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**Beyond the Game: Assessing the IMPACT of a Collegiate Sports Mentorship Program on
Psychosocial Development in Children With Disabilities and Serious Illnesses**

A Community-Based Honors Thesis

Presented to

The Faculty of the Department of Psychology

Bates College

In partial fulfillment

of the requirements for the degree of

the Bachelor of Arts

by

Samantha Shapiro

Lewiston, Maine

Apr 1, 2024

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Beyond the Game: Assessing the IMPACT of a Collegiate Sports Mentorship Program on Psychosocial Development in Children With Disabilities and Serious Illnesses

Abstract

Mentorship relationships may be particularly beneficial for children with disabilities and serious illnesses in building their positive youth development and self-determination. The present mixed-methods study aimed to explore the characteristics of mentorship matches between children with disabilities and serious illnesses and collegiate sports teams that fostered psychosocial development among child participants. The study focused on program evaluation surveys ($N = 169$) completed by the parents of participants in the Team IMPACT organization at one to two time points between August 2022 and October 2023. Across all participating children, ($M_{\text{age}} = 12.25$, $SD = 2.97$) at Time 1, 36% were female and at Time 2, 42% were female. Participants had a wide range of diagnoses. Using thematic qualitative analysis of the open-ended survey responses and anecdotal data from a parent focus group, I identified a three-phase process of empowerment by the mentoring sports team as a precursor for growth in a range of support factors, internal assets, and social skills that supported participants' positive youth development and self-determination. I also identified challenges (e.g., logistical obstacles, difficulties connecting in a meaningful way with the team) associated with program participation that may have influenced the development of the aforementioned elements (i.e. internal assets, social skills, positive emotions). Exploratory follow-up quantitative analyses were conducted, but the results were inconclusive. Findings allow Team IMPACT and youth mentoring programs to more broadly understand the developmental outcomes and implications of mentorship matches, and to consider future longitudinal qualitative and quantitative analyses.

Beyond the Game: Assessing the IMPACT of a Collegiate Sports Mentorship Program on Psychosocial Development in Children With Disabilities and Serious Illnesses

Due to medical absences from schools, exclusion from physical activities, and a lack of empathy from their peers, youth with disabilities and serious illnesses are more prone to social isolation, with consequences of heightened anxiety, depression, and general psychosocial difficulties than their healthy peers (Maes et al., 2017; Merikangas, 2010). Children with serious illness refers to individuals under 18 who have a chronic condition that interferes with daily life and requires routine medical care for more than three months of the year (Jin et al., 2017). Youth with disabilities refers to individuals under 18 who experience delays or differences developmentally, intellectually, psychosocially, and/or physically (American Psychological Association, n.d.). Finally, the term psychosocial refers to environmental and social influences on an individual's thoughts, emotions, and behaviors (American Psychological Association, n.d.). Experiences of social isolation may lead children with disabilities and serious illnesses to psychosocial challenges such as feelings of loneliness - a reflection of an individual perceiving their social connections as deficient in some way (Maes et al., 2017). In the face of a national public health loneliness epidemic (Marshall, 2023), children with disabilities and serious illnesses may experience long-term psychosocial tolls of isolation. For these risks to be alleviated, it is crucial for children to build protective factors and have their unique developmental needs met.

Mentorship relationships offer one pathway by which social isolation may be combatted through the fostering of self-esteem and connections (Erdem et al., 2016). Mentorship may be especially potent for children with disabilities and serious illnesses because it can aid them in developing both their broader psychosocial capacities as well as the specific skills needed to

navigate illness and disability (e.g., medical cooperation; Høiseth et al., 2014). With the number of national mentorship programs for vulnerable children on the rise, these organizations must be evaluated to optimize mentoring matches and children's developmental outcomes. Guided by positive youth development (PYD; Lerner et al., 2005) and the self-determination theory (SDT; Ryan & Deci, 2002), the purpose of this study is to understand in what ways youth participants of one mentorship organization, composed of individuals with disabilities and serious illnesses, develop psychosocially throughout their experience in the program.

Mentorship Relationships Promote Protective Factors and Positive Experiences

Mentorship relationships and exposure to positive role models have the potential to shape how an individual perceives themselves and the world around them. Mentors are defined as individuals with more experience who can help their mentees build competence and positive mindsets through their support and direction (White et al., 2021). Mentor relationships provide children with unique opportunities to develop their identities, foster their interests and long-term well-being, and equip them with a support system that may not typically come from peer relationships (DuBois & Keller, 2017). Several studies have been conducted on the success of youth mentorship programs, pinpointing aspects of the nature and structure of relationships that make for high-quality matches and child outcomes (Erdem et al., 2016; Sulimani-Aidan et al., 2021; Nakkula & Harris, 2010). Research on the Big Brother Big Sister mentorship program uses both mentee and mentor perspectives to identify factors of match structure that lead to high match quality. It is found that the greatest predictors of match quality are youth-centered fun and reciprocal sharing (Nakkula & Harris, 2010). This act of sharing not only builds trust and meaningful connection between a mentor and mentee but also sets children up for scaffolded

learning through a mutual experience or activity (DuBois & Keller, 2017). It was also noted that the highest-quality matches had a clear focus and purpose (Nakkula & Harris, 2010).

