraints are likely perceived to be similar in nature to intrapersonal constraints for many adolescents as they are likely to initiate friendships and form social groups through their sport participation. With 39% of survey respondents being college students, it is possible that there was a college effect on how respondents perceived their ability to negotiate both interpersonal and structural constraints. Many of the interview participants fell within the traditional college student age range (i.e., 18 to 22). Consequently, we posit that interpersonal constraints are likely amplified given that these individuals were living in environments that were more homogeneous with respect to age and life stage than would be expected from young adults who did not attend college or who had already graduated. We anticipate that there would be greater opportunities for young adults to expand their social networks in a traditional college campus environment and that individuals would likely prioritize activities that fostered social interaction, whether sports or something else. When considering interview participants' commentaries on the recreation facilities and intramural sport programming offered at their colleges, the perceived ability to negotiate structural constraint factors for facilities and resources by those survey respondents still in college were likely less than they would be in other contexts, lowering its overall score within the study.

Findings from the qualitative analysis corroborated many findings in extant literature pertaining to sport participation, whether directly or indirectly. For instance, many interview participants mentioned their preference for team sports, and the socialization opportunities inherent in them; thus, supporting the findings of Andersen and Bakken (2019) that participation in team sports encourages positive, continued engagement as young adults. In many of the interviews, participants whose parents actively invested in their sport experiences as adolescents, especially those whose parents made such investments as part of family-based leisure relationships (i.e., Anna, Jessie), significantly shaped their sporting habits and values (Haycock & Smith, 2012).

Bae et. al. (2020) extended TPB by incorporating prior knowledge as a construct and found that prior knowledge had a direct influence on the attitudes and sport participation intentions of adolescents. While constructs for attitudes and participation intentions were not quantitatively tested in our study, the responses of interview participants suggested that their prior knowledge influenced their attitudes and intentions to participate in sport as adolescents and adults. As identified within "The More I Know; The More Willing I Am to Try—If I Can" theme, all but one of the interview participants in our study communicated that the more they knew about a sport, the more likely they were to try it. Moreover, in situations where interview participants' sport backgrounds involved fundamental skills that

transferred to another sport, then they were more likely to try those sports. A possible explanation for the willingness of individuals to try new sports under such circumstances could be that the psychological barrier for attempting something new is mitigated through their skill familiarity and any consequential increase in confidence of achieving competence (i.e., the perception that they would, at minimum, possess a "high floor" in the sport).

Lastly, prior studies that tested different structural constraints found that accessibility and facilities were the most difficult for individuals to negotiate (Drakou et. al., 2020; Halforty & Raddar, 2015). The quantitative results from our study support this.

Implications

From a theoretical perspective, findings from our study would suggest that prior knowledge is likely to possess an effect on attitudes and intentions to participate in a sport while individuals are adolescents, offering confirmation of findings from Bae et. al. (2020). However, based on our study findings, these theoretical relationships are likely applicable to a young adult context as well. Furthermore, our qualitative findings appear to lend support to the findings of Alexandris et al. (2007) that suggest TPB behavioral elements are likely to mediate the constraints-intention relationship for older individuals' continuation in sport activities. With our study examining young adults, it provides support for extending the context of those theoretical relationships.

From a managerial perspective, when applying the qualitative themes identified from our study holistically, there are several strategies that emerge as likely being beneficial for sport organizations to implement for increased sport participation among young adults. If sport organizations seek to increase sport participation among young adults, one strategy would be to create social environments around the sport participation activities given that young adults appear to use their sport involvement as an opportunity for social engagement.

Another recommended strategy would be to promote affordable, entry-level sports that offer a "high floor" and "low stakes" (i.e., it is okay to lose) for first-time or inexperienced young adult participants. For instance, it would not be recommended for a sport organization to encourage young adults with limited sport participation backgrounds to join a hockey league or recreational golf circuit. The financial investment for both sports would be substantial, and the technical skills required to achieve competency in these sports generally require significant instruction and practice time.

Lastly, for national governing bodies (NGBs) of nontraditional or less mainstream sports, it is recommended that resources are invested towards 1) actively educating adolescents about how to play their sports, and 2) marketing their sports to young adults who possess a background in traditional sports that require similar, fundamental skills.

