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ORIGINAL PAPER

Parent decision-making regarding youth sport participation during the COVID-19 pandemic

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Abstract

Purpose To describe youth sport participation behaviors during the COVID-19 pandemic as reported by parents of youth sport athletes, to examine the association of family demographics with the likelihood of children resuming sports, and to qualitatively report the factors influencing parental decision-making regarding youth sport participation during the COVID-19 pandemic.

Methods A national sample of parents of youth athletes from across the United States (n=236, age: 39.2±8.1 years, 57.2% female) were recruited to complete an online questionnaire by Qualtrics Online Samples (Qualtrics, Provo, UT) using a combination of actively managed, double-opt-in market research panels. The questionnaire focused on changes in child sport participation and family finances as a result of COVID-19 and included both close-ended and open-ended questions.

Results Most parents (63.1%) reported the time their children spent participating in organized youth sports had decreased because of the COVID-19 pandemic. Three-quarters of parents (75.5%) reported that it was likely that their children would fully resume participating in organized youth sports within the next year. Parents whose financial situation was worsened by COVID-19 were less likely to report that their children would resume sports in the upcoming year. Three domains related to parental decision-making emerged from the open-ended responses: safety, fear, and normalcy.

Conclusions Understanding the factors influencing changes in youth sport participation during the pandemic can allow systems to implement strategies for safe participation in youth sport and physical activity among children. Encouraging participation in outdoor sports with appropriate safety precautions such as masking, social distancing, and hygiene may reduce fear of participation among parents.

Keywords Youth sport · COVID-19 · Parent · Qualitative

Introduction

The benefits of physical activity and youth sport participation have been well established. Physical benefits include improving cardiovascular function and fitness, while decreasing blood pressure, obesity, resting heart rate, and the risk for at least 13 types of cancer, stroke, and type 2 diabetes.[1] In addition general mental health and psychological stability are thought to improve because of exercise, while also staving of stress, depression, anxiety, tension, confusion, anger, rumination, loneliness, and neuroticism.[1] Overall wellbeing, quality of life, happiness, life satisfaction, mood, resilience, coping, and feelings of revitalization are also positive byproducts from exercise, particularly exercise outdoors.[1] Youth sports have also been thought of as a vehicle for social development.[2] However, sport participation also includes risk of injury, impact on musculoskeletal growth and maturation, and mental health issues as a result of competition.[3] In general, when offered in ideal, development-focused environments, the benefits of youth sport participation are broad.[2].

The impact of COVID-19 on youth sport participation, beyond initial cancellations and shutdowns, is not yet known. There are beliefs that there will be substantial youth weight gain and childhood obesity.[4] Youth sport athletes, immediately after shutdowns across the United States, reported anxiety and depression higher than normal rates, which was worse for girls and those living among the highest poverty levels.[5] In the first 6 months following

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the initial shutdowns, 40% of families with children under 6 years old experienced loss of employment, whereby families were cutting spending on food, utilities, rent, and even healthcare needs.[6] The impact of COVID-19 on future engagement in organized youth sports is uncertain, as families with children who engage in youth sports must consider both the benefits and risks of sport participation during a global pandemic.

Therefore, the purposes of this study were to (1) describe youth sport participation behaviors during the COVID-19 pandemic as reported by parents of youth sport athletes, (2) examine the association of family demographics with the likelihood of children resuming sports, and (3) to qualitatively report the factors influencing parental decision-making regarding youth sport participation during the COVID-19 pandemic.

Methods

Participants and study design

This mixed-methods study was declared exempt by the Institutional Review Board at Indiana State University. A national sample of parents of youth athletes from across the United States were recruited to complete an online questionnaire by Qualtrics Online Samples (Qualtrics, Provo, UT) using a combination of actively managed, double-opt-in market research panels. To qualify for the study, participants had to be a parent of a child between 7 and 17 years old and the child had to have participated on an organized youth sports team in the previous year. If participants qualified, they were presented with an information page describing the study, and then proceeded to the rest of the questionnaire. Data collection took place over a one-week period in May 2021.

Participants were recruited via Qualtrics Online Samples due to the improved ability to recruit racial and ethnic minorities compared to traditional survey recruitment methods that typically results in largely White/Caucasian samples.[7] The sample recruited was nationally-representative with regards to race/ethnicity in the United States[8] (White/Caucasian 66.1%; African American/Black 12.3%; Hispanic/Latino of any race 11.0%; Asian 5.5%; 2+ races 2.5%; Native American/Alaskan Native 1.7%, Other 0.9%).