For children with disabilities and serious illnesses, it is particularly crucial to identify individual developmental and growth outcome goals in the early stages of these connections due to their predisposed risk factors (Adams et al., 2019). Mentorship has been identified as especially important for youth with disabilities in building autonomy, confidence, and aspirations (Freeman et al., 2015; Powers et al., 2015). While there is a lack of robust literature on the role of mentorship for children with serious illnesses, one study on youth with type 1 diabetes highlights the importance of mentors in fostering participants' illness management and emotion management (Sullivan-Bolyai et al., 2020). Additionally, a study on a group mentorship program for immigrant youth, another youth population who may face psychosocial challenges due to navigating new social spaces, underscores the capacity for group mentorship programs in particular to foster belonging and mitigate social isolation (Pryce et al., 2019). Having these strong relationships is foundational to children's stability and ability to manage adversity through perhaps unstable circumstances. These relationships not only help children acutely, but also provide them with the long-term skills to manage stress and adversity in their futures.

Positive Youth Development

The positive youth development theory (PYD) is a framework focused on youth's strengths and their bidirectional environmental and social interactions (Erdem et al., 2016). This theory has widely been used in recent years to study the development of risk-mitigating protective factors that may lead to children's thriving and general healthy development (Erdem et al., 2016). PYD considers five developmental assets (5Cs) including competence, confidence, connection, character, and care/compassion which are crucial for youth to thrive (Lerner et al.,

2005). This theory recognizes the symbiosis of youth with their peers, adults, and environments to build or strengthen these factors (Erdem et al., 2016). This theory has been frequently used in conjunction with mentorship studies in exploring youths' ecological systems and how external influences (i.e. the presence of mentors) may foster a variety of skills and assets (Erdem et al., 2016). PYD was selected as a framework for the present study due to its developmental explanation of positive growth and its tie to relationship-building. In aligning with Team IMPACT's organizational goals of seeing clinical improvements in children as a result of the program, this theory highlights the process of where and how that growth may occur.

Mentorship Fosters PYD

Three of the PYD factors that have been particularly highlighted as affected by mentorship experiences are competence (i.e., social and participatory skills), confidence (i.e., children's assurance in their abilities and independence), and connection (i.e., building relationships with others; Rhodes, et al., 2000; Karcher, 2005). One of the key ways through which children may build competence is social development. The formation of social bonds often leads to meaningful connections, both of which are basic human needs and aid youth in building social competence and comfortability (Chapman et al., 2017). It has been found that participants in youth programming or activities see more benefits when they are fully engaged (i.e. socially and emotionally) beyond solely participating (Chapman et al., 2017). Through this social 'buy-in', children build competence and lay the foundation for other developmental gains. Studies on the Big Brothers Big Sisters mentorship program also found mentorship to foster academic achievement (i.e., competence; Erdem et al., 2016). Supportive mentorship relationships are also predictive of later competence and confidence, revealing the potential for lasting developmental impacts (Erdem et al., 2016).

Notably, a principal goal of many mentorship programs to ensure positive development is the fostering of youth confidence. While building competence in several domains, children often symbiotically grow in confidence. Confidence is viewed as multifaceted, including one's self-view, self-esteem, and self-efficacy (Roth-Herbst et al., 2008). In this, confidence is viewed as having emotional and motivational aspects about one's belief in their abilities as well as their capacities to accomplish and further these abilities (Roth-Herbst et al., 2008). Levels of confidence are associated with how individuals think and feel about themselves and the world around them as well as how they behave (Roth-Herbst et al., 2008). Having high levels of confidence is also directly associated with improved mental health and decreased loneliness, depression, and other risk behaviors (Roth-Herbst et al., 2008). Cumulatively, the research on mentorship programs via a PYD lens suggests that the fostering of competence, connection, and confidence leads to thriving. These developmental factors are centered in the current study.