For example, pickleball is the fastest growing sport in the US, with 4.8 million players (Mullen, 2022). While the average age of core players is higher than most sports at 65 years of age, the sport has grown in popularity among adults of all ages (Mullen, 2022). Its fastest growing player segment consists of individuals under 24 years of age (DeMelo, 2022). Our study findings can provide some explanation for why it has grown so rapidly in recent years.

First, pickleball combines elements of tennis, ping pong, and badminton, offering an element of familiarity to those who possess backgrounds in those sports. The physical demands of the sport are less than traditional power and performance sports (e.g., football, basketball, soccer, tennis, etc.). Thus, the accessibility of pickleball across a wide age range of players permits it to serve as a family leisure activity. Moreover, because the sport is accessible physically to such a broad population, its nature as a "high floor" and "low stakes" sport facilitates recruitment of others within individuals' various social groups with whom they could play.

While pickleball originated in 1965, its recent surge in popularity may be attributable to the current trend of municipal recreation departments replacing tennis courts with pickleball courts, eliminating a major structural constraint (i.e., facilities/resources). Other popular emerging sports among young adults such as kickball, disc golf, and ultimate frisbee share many characteristics similar to those identified with pickleball.

Limitations and Future Recommendations

There are several limitations to our study that warrant mention. First, data collection for this study employed a convenience sampling approach, with the population sampled delimited to young adults from one state (i.e., GA) within the US. Therefore, future studies could address these limitations by extending the scope of the population sampled while employing a probability sampling approach.

Furthermore, while this study examined potential transitional effects for Georgians between adolescence and young adulthood, the data collection was cross-sectional. Survey participants were young adults (i.e., from ages 20 to 25 years) and were asked to share their perceptions on what they believed to be their ability to negotiate the different types of HLCs during their adolescence. Future studies should consider a longitudinal research design that captures data on a yearly basis as individuals transition from their adolescent years into young adulthood. Because study participants were answering questions related to perceptions of their adolescence, it was not possible to capture reliable SES data. If a longitudinal research design is adopted in future studies, identifying household SES with the other demographics that were collected in our study is recommended. Increasing the age range would also be useful for a better understanding of how sport preferences change once an individual leaves college and enters the workforce.

Author Contributions: Conceptualization, C.A.F. and G.R.; methodology, C.A.F., G.R., and J.L.; software, C.A.F. and G.R.; validation, C.A.F. and G.R.; formal analysis, C.A.F., G.R., and J.L.; investigation, C.A.F. and G.R.; resources, C.AF. and G.R.; data curation, G.R., and J.L.; writing—original draft preparation, C.A.F.; writing—review and editing, G.R. and J.L..; visualization, C.A.F. and G.R.; supervision, G.R. and J.L.; project administration, G.R. and J.L.; funding acquisition, N/A. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

References

Azjen, I. (1991). The Theory of Planned Behavior. *Organizational and Human Decision Processes, 50*(2), 179-211. Https://doi.org/10.1016/0749-5978(91)90020-T.

Alexandris, K., & Stodolska, M. (2004). The influence of perceived constraints on the attitudes toward recreational sport participation. Society and Leisure, 27(1), 197-217. Https://doi.org/10.1080/07053436.2004.10707647.

Alexandris, K., Barkoukis, V., & Tsormpatzoudis, C. (2007). Does the Theory of Planned Behavior elements mediate the relationship between perceived constraints and intention to participate in physical activities? A study among older individuals. *European Review of Aging and Physical Activity*, *4*, 39–48. Https://doi.org/10.1007/s11556-007-0014-1.

Anderson, P. L., & Bakken, A. (2019). Social class differences in youths' participation in organized sports: What are the mechanisms? *International Review for the Sociology of Sport, 54*(8), 921-937. Https://doi.org/10.1177/1012690218764626.