Questionnaire

The questionnaire was developed by a panel of content-area experts and consisted of three sections: (1) parent demographics (including parent age, race/ethnicity, biological sex, gender identity, household income, employment status, marital status, and educational status), (2) changes in child sport participation and family finances as a result of COVID-19, and (3) parent and child COVID-19 diagnosis history in the previous 12 months. The specific questions asked within Sects. 2 and 3 of the questionnaire are provided in Appendix 1. Open-ended items focused on an opportunity for parents to provide more detail about the factors influencing their decision-making regarding participation, factors that specifically decreased sport participation, concerns about organized sport participation during the pandemic, and intentions to resume participation. Participants were also permitted an opportunity to share if there was anything else they thought they needed to explain relative to their other responses.

Prior to collecting data, we pilot tested the questionnaire in a sample of eleven youth sport parents who met the study inclusion criteria to establish face and construct validity and internal consistency. We found an acceptable level of internal consistency, with a Cronbach's Alpha value of 0.805 (minimum alpha level of 0.80 needed).

Quantitative analysis

Data were summarized using means and standard deviations (SD), medians and interquartile ranges [IQR], and frequencies and proportions (%). Continuous variables were assessed for normality using the visual inspection of histograms and skewness/kurtosis values. Normally distributed variables were presented as means (SD), and non-normal variables were presented as medians [IQR]. Chi-square tests were used to examine associations between family demographics and likelihood of children resuming sports within the next 12 months. An alpha level of 0.05 was set a priori to determine statistical significance for all tests. All analyses were performed using R statistical software (R Foundation for Statistical Computing, Vienna, Austria).

Qualitative analysis

Open-ended responses were evaluated using a consensual qualitative research – modified (CQR-M) approach.(Spangler et al., 2012) This approach allows the data analysis team to construct core ideas for domains and categories from succinct data provided from a larger sample of participants than traditional CQR. Three members of the team served as the data analysis team, and one served as the external auditor. Multi-analyst triangulation, internal and external auditing were used to established trustworthiness within the data analysis process.

Results

Participant demographic data is presented in Table 1. A total of 236 youth sport parents (mean age: 39.2±8.1 years, 57.2% female) fully completed the questionnaire and were included in data analysis. Approximately half (47.9%) of parents reported that some or all of their children completely stopped sport participation as a result of the pandemic. The majority of parents (63.1%) reported that amount of time their children spend participating in organized youth sports had decreased as a result of the COVID-19 pandemic. However, three-quarters of parents (75.5%) reported that it was likely that their children would fully resume participating in organized youth sports within the next year. One-third of parents (34.3%) reported that their family's financial situation had become worse as a result of the COVID-19 pandemic.

Data on parent and child COVID-19 diagnoses are presented in Table 2. One in five parents (19.5%) reported that they had been diagnosed with COVID-19. Similarly, 18.2% of parents reported that at least one of their children had been diagnosed with COVID-19. The most common suspected sources of their children contracting COVID-19 were at home (39.5%), followed by at school (27.9%). The majority of parents (62.7%) reported that their children were required to wear a mask during organized sport participation "most of the time" or "always" (Fig. 1). Overall, parents were most likely to report that their COVID-19 diagnosis (58.1%) or their child's COVID-19 diagnosis (63.0%) had no impact on their child's likelihood of participating in organized sports.

Associations of family demographics with the likelihood of their children resuming sports in the next year are presented in Table 3. There were no associations between parent biological sex, race, education, employment status, or income category and likelihood of children resuming sports in the next year (all $p>0.05$). Married parents were more likely than non-married parents to report their children were likely to resume sports in the next year (80.6% vs. 64.5%, $p=0.02$). Parents who reported that their family finances had been made worse or stayed the same because of COVID-19 were less likely than those whose finances had changed for the better to report that their child was likely to resume sports (worse: 76.5%, same: 71.1%, better: 88.2%, $p=0.03$). Finally, parents who reported that some or all of their children stopped participating in sports as a result of COVID-19 were much less likely to report that their children would resume sports participation in the next year (all children stopped: 65.9%, some children stopped: 62.7%, no children stopped: 91.6%, $p<0.001$).

Three domains emerged from the open-ended responses: safety, fear, and normalcy (Fig. 2).