The Self-Determination Theory

The self-determination theory (SDT) explains individuals' intrinsic motivation and determination through the need for autonomy, belonging, and competence (Ryan & Deci, 2002). This theory frames how individuals become intrinsically motivated by having these basic psychological and developmental needs met (Ryan & Deci, 2002). The presence of strong attachments via mentorship, particularly those with older individuals, provides children with stable and nurturing relationships that foster their senses of autonomy, belonging, and competence, ultimately allowing them to be self-determined (Davis & McQuillin, 2022). SDT has been previously used in evaluating mentorship programs to explain the role of mentors in fostering these qualities resulting in youths' determination and general positive outcomes (Fisher, et al., 2020). Accordingly, this theoretical framework was selected for the present study due to

mentorship's relevant capacity for building belonging and competence that support the development of determination.

Mentorship Fosters SDT

Prior mentorship studies have identified belongingness or relatedness to one's environment as particularly important in fostering positive youth outcomes (Sulimani-Aidan et al., 2021). A sense of belonging is considered a basic human need and a precursor for positive developmental outcomes (Goodenow, 1993) and is thought to be a mediating factor between mentorship relationships and children's outlooks on their futures (Sulimani-Aidan et al., 2021). Having opportunities to find belonging is considered crucial for children in developing their identities and discovering groups with which they feel connected (Theriault & Witt, 2014). Similarly, a child's perception of belongingness in their environment, as can be fostered by mentors and coaches, also influences the child's level of motivation and self-determination (Andrade et al., 2021). Children are most likely to build high levels of intrinsic motivation and self-determination when they are exposed to motivational and caring climates through which they feel like they belong (Andrade et al., 2021). More specifically, when children feel personally cared for and encouraged in their environments, they may also build autonomy, feel competent at tasks, and like they belong in the group (Andrade et al., 2021). Thus, within group mentorship settings, the cultivation of environmental climates that promote belonging is crucial in youth self-determination.

Integrating PYD and SDT to Understand Mentorship for Children with Disabilities and Serious Illnesses

While both positive youth development and the self-determination theory are rooted in explanations of positive developmental outcomes resulting from the fostering of particular

qualities, this study seeks to further connect the implications of these theories and the potential interactions between the given qualities. In many ways, these theories are complementary from a developmental standpoint. Both PYD and SDT revolve around an individual's strengths and potential, using the knowledge of crucial developmental factors to promote positive outcomes (Hui & Tsang, 2012). It is likely that when the qualities identified through PYD and SDT are simultaneously fostered, children will experience beneficial outcomes in both self-determination and positive development. For example, due to fostered competence and connection, mentorship relationships and environments where children feel they belong likely have the potential to influence children's positive youth development in addition to their self-determination.

An integration of these theories was chosen for the present study to offer a perspective on what it may mean for children to build strong self-determination while experiencing general positive development. While both theories suggest the importance of children developing competence, the factors of SDT within a PYD lens (i.e. both belonging and connection fostering competence) suggest that self-determination may be critical to positive development. For children with disabilities and serious illnesses in particular, these qualities also serve as protective factors against later emotional and behavioral problems, substance use, and delinquency (Rhodes, 2005). Children's self-determination and positive development, as can evidently be built through mentorship, are integral for long-term outcomes in resilience, psychosocial health, and general well-being. Essentially, based on the prominent risk factors for children with disabilities and serious illnesses, the mindful and integrated fostering of the qualities identified by both PYD and SDT support the development of protective factors and the utmost positive outcomes.

Team IMPACT

Team IMPACT is a national nonprofit organization that serves children and adolescents ages five through 18 with disabilities and/or serious illnesses. The mission of the organization is to create mutually beneficial relationships that promote belonging, empowerment, and resilience (Team IMPACT, n.d.). Match-up specialists at Team IMPACT pair children with a sports team on a local college campus and, after an official “signing day”, the child becomes a member of the team for two years. In addition to school locations, match-up specialists also pair participants based on gender identity and what team they think would be fitting based on the family’s developmental goals for their child. When a team is set to receive a match, the players and coaches receive basic online mentorship training through Team IMPACT, and a few student-athletes are selected as ambassadors to lead in the outreach to the family and mentorship of the child. After the match is made, one of Team IMPACT’s case managers, who are all social workers or Certified Child Life Specialists, manages the match for the duration of the two years. This role includes ensuring the team regularly includes the child in practices and games, setting up activities outside of the sport, and answering any questions the family and athletes have. While the case managers only actively follow matches for two years, the bonds formed through Team IMPACT often last far longer.