Armstrong, S., Wong, C. A., Perrin, E., Page, S., Sibley, L., & Skinner, A. (2018). Association of physical activity with income, race/ethnicity, and sex among adolescents and young adults in the United States: findings from the National Health and Nutrition Examination Survey, 2007-2016. *JAMA Pediatrics*, *172*(8), 732–740. Https://doi.org/10.1001/jamapediatrics.2018.1273.

Bae, J., Won, D., Lee, C., & Pack, S. M. (2020). Adolescent participation in new sports: Extended Theory of Planned Behavior. *Journal of Physical Education and Sport, 20*(3), 2246-2252. Https://doi.org/10.7752/jpes.2020.s3301.

Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 191–205).

Brenner, J. S., LaBotz, M., Sugimoto, D., & Stracciolini, A. (2019). The psychosocial implications of sport specialization in pediatric athletes. *Journal of Athletic Training*, *54*(10), 1021-1029.

Brown, B. J., Jenson, J. F., Hodgson, J. L., Schoemann, A. M., & Rappleyea, D. L. (2020). Beyond the lines: Exploring the impact of adverse childhood experiences on NCAA student-athlete health [Special issue]. *Journal of Issues in Intercollegiate Athletics,* Winter 2020, 8–38.

Crawford, D. W., & Godbey, G. (1987). Reconceptualizing barriers to family leisure. *Leisure Sciences, 9*, 119-127. Https://doi.org/10.1080/01490408709512151.

Crawford, D., Jackson, E., & Godbey, G. (1991). A hierarchical model of leisure constraints. *Leisure Sciences, 13*, 309-320. Https://doi.org/10.1080/01490409109513147.

Crossan, W., Mudrák, J., & Helešic, T. (2022). Examining adolescent football dropout in the Czech Republic. *Acta Gymnica, 52*(1), 1-8. Https://doi.org/10.5507/ag.2022.003.

Davis-Kean, P. E. (2005). The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment. *Journal of Family Psychology, 19*(2), 294-305. Https://psycnet.apa.org/doi/10.1037/0893-3200.19.2.294.

DeMelo, J. (2022, September 3). Why is pickleball so popular? Everyone and their mother seems to be playing. What's the draw—and is it really a workout? *New York Times*. Https://www.nytimes.com/2022/09/03/well/move/pickleball-popular-sport.html.

Drakou, A., Tzetzis, G., & Mamantzi, K. (2008). Leisure constraints experienced by university students in Greece. *The Sport Journal, 11*(1). https://link.gale.com/apps/doc/A210520253/HRCA?

Eime, R. M., Harvey, T., Charity, M. J., Casey, M. M., Westerbeek, H., & Payne, W. R. (2016). Age profiles of sport participants. *BMC Sport Science, Medicine and Rehabilitation, 8*(1), 6. Https://doi.org/10.1186/s13102-016-0031-3.

Fishbein, M., & Azjen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Addison-Wesley.

Glaser, B. G. & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Routledge.

Godbey, G., Crawford, D. W., & Shen, X. S. (2010). Assessing Hierarchical Leisure Constraints Theory after two decades. *Journal of Leisure Research*, *42*(1), 111–134. Https://10.17123/atad.vol26iss179557.

Halforty, G. A., & Radder, L. (2015). Constraints of participation in organised sport: Case of senior undergraduate students at a new generation university. *South African Journal for Research in Sport, Physical Education and Recreation*, *37*(3), 97–111.

Haycock, D., & Smith, A. (2012). A family affair? Exploring the influence of childhood sport socialisation on young adults' leisure-sport careers in north-west England. *Leisure Studies*, *33(3),* 285–304. Https://doi.org/10.1080/02614367.2012.715181

Hernandez, M. I., Miller, E. C., Prieto, L. A., Columna, L., Biese, K. M., Bell, D. R. (2023). The current youth sport culture and its impact on sport participation experiences of low socioeconomic status families. Internet Journal of Allied *Health Sciences & Practice, 21*(2), 1-12.

Hubbard, J., & Mannell, R. C. (2001). Testing competing models of the leisure constraint negotiation process in a corporate employee recreation setting. *Leisure Sciences*, *23(3),* 145–163. Https://doi.org/10.1080/01490400131689684 6.