Table 1 Parent Demographics (N=236)

Variable	N (%), Mean (SD), or Median [IQR]
Parent Age	39.2 (8.1)
Parent Gender	
Male	101 (42.8%)
Female	134 (56.8%)
Gender non-conforming	1 (0.4%)
Parent Sex	
Male	101 (42.8%)
Female	135 (57.2%)
Parent Race	
Asian	13 (5.5%)
African American/Black	29 (12.3%)
Native American/Alaskan Native	4 (1.7%)
Hispanic/Latino of any race	26 (11.0%)
Native Hawaiian/other Pacific Islander	0 (0.0%)
White/Caucasian	156 (66.1%)
Two or more races	6 (2.5%)
Other	2 (0.9%)
Parent Education	
Less than High School	3 (1.3%)
High school diploma or GED	36 (15.3%)
Some college	45 (19.1%)
Associate or 2-year college degree	30 (12.7%)
Bachelor or 4-year college degree	67 (28.4%)
Professional degree	50 (21.2%)
Doctorate degree	5 (2.1%)
Parent Household Income Category (USD)	
Less than $35,000	33 (14.0%)
$35,001 to $50,000	45 (19.1%)
$50,001 to $75,000	41 (17.4%)
$75,001 to $100,000	42 (17.8%)
$100,001 to $150,000	43 (18.2%)
More than $150,000	32 (13.6%)
Parent Household Income Self Report (USD)	70,000 [40,000-120,000]
Money Spent on Children's Sports in Past 12 Months (USD)	1548 [578-3754]
Parent Employment	
Employed full time	173 (73.3%)
Employed part time	19 (8.1%)
Unemployed looking for work	15 (6.4%)
Unemployed not looking for work	21 (8.9%)
Retired	3 (1.3%)
Student	2 (0.9%)
Disabled	3 (1.3%)
Parent Marital Status	
Married	160 (67.8%)
Widowed	7 (3.0%)
Divorced	28 (11.9%)
Separated	9 (13.6%)
Never married	32 (13.6%)

Safety

Participants indicated that safety precautions were in place during organized sports and several categories were used to characterize the data. At the onset of the pandemic, cancellations were used to protect youth from exposure. Some participants felt cancellations protected their children, while others felt this was too stringent or not even a choice. For instance, one participant indicated "They had to stop for a while and reduce some of their interactions regarding sports," while another stated "I didn't agree with some of sports stopping" and another said, "the sports were cancelled; it wasn't our choice." As initial cancellations resolved, participants identified social distancing or group size modification, masks, and hygiene (e.g. hand washing, equipment sterilization, and facility cleaning) as ways to improve the safety of organized sports. One participant stated that their "children felt comfortable continuing in cross country and track as they were outside and not contact sports." This same participant was concerned their oldest child "could get seriously ill due to asthma, so he maintained social distancing with track and cross country and wore a mask when not running," but their other children had more difficulty with social distancing and contact with basketball. They stated "one child decided to play recreational basketball but the other did not want to due to COVID." Masking was a common safety precaution and some felt it reasonable, while others felt it restrictive. A participant indicated mask wearing was an imperative, no matter the environment: "I always remind my daughter to always use a mask wherever and whenever." One participant indicated "my child isn't comfortable in the mask so that has led to some decreased participation." Another participant indicated "I do not want my child running around playing soccer with a mask trying to keep 3 feet away from everyone." Hygiene was a reason for participants to choose not to allow their child to participate; a participant stated that participation was dependent upon whether "Whether proper safety and health protocols would be enforced, such as mask wearing, distancing when possible, and encouraging good hygiene practices, along with regular disinfection of equipment and facilities." Participants also referred to periods of cancellation when portions of teams or organizations may have had increased risk for exposing others to the virus: "Their coach caught the virus so they were looking for a substitute coach and they couldn't find anyone so that was two weeks without playing sports." Participants were hopeful that vaccinations for youth were on the horizon and would also improve safety of participating in sport. One participant indicated hope: "Hopefully since we started vaccinating for the virus that means there is a light at the end of the tunnel and organized sports will be able to start up again soon." Overall safety was a concern among the participants, but when taken seriously, this alleviated parental concern: "Since my child wore a mask the entire time and the owners were very concerned with proper safety measures during COVID-19, we were comfortable with our decisions."