In 2022 alone, Team IMPACT had 1,227 active matches involving over 30,000 student-athletes (Team IMPACT, n.d.). Since its founding in 2011, Team IMPACT has created over 3,200 matches and involved over 70,000 student-athletes. The organization serves children with over 300 diagnoses and has had matches in 50 states. Many campuses have multiple active matches across their athletic department, however, each team never has more than one active match. In some cases, sports teams get involved with the program by reaching out after learning

about Team IMPACT from other teams on their campus or athletic directors. In other cases, if an eligible child is looking for a match in a location where there are no teams on the waiting list, the match-up specialists at Team IMPACT reach out directly to schools' athletic directors to educate them about the program and ask them to identify teams that might be interested in participating.

In their 2022 report based on quantitative data from the present survey, Team IMPACT researched participants' medical cooperation and independence, physical activity levels, ability to manage emotions, and social stigma related to their diagnosis (Team IMPACT, n.d.). Before this 2022 report, the organization had conducted qualitative analysis and found trends relating to emotion management, independence, belonging, and physical activity, which led to further quantitative measurement in these domains (i.e., about age, gender, and other demographic variables). Though there were no significant findings in 2022 about improvements in social stigma, both emotional resilience and medical independence were found to improve as a result of program participation. The report identified significant predictors of these improvements including gender, income, and match quality. The report does not yet include an analysis of their latest qualitative data exploring consistent and emerging trends. The organization has also published studies showing successful outcomes and psychological benefits for participating student athletes.

Positionality

I am a former summer intern at Team IMPACT with the program team. I assisted the team in compiling a literature review about the loneliness epidemic and how children with disabilities and serious illnesses are uniquely impacted by loneliness and social isolation. This research and expansion of knowledge inspired me to further explore the developmental needs of this population. After shadowing a match-up specialist at Team IMPACT and learning that

matches are often made primarily by location, I was curious how contrasting environments and factors of mentorship relationships could differently foster the developmental needs of these children. Approaching this study, I hope that the findings can be a tool used by the match-up specialists at Team IMPACT to inform their matchmaking process and to most effectively meet the needs of children participating in the program.

Though I do not personally have experience living with a disability or serious illness, I am interested in working with children in the future, perhaps in a medical setting, which drives my interest to learn more about these populations. I identify as a non-disabled, White, cis-gender woman. In this, I recognize I analyzed the data from a privileged position that does not encapsulate the identities of all participants. I also acknowledge my role in the ‘outsider position’ without many of the lived experiences of the participating individuals. While I approach the data with empathy and an open mind, I am not able to be entirely aware of the nuances of participants' experiences given my own experiences as an able-bodied person. I sought to approach the research cognizant of these potential biases and thus incorporated perspectives from those more knowledgeable in the field and more closely identified with the populations of interest. This was done through my monthly connections with Rachel Rogovin, Director of Clinical Services at Team IMPACT, ensuring that my research aligned with their previous findings and general organizational expertise in child development fields. Furthermore, in the parent focus group, I focused on keeping my field notes as direct and accurate as possible while avoiding any interpretation. This again allowed me to center the experiences of those who participated in the Team IMPACT program. The focus group also allowed me to include a wider range of perspectives and forms of data collection beyond survey responses. I also sought to include

survey responses that highlighted a variety of topics and demographics to ensure the participant responses were at the center of the analysis.

Aims and Rationale

The present study was conducted with three main aims. The first aim was to explore and identify evidence of psychosocial development via participants' recounted experiences and challenges in the Team IMPACT program. The second aim of the study was to investigate the process of psychosocial development by examining when and how these areas of development may occur in relation to one another. The final aim of the study was to longitudinally and quantitatively explore trends in frequencies of reported themes across time points. The present study was guided by the question: In what ways do Team IMPACT participants develop psychosocially through mentorship relationships?