Jackson, E. L., Crawford, D. W., & Godbey, G. (1993). Negotiation of leisure constraints. *Leisure Sciences, 15*(1), 1-11. Https://doi.org/10.1080/01490409309513182.

Jayanthi, N. A., Post, E. G., Laury, T. C., & Fabricant, P. D. (2019). Health consequences of youth sport specialization. *Journal of athletic training*, *54*(10), 1040-1049.

King, B. (2020, January 13). *Fueling interest on their terms: Millennial and Generation Z sports fans are creating their own game-day experiences and showing loyalty to teams and leagues that support and simplify that process*. Sport Business Journal. https://www.sportsbusinessjournal.com/Journal/Issues/2020/01/13/In-Depth/Fueling-interest.aspx.

Kremer-Sadlik, T., & Kim, J. L. (2007). Lessons from sports: children's socialization to values through family interaction during sports activities. *Discourse & Society*, *18*(1), 35–52. Https://doi.org/10.1177/0957926507069456.

Madden, T. J., Ellen, P. S., & Ajzen, I. (1992). A comparison of the Theory of Planned Behavior and the Theory of Reasoned Action. *Personality and Social Psychology Bulletin, 18*(1), 3-9. Tttps://doi.org/10.1177/0146167292181001.

Mullen, S. (2022, February 19). *American's fastest-growing sport is a cross of tennis, pingpong, and badminton*. NPR. Https://www.npr.org/2022/02/19/1081257674/americas-fastest-growing-sport-pickleball.

Nadirova, A, & Jackson, E. L. (2000). Alternative criterion variables against which to assess the impacts of constraints to leisure. *Journal of Leisure Research, 32(*4), 396-405.

Noel-London, K., Ortiz, K., & BeLue, R. (2021). Adverse childhood experiences (ACEs) & youth sports participation: Does a gradient exist? *Child Abuse & Neglect*, *113*, 104924. Https://doi.org/10.1016/j.chiabu.2020.104924.

Perks, T. (2020). Trajectories of sport participation among children and adolescents across different socio-economic categories: Multilevel findings from the national longitudinal survey of children and youth. *Sociology of Sport Journal, 37*, 264–268. Https://doi.org/10.1123/ssj.2018-0096.

Scheerder, J., Vanreusel, B., Taks, M., & Renson, R. (2005). Social stratification patterns in adolescents' active sports participation behaviour: a time trend analysis 1969–1999. *European Physical Education Review, 11*(1), 5–27. Https://doi.org/10.1177/1356336X05049822.

Somerset, S., & Hoare, D. J. (2018). Barriers to voluntary participation in sport for children: a systematic review. *BMC Pediatrics*, *18*(47), 1–19. Https://doi.org/10.1186/s12887-018-1014-1.

Sowell, E. R., Thompson, P. M., Holmes, C. J., Jernigan, T. L., & Toga, A. W. (1999). In vivo evidence for post-adolescent brain maturation in frontal and striatal regions. *Nature Neuroscience, 2*(10), 859-86. Htpps://doi.org/10.1038/13154.

Sylwester, R. (2007). *The adolescent brain: reaching for autonomy*. Corwin Press.

US Department of Health and Human Services [USDHHS]. (2008). *2008 Physical Activity Guidelines for Americans*. Author. http://www.health.gov/paguidelines/default/aspx.

Wendling, E., Flaherty, M., Sagas, M., & Kaplanidou, K. (2018). Youth athletes' sustained involvement in elite sport: An exploratory examination of elements affecting their athletic participation. *International Journal of Sports Science & Coaching, 13*(5), 658–673. Https://doi.org/10.1177/1747954118757436.

Wheeler, S., Green, K., & Thurston, M. (2019). Social class and the emergent organised sporting habits of primary-aged children. *European Physical Education Review, 25*(1), 89-108. Https://doi.org/10.1177/1356336X17706092.

Wilson, T. C. (2002). The paradox of social class and sports involvement. *International Review for The Sociology of Sport, 37*(1), 5-16. Https://doi.org/10.1177/1012690202037001001.

World Health Organization [WHO]. (2009). *Global health risks: Mortality and burden of disease attributable to selected major risks.* WHO Press.