Table 2 Parent and Child COVID-19 Diagnoses in Previous 12 months

Variable	N (%), Mean (SD), or Median [IQR]
Parent diagnosed with COVID-19?	
Yes	46 (19.5%)
No	190 (80.5%)
Any children diagnosed with COVID-19?	
Several children	20 (8.5%)
One child	23 (9.7%)
No children	193 (81.8%)
Where did child most likely contract COVID-19?	
At school	12 (27.9%)
At home	17 (39.5%)
While in public	7 (16.3%)
During organized sports	2 (4.7%)
Other	0 (0.0%)
Unknown/unable to determine	5 (11.6%)
How has your child's COVID-19 diagnosis changed your behavior regarding your children's sport participation?	
My children are less likely to participate in organized sports	10 (23.3%)
There is no change in my children's likelihood of participating in organized sports	25 (58.1%)
My children are more likely to participate in organized sports	8 (18.6%)
How has your own COVID-19 diagnosis changed your behavior regarding your children's sport participation?	
My children are less likely to participate in organized sports	10 (21.8%)
There is no change in my children's likelihood of participating in organized sports	29 (63.0%)
My children are more likely to participate in organized sports	7 (15.2%)

Fear

Some participants expressed fear about their children participating in organized sports during pandemic conditions. Specifically, there were concerns about the health of their children in terms of being exposed and acquiring the virus. Fears about overall health, death, and the unknown short and long term effects of the virus were expressed. One participant expressed "concerns about my children's exposure to others and wanting to minimize the potential risk to their health. Another indicated their fear of "death or worse." On participant profoundly stated "The pandemic is not behind us and we don't know if children are affected by the virus or the vaccination. There is not much known about how children react to the virus nor the vaccine side effects."