Method

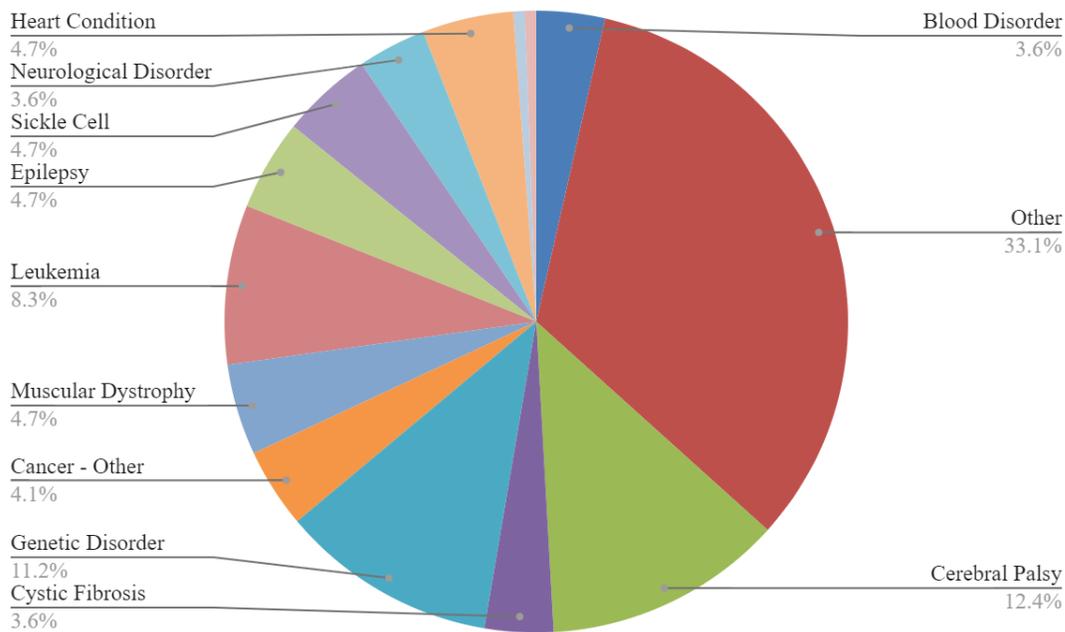
Participants

The sample is comprised of 169 total participants, with 144 parents of participants completing the survey at Time 1 (12 months post-match) and 33 parents of participants at Time 2 (24 months post-match). Nine parents of participants completed the survey at both time points. Participants at Time 1 ($M_{\text{age}} = 12.25$, $SD = 2.96$) were 36% female and 64% male. At Time 2, participants ($M_{\text{age}} = 12.96$, $SD = 3.06$) were 42% female and 58% male. Participants had a range of 28 reported diagnoses in addition to some participants listing their child's diagnosis as 'unknown' or 'other' (see Figure 1). The baseline survey response rate (not used in the present study) was 61%, at 12 months, the response rate was 37%, and at 24 months, the response rate was 31%. Though data regarding participants' racial identities and household incomes were not provided by Team IMPACT in the present data set, the following reflects descriptive data of the

sample composition from Team IMPACT’s 2022 report. Ethnically/racially, the sample was predominantly White (82%) with 8% identifying as Black, 6% as Latino, 2% as Asian/Pacific Islander, and 3% identifying as multiracial or of another race. For family household income, 8% earn between \$0-24,999, 17% between \$25,000-49,999, 16% between \$50,000-74,999, 15% between \$75,000-99,999, 24% between \$100,000-149,000, 11% between \$150,000-199,999, and 10% earn more than \$200,000.

Figure 1

Participants’ Primary Diagnoses



Note. N = 169. Only the most common 11 diagnoses are shown beyond ‘other’ for visual clarity.

Procedure

The present data were collected by Team IMPACT through SurveyMonkey between August 2022 and October 2023. While data continues to be collected, only surveys submitted

during these 14 months were analyzed in the present study. The surveys were sent to all participating families, only some of whom chose to complete them. Completion of the surveys was not incentivized and was not required for program participation. Parents or primary caregivers completed digital confidential surveys on behalf of their children at baseline (before beginning the program), 12 months, and 24 months (at the completion of the program) about their child's and family's experience with Team IMPACT. The survey questions and format were selected by Team IMPACT based on ease of completion, validity of tools, assurance of completion by an adult, and alignment with the organization's goals (Team IMPACT, n.d.). The baseline survey did not include open-ended questions, thus only responses from the 12-month and 24-month groups were analyzed in the present study. It should be noted that only nine participants completed the surveys at both time points. Participants were first asked about demographic information including child name, age, team and sport of their match, and diagnosis. Parents then proceeded to answer a series of Likert scale and open-ended questions to complete the survey.

Parent Focus Group

A parent focus group was held by Team IMPACT's Director of Clinical Services and an external consultant with a small group of former program participants ($N = 2$). Focus group participants were recruited via email. Participating parents were asked a series of conversational questions over a 90-minute video call. Demographic information of focus group participants were not provided.

Measures

Team IMPACT Experience

The Team IMPACT clinical team compiled a series of questions from their expertise to learn more about the participant experience with the Team IMPACT program. This portion consisted of four open-ended questions. The two questions analyzed in the present study were, “What has been the biggest change you’ve seen in your child since the start of their participation in Team IMPACT?” and “What has been the most challenging part of participating in Team IMPACT?”

Analytic Approach

In the present study, I used a QUAL, quan mixed methods approach (American Psychological Association, n.d.), thematically analyzing new qualitative data and conducting quantitative analysis to discover the frequencies of these findings. This approach implies a primarily qualitative approach supported by supplementary quantitative analysis (American Psychological Association, n.d.). The thesis culminates with a cumulative presentation of findings and implications to the Team IMPACT clinical team aiming to inform their continued work. I have had monthly meetings with Rachel Rogovin, the Director of Clinical Services at Team IMPACT, to ensure my research continues to align with the organization's goals and interests.