World Health Organization [WHO]. (2013). Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: Recommendations for a public health approach. WHO Press.

World Population Review. (2023). *Georgia Population 2023*. Https://worldpopulationreview.com/states/georgia-population

Xia, M., Hu, P., & Zhou, Y. (2020). How parental socioeconomic status contribute to children's sports participation in China: A cross-sectional study. *Journal of Community Psychology, 48*, 2625-2643. Https://doi.org/10.1002/jcop.22439.

Appendix A

SEMI-STRUCTURED INTERVIEW GUIDE

Initial Open-Ended Questions | Student Background

To start, may you tell me the sports you grew up around or knew about before you started playing sports? Out of these sports which ones did you want to play or more interested in playing than others?

- Did growing up around these sports play a factor in the sports you chose to play? If so, how?

Looking back now, would you say your access to sports, or the opportunities offered to you were better or worse compared to others?

- Could you explain why?

Was it easier or harder for you to stay active in sporting activities growing up?

- Could you explain why?

Were certain sports easier to access or offered more in the area you were raised?

- **If they say yes:** Could you tell me those sports?
    - Would you say this affected the types of sports you preferred?
- **If they say no:** Why do you think some sports in your area were not as easy to access or were not offered more than others?
    - Would you say this affected the types of sports you preferred?

Were a variety of different sports/ or opportunities to engage in different sports offered or available at your school?

- **If they say no:** How did not having a wide range of sports or opportunity to engage in different sports impact your participation?
    - Did this cause you to favor more sports that were easier to access?
- **If they say yes:** How did having a wide range of sports/ and or opportunities to engage in different sports /impact your participation?
    - Did you find yourself favoring one sport more than others? If so, why?

Was popularity in sports an issue in the sports you attended, or the sports offered in the schools you attended?

- Did that play a factor in the types of sports you chose to engage in growing up?
- How did that affect your participation in that sport? Did it affect how you viewed that sport?

Would you consider yourself more of an introvert or extrovert?

- How did that affect the type of sports your preferred or your participation in sports?

Looking back, what was your biggest challenge playing sports?

- **If they mention a constraint:** Would you say [constraint here] had an impact on your sporting activity/ or the type of sports, you engaged in?
    - What do you think would have been different sports participation/ activity-wise, if you did not have to worry about [constraint here]?

Did you have any insecurities or doubts that may have affected or still do affect your sports participation? If so, what are they?

- How did that affect your participation in sport?
- Did you favor a particular sport due to that doubt or insecurity?

Past and Present Sports Interest

Since leaving your home, no longer living under your parent's roof, have you felt more empowered making decisions on things?

- **If affirmed:** That's interesting…could you tell me how this sense of empowerment may have possibly changed your preferences for some sports that you wouldn't have been interested in before?
- **If follow-up, they say no:** Oh, okay. Why do you think your preferences haven't changed.

Do you feel that you have more options and opportunities to engage in other sports now that you are not living under your parent's roof?

- **If yes:** Why do you feel as if you have more options now compared to when you were at home?
- **If no:** Why not?

Would you say that the type of sports you grew up around and engaged in as a child are the same or different now?

- **If different:** What caused you to engage in different sports now instead of the sports, you grew up playing?
    - Why do you think you were not able to engage in these sports growing up?
- **If same:** What was your reasoning in not engaging in other sports as you grew older?

Do you feel that the types of sports you engaged in as a child influenced the types of sports you prefer now?

- Why do you feel this way?

Do you play any sport now that you didn't play growing up and that you weren't exposed to?

- **If yes:** What are they, and what lead you to choose that sport
- **If not:** Why not?

Do you face any challenges today regarding sport activity/ or participation?

- **If yes:** What is your biggest challenge and how has that impacted your sport preference/ or participation?
- **If no:** What do you think is the main reason for this?

If you had unlimited time and money, what sports would you have wanted to play growing up and why?

- What about now if you had unlimited time and money?

Closing

Is there something else not discussed in this interview that you think I should know to better understand your relationship with the types of sports you participate in and/or prefer?

Do you have any questions? Is there anything you would like to ask?