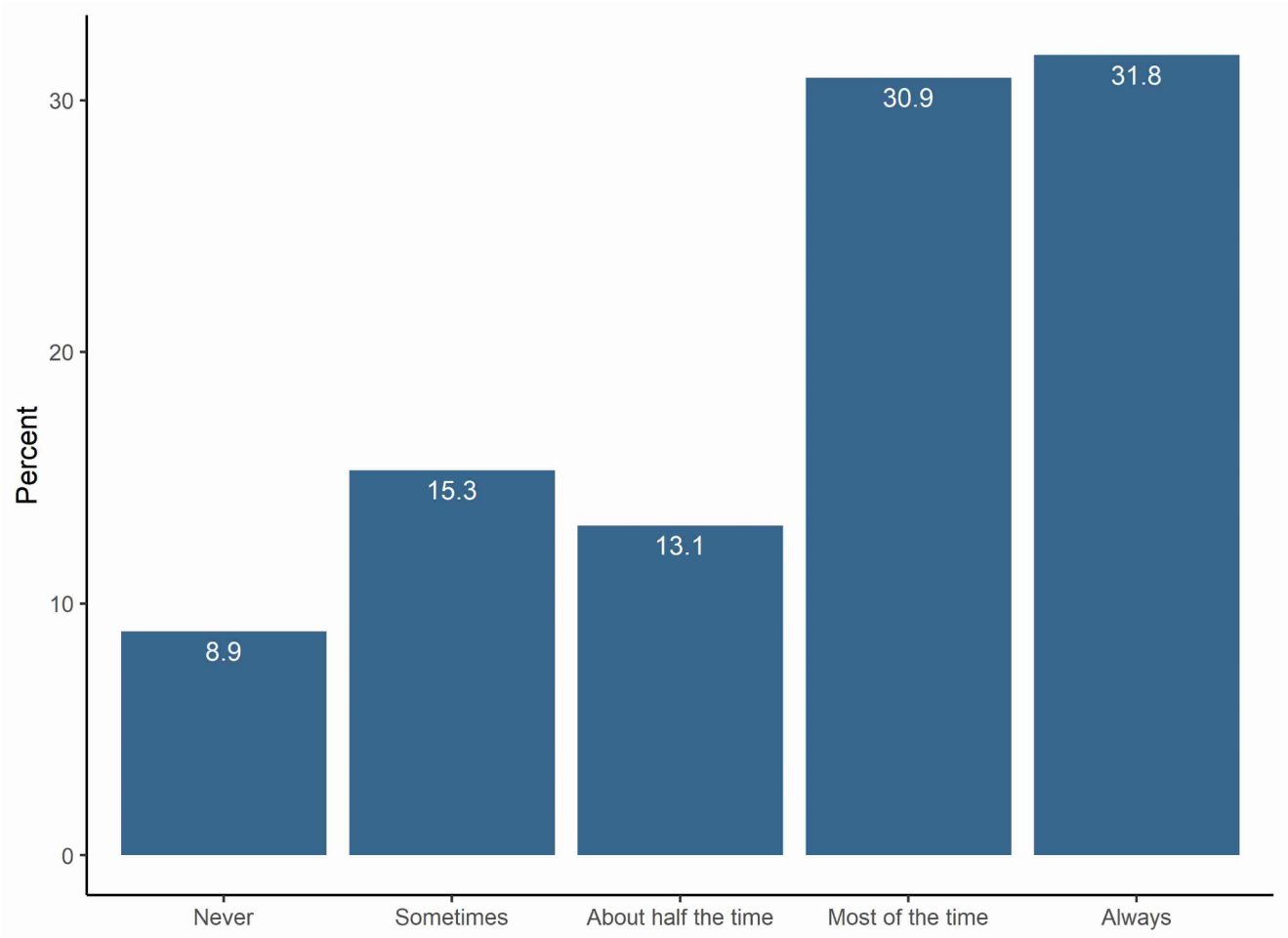

Fig. 1 How often have your children been required to wear masks during their organized sport participation in the previous 12 months?

Participants discussed fear about lack of enforcement about safety procedures like social distancing and masking during participation. A participant expressed concern "about how much enforcement of mask wearing and cleaning is actually taking place, especially when I'm not there to directly supervise." Another stated "We are concerned with close contact with the children have their masks off." Financial fears impacted current and future sport participation for these children, whereby some parents were unsure if they would have the financial resources to continue to support their children in sport participation: "I was losing money due to COVID-19, so kids sports were cut back and I didn't have the money to pay for all their sports." Many parents indicated they had no fear or no longer feared the impact of sport participation during the pandemic. One participant shared that there was no higher risk for their child as compared to other activities "I don't think the risk for getting COVID-19 is any higher while playing sports than it would be doing any other activities." At the time of data collection there may have been less concern for children acquiring the virus and one participant stated "children also have minimal risk of contracting and spreading COVID-19." Other participants were emphatic when asked about concerns indicated they had "absolutely none!"

Normalcy

Many participants desired normalcy, specifically for their children: "It is time to move on. We have to get back to what we know and what we are happy doing." There was a belief that things were improving: "I believe that the crisis is beginning to go back to normal." Parents spoke about the overall benefits of sport participation for their children and wished characteristics of life would return to normal so their children could reap these benefits. One participant stated "the value of youth sports is priceless" and another said "I think it's important that she stays busy and active." Participants described the negative effects on children due

to the loss of sport: "COVID-19 has been a terrible experience for our kids" and "if they can't go to practice they will get out of shape and it will take time to train back up to standard. More consequential were the emotional losses due to the pandemic, as one parent expressed: "The regulations regarding COVID-19 made the sport more of a hassle and it wasn't fun anymore."

Discussion

To our knowledge, this is the first study to examine the impact of COVID-19 on youth sport participation from the perspective of parents, using a mixed-methods approach. Parents reported their children's sport participation had completely stopped during the COVID-19 pandemic, largely a result of sport cancellations due to safety concerns and reinforced by parent fears regarding the potential health impact of COVID-19 on their child. However, three-quarters of parents reported that it was likely their child would fully resume sports participation in the upcoming year, with a strong and consistent desire for normalcy. We also found that parents whose financial situation was worsened by COVID-19 were less likely to report that their children would resume sports in the upcoming year.

Previous research has similarly found large decreases in physical activity and sport behavior as a result of the COVID-19 pandemic among children and adolescents.[9–11] In a study that conducted semi-structured interviews with 20 Canadian high school athletes, Shepherd et al. reported the primary factor that reduced their sport participation during the pandemic was the cancellation of sports leagues during stay-at-home restrictions.[12] Similarly, the parents in our study repeatedly identified cancellation of sports leagues by higher authorities as a primary reason their children's sport participation had decreased, along with concerns regarding their children's safety. As one parent stated: "The local team they were on has not reopened. Even if it did, I would not let them participate for fear of [COVID-19] exposure."