Qualitative Analyses

A significant portion of the study focused on the coding and analysis of the survey’s first two open-ended questions. My qualitative analysis was primarily inductive, relying on bottom-up coding and trends that I identified from the data (Creswell, 2013). I first read through the data set and openly coded with no preconceived notions, noting patterns and questions that

arose (Ravitch & Carl, 2021). I wrote an initial memo about the findings of this first read-through. Next, I read the data again to look for emerging themes while avoiding any interpretation. I completed another memo after this process. I then read the data a third time while identifying present concrete themes. Finally, I entered the themes into a codebook to organize meta-thematic groupings, subthemes, code definitions, and sample responses for these designated categories (see Appendix A). The coding process was done manually in Google Sheets and no qualitative data analysis programs were used. The codebook was reviewed by Professor Elena Maker Castro, and we conducted the first rounds of the final coding process collaboratively while discussing the best-fitting codes to ensure inter-rater reliability. After completing all the necessary coding, my final selections were also discussed and reviewed with Professor Elena Maker Castro to clarify and modify any necessary portions of the coded data. Though much of this coding was done bottom-up, the knowledge of SDT, PYD, and factors of emotional resilience served as sensitizing concepts (Bowen, 2006) that informed the structuring and analysis of the superordinate themes and how they fit together.

Additionally, I shadowed a parent focus group led by Team IMPACT's Director of Clinical Services as well as an external consultant. During this meeting, I observed prompted discussion between participating parents and the facilitators regarding several aspects of their family's experience in the program. I did not have access to recordings or transcripts of these groups, however, I took extensive field notes and used this information to support my findings.

Supplemental Quantitative Analyses

The initial quantitative data has been professionally analyzed by Derek Gravholt, MS, and Rachel Rogovin, MSW, LICSW to identify potential improvements in emotion management, medical cooperation and independence, and social stigma as well as variables that may predict

these improvements. To build on their quantitative findings, I ran a series of chi-square tests to explore the relationships between families' reported changes and challenges across time points as a result of the program. To run the chi-square tests, I first quantified the participants' qualitative survey responses by summing the number of responses with each code separately for each time point. For example, the code 'confidence' was used 43 times at Time 1 and 10 times at Time 2. For each code with more than five inclusions at a given time point, I entered these quantities into an Excel spreadsheet chi-square generator to identify if there were significant differences in frequencies of these themes across time points.