In addition to concerns about their children's safety, parents expressed concern about their children missing out on the benefits of youth sports participation. As one parent said: "It has been important to balance keeping her active and giving her opportunities to play with keeping her safe and protected from COVID-19." In a sample of 559 high school athletes in the United States, athletes who stopped participating in sports due to COVID-19 were more likely to report moderate to severe depression and anxiety symptoms, and lower overall quality of life scores.[11] Some parents in our study reported similar concerns regarding the potential consequences of their children not participating in sports. One parent stated: "Returning to all of my child's sports activities is extremely important to his social

Table 3 Association of Family Demographics with Likelihood of Children Resuming Sports

	Likelihood of Resuming Sports in Next 12 Months				
	Unlikely (N=26)	**Neither likely nor unlikely (N=32)**	**Likely (N=178)**	**X^2**	**P**
Parent Sex				0.44	0.80
Male	11 (10.9%)	12 (11.9%)	78 (77.2%)		
Female	15 (11.1%)	20 (14.8%)	100 (74.1%)		
Parent Race				4.5	0.10
White	22 (14.1%)	20 (12.8%)	114 (73.1%)		
Non-White	4 (5.0%)	12 (15.0%)	64 (80.0%)		
Parent Marital Status				7.5	0.02
Married	13 (8.1%)	18 (11.2%)	129 (80.6%)		
Non-married	13 (17.1%)	14 (18.4%)	49 (64.5%)		
Parent Education				2.5	0.29
Associate degree or lower	14 (12.3%)	19 (16.7%)	81 (71.1%)		
Bachelor's degree or higher	12 (9.8%)	13 (10.7%)	97 (79.5%)		
Parent Employment Status				0.41	0.82
Employed full-time	19 (11.0%)	22 (12.7%)	132 (76.3%)		
Not employed full-time	7 (11.1%)	10 (15.9%)	46 (73.0%)		
Family Income Category				4.5	0.10
Less than $75,000	15 (12.6%)	21 (17.6%)	83 (69.7%)		
$75,001 or more	11 (9.4%)	11 (9.4%)	95 (81.2%)		
Change in Family Finances				10.5	0.03
Worse	13 (16.0%)	6 (7.4%)	62 (76.5%)		
Same	12 (9.9%)	23 (19.0%)	86 (71.1%)		
Better	1 (2.9%)	3 (8.8%)	30 (88.2%)		
Child Sport Participation				22.7	<0.001
All children stopped	13 (15.9%)	15 (18.3%)	54 (65.9%)		
Some children stopped	10 (16.9%)	12 (20.3%)	37 (62.7%)		
No children stopped	3 (3.2%)	5 (5.3%)	87 (91.6%)		

Fig. 2 Primary themes and subthemes from open-ended responses

well-being." The perceived benefits of youth sport participation may explain why a large majority of parents in our study reported that it was likely that their children would fully resume participating in organized youth sports within the next year.

Recent research in large samples of youth athletes has reported low rates of transmission between athletes, particularly for outdoor sports.[13–15] Conversely, in April 2021 the Centers for Disease Control and Prevention (CDC) reported increasing rates of COVID-19 transmission linked to certain youth sports, such as basketball, wrestling, and ice hockey.[16] Low rates of transmission in organized youth sports may be dependent on whether the sport is played outside, and whether safety protocols such as social distancing and mask-wearing are in place. For example, several parents expressed the opinion that they felt comfortable with their child participating in sports if they were held outside. As one parent stated: "I feel like since they are practicing outside, it's safe." Additionally, in our sample most parents (62.7%) reported that their child was required to wear a mask "most of the time" or "always" when participating in organized sports. As one parent stated about her daughter: "She can play softball but has to wear a mask in the dugout." Conversely, another parent expressed hesitancy in allowing their child to participate due to a lack of enforced mask wearing: "Until the infection rate is almost nonexistent my

child will not participate in group sport because the mask requirement is almost nonexistent in my state."

To our knowledge, this is the first investigation to examine the intersection of family dynamics regarding youth sport participation in the wake of COVID-19. We found that those whose financial status was worsened during the pandemic were less likely to have their child resume sport participation. When discussing the factors influencing current participation status, one parent reported that a decreased income and being behind on bills limited their child's participation. Further, when discussing the likelihood of resuming sports, this participant reported: "I am not sure if I can afford it next year." These findings align with previous investigations that found familial support, which includes the financial status of the parent, can significantly impact the sport participation of children during the COVID-19 pandemic.[17] In a previous study that examined the influence of familial sociodemographic changes in physical activity levels of children in during the COIVD-19 pandemic, the authors found that children with negative familial support had larger decreases in physical activity levels.[17] However, this previous investigation consisted of children self-reporting their family's sociodemographic data, which included finances. Our study asked the parents directly, and further asked about changes in finances as a result of COVID-19, which may give a more direct representation of financial influence on likelihood to resume sport participation. Participants in our study echoed similar findings from previous research that found parent's financial well-being had a significant indirect association with their child's physical activity during the COVID-19 pandemic.[18].