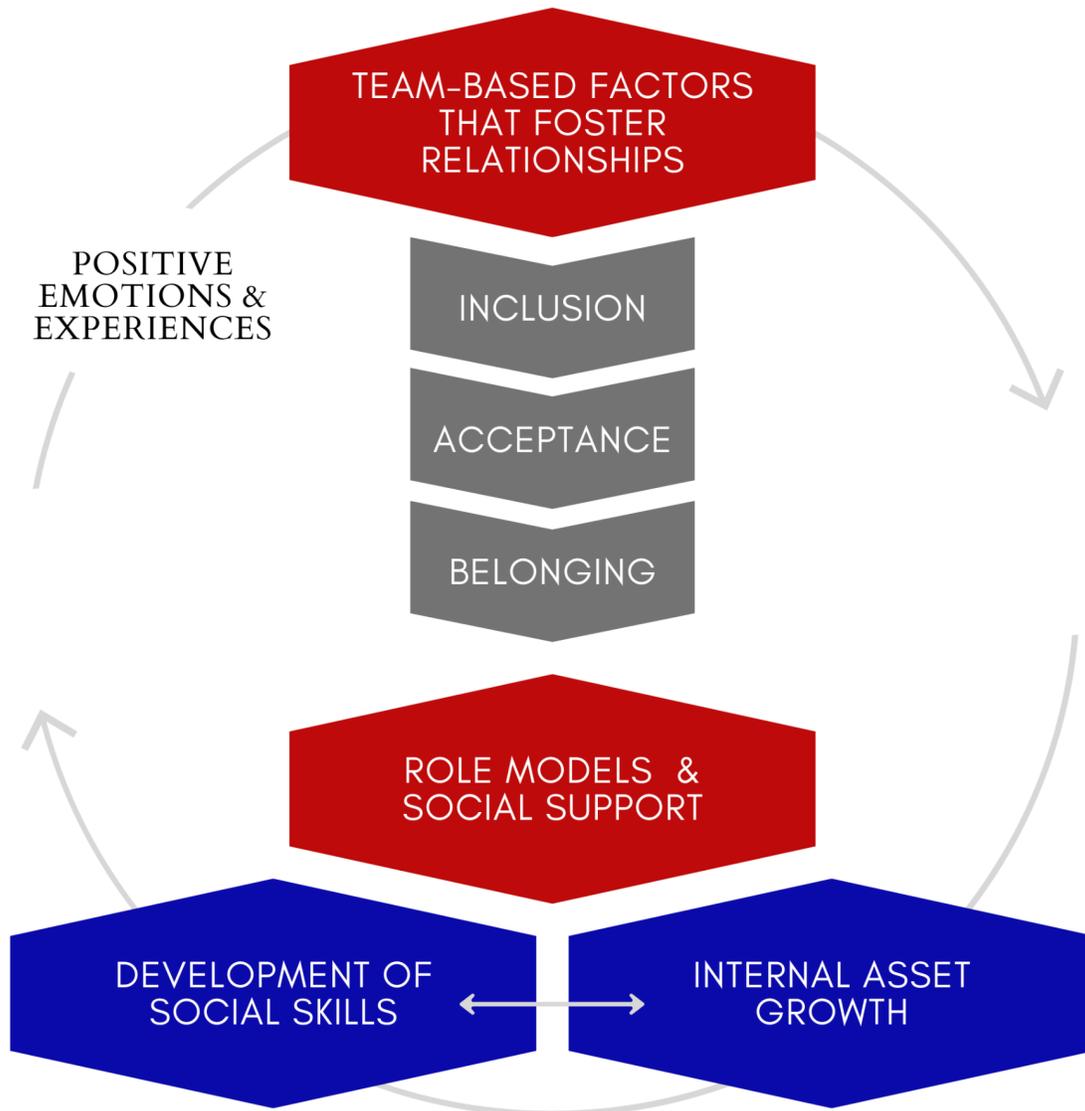
Results

The Empowerment Model of Mentorship

I identified several emerging prominent factors of child development through mentorship relationships and categorized them into five groups based on the psychosocial meta-themes identified through the coding analysis (see Appendix A). These categories include team-based factors that foster relationships, role models and social support, internal asset growth, development of social skills, and general positive emotions and experiences. The relationships between these meta-themes were theorized into a major model, the empowerment model of mentorship, based on the directional impact of each factor (see Figure 2). Essentially, teams fostering relationships laid the foundational empowerment for children to develop a network of support and subsequently grow internally and socially while enjoying positive emotions and experiences. The model suggests directional correlations between reported themes, however, it does not imply causality or a mold for time ordering of growth areas. Throughout the findings, this model is referenced and explained as developmental processes are explored.

Figure 2

The Empowerment Model of Mentorship



Team-Based Factors That Foster Relationships and Seed Opportunities for Empowerment

Team-based factors that foster relationships between participants and the team emerged as a precursor for the development of children's internal assets, social skills, and positive emotions and experiences. Parent participants identified team-based factors that foster relationships as those that are directly tied to their connections with their teams, often within the control of the team's actions, and as starting points in affecting positive change within their children. Parents' reports often showed teams' demonstration of a three phase process of empowerment which ultimately lead to beneficial development in several areas. One initial factor that emerged as a common first step taken by the team and led to this positive change was inclusion.

Inclusion

One of the first steps teams took toward empowering and benefiting participants was inclusion. The act of ensuring participants felt included in team meetups and activities was an initial action in successful match experiences and children ultimately feeling like part of the team (explored in subsequent sections). It should be noted that in these analyses, inclusion is referred to as the act of intentionally involving the child in team activities and social interactions, but does not imply total acceptance. In reference to a change seen in their child, one parent of a 13-year-old with a leukemia diagnosis and matched with a wrestling team wrote,

He felt included and like he was part of something. It took the focus off of the lack of friends he had during treatment. It made him feel important and included. It kept him inspired to return to his sports. It provided role models for him to look up to.

While this example dives into program successes beyond inclusion, it alludes to the initial importance of the child being welcomed and included by their team, particularly when a child

may have had experiences of exclusion in peer groups. In the parent focus group, a parent of a 10-year-old with cerebral palsy matched with a softball team discussed her child's disappointment with not being able to keep up with peers during physical activities. With her team, they make sure she is involved and engaged which has encouraged her to become more active outside of the program. Inclusion is nearly entirely controllable and effortful on the team side of the program and was not identified as a challenge by any participants in response to the second question.