Interestingly, one participant discussed how the COVID-19 pandemic illuminated their ability to provide the financial opportunity for their child to participate in organized sports: "[The COVID-19 pandemic] has taught my child… to be thankful for organized sports and to feel lucky that he gets to play since his parents have money to afford to let him play and enroll him in any sports he is interested in." Previously, studies have highlighted the disparities in financial data for families whose children are participating in organized youth sports.[19–21] These previous investigations have demonstrated that families that have more financial stability and higher socioeconomic status are able to provide more opportunities for children to participate in organized sports, which is reflected in our findings.[19–21] Further, previous literature has demonstrated families in under-resourced communities have less access to safe and appropriate facilities and equipment.[22, 23] This qualitative response from the participant above demonstrates an awareness of these disparities in the families who are and are not able to financially support their child's sport participation, which has been worsened during the COVID-19 pandemic.

The final theme that emerged was a desire for normalcy in sports participation. As one parent stated: "The coronavirus has made it hard for my son and all other kids to play organized sports due to social distancing. Hopefully since we started vaccinating for the virus that means there is a light at the end of the tunnel and organized sports will be able to start up again soon and social distancing will be a thing of the past as soon as possible." Though the full impact of COVID-19 limitations on sport participation are currently unknown, previous research has demonstrated both negative effects on children's behavioral health overall,[24] and as a result of sport participation specifically.[11] Previous investigations have found that the cessation of activities and removal of structure from children's lives increased the prevalence of depression and anxiety symptoms.[11] The removal of sports from a child's life can represent both a shock to their structure and activity in their lives which can have influences on the behavioral health of the child. One parent in our study indicated, "[My] child feels lost without sports in their life." Additionally, one parent described the influence sport participation had on the mental health of their child, "I think it is important to keep kids healthy and sport is good for physical and mental health."

Limitations and Strengths

Our study has several important limitations to note. First, we relied on parent recall for all questions on our survey. This may have resulted in recall bias or inaccurate information for certain questions. For example, we relied on parent recall regarding their own and their children's COVID-19 diagnosis, and the suspected location where the parent or their child contracted COVID-19, as opposed to a diagnosis from a physician or information from a contact tracing official. We felt this limitation was a warranted trade-off to increase the ease of capturing this information, and because any diagnosis of COVID-19 would likely be more memorable and easier to recall compared to more typical illnesses that the parent or their children may have contracted. Additionally, we only collected data during one brief period of time during the COVID-19 pandemic (May 2021). Therefore, we are not able to determine how parent decision-making regarding their children's sport participation behavior may have changed as the circumstances of the pandemic changed, such as with the emergence of the Delta variant in the United States in July of 2021.[25].

Implications for Policy and Practice

It is important to understand the factors influencing changes in youth sport participation during the pandemic so that strategies can be pursued to encourage safe options for physical activity among children. Encouraging participation in outdoor sports with appropriate safety precautions such as masking, social distancing, and hygiene may reduce fear of participation among parents. Additionally, providing low-cost options for sport participation or physical activity may help address potential disparities in sport participation that already existed prior to COVID-19, but were exacerbated by the pandemic.

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Authors' contributions: EP conceived the study, coordinated data collection, and performed the quantitative statistical analysis. EP, MR, DD, and LE developed the study questionnaire, designed the study, and conducted the qualitative (CQR) analysis. EP, MR, and LE drafted the initial manuscript, and DD critically reviewed the final manuscript. All authors have read and approved the final version of the manuscript and agree with the order of presentation of the authors.

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Code Availability Not applicable.

Declarations

Consent for publication: Not applicable.

Conflicts of interest/Competing interests: The authors have no competing interests to declare that are relevant to the content of this article.

Ethics approval: This mixed-methods study was declared exempt by the Institutional Review Board at Indiana State University.

Consent to participate: All participants provided informed consent prior to participating.

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