Acceptance

The second phase of the empowerment process was acceptance. Before a child could feel like they truly belonged and identified with a team, they needed to feel welcomed and appreciated. This process is defined by a child being made to feel special and appreciated either as a result of or despite their characteristics, identities, or 'differences'. One parent of a nine-year-old with a neurological disorder and matched with a volleyball team wrote, "[She] is excited to see the volleyball team we are working with and is excited to feel accepted into something that is her own, especially sports related." This response highlights that the team provides this child with the opportunity for acceptance which she may not experience in all aspects of life. A parent of a nine-year-old with leukemia and matched with a baseball team wrote, "Feeling supported and appreciated by non-family members and understanding of his strength and difficult journey. Celebrating ringing the bell with some of the team and coach at our home was beautiful." This response dives into the importance of acceptance and engagement for these children beyond sports activities, especially around the child's diagnosis. By highlighting the team's acceptance and support during the participant's difficult journey and major milestones, this response alludes to the unique bonds built through the mentorship journey.

This phase of acceptance is powerful, particularly in alignment with a piece of the program's mission to provide families with a "dose of life beyond illness" (Team IMPACT, n.d.). For many of these children and families, their diagnosis is the central aspect of their lives which may not always be a positive experience. Having this exposure to group acceptance allows children to be socially at ease and often leads to the development of confidence and feeling special. Acceptance was not often mentioned as a challenge for participants except for one response noting the child still felt "different" from the team.

Belonging

When asked about the biggest change parents have seen in their child as a result of the program, belonging was mentioned frequently. Belonging was also identified as a connecting factor between the groupings of team-based factors that foster relationships (i.e., inclusion, acceptance, etc.) and internal asset growth (i.e., confidence, determination, etc.). Though the team can do everything in its power to make a child feel included and accepted, a sense of belonging comes from a child's comfort and relatedness in a group. One parent of a 13-year-old with a brain tumor and matched with a basketball team wrote, "It has given him a place to belong and feel special. This past year has been really hard on him and he lights up when he meets up with his team." One parent of a 10-year-old with leukemia and matched with a softball team wrote, "She loves being a part of a team and having a broad network of strong, brave, fierce women to cheer her on and support her." For this participant, finding belonging on the team has also brought exposure to positive individuals and support allowing her to feel special and empowered. Similarly, a parent of an 11-year-old with muscular dystrophy and matched with a field hockey team wrote, "She feels like she has a 'family' outside of her own." These responses highlight the importance of finding belonging and the subsequent feelings children experience

such as feeling connected to something bigger. For example, one parent of a 12-year-old with immune dysfunction and matched with a basketball team wrote, “He looks at life differently. He went from why me to feeling lucky that he is different. He now feels like this was meant to be so he could be a part of the team and something bigger.” It is clear across several responses that this belonging can lead to a child feeling less alone and to increased motivation, participation, and shifting perspectives, each explored in a subsequent section as elements of participants’ development of internal assets and social skills.

The Emergence of Role Models and Social Support From Team-Based Factors and Empowerment

The three phases of empowerment outlined above (i.e., inclusion, acceptance, and belonging) were commonly discussed leading to the presence of developmentally supportive experiences including role models, social support, and meaningful connections. As children are accepted into their teams, they acquire a network of mentors and meaningful connections that allow them to ultimately feel like they belong and flourish in several domains. Once children get to know their teammates and feel accepted, it is clear that they often view these older individuals as role models and may lean on them for social support. One parent of an eight-year-old with type 1 diabetes and matched with a volleyball team wrote

She knows that there is a ‘super cool’ group of girls who support her and it is removed from her school. They encourage her and ask how she’s doing and when she leaves the gym, no one can take away that empowerment.

This response acknowledges the internal strength this type of social support can provide and alludes to the fact that this empowerment will likely carry on beyond the child’s participation in the program. A parent of a seven-year-old with leukemia and matched with a baseball team

wrote, “He has been so faithful and committed to loving and caring for these young men like they are his big brothers. They bring him such joy!” This response highlights the reciprocity often seen in mentorship relationships in that the child wants to care for his teammates the way they care for him. Team IMPACT often underscores the relationships built through the program as being mutually beneficial and this response insinuates that effect. It is important to note that the emergence of role models and social support may occur at any point during the child’s Team IMPACT experience and likely spans beyond their time in the program. However, these factors may be especially important in explaining one potential developmental pathway between empowerment and the development of internal assets.

The Emergence of Internal Assets From Team-Based Factors and Empowerment

Ultimately, these supportive factors combined with experienced empowerment led to children developing internal assets (i.e., motivation, shifting perspectives, confidence, emotion-management skills, and participation). Thus, this section focuses on how participants move from experiencing empowerment and social support through role models to fostering internal assets that transcend the space of Team IMPACT. Across many responses, the emergence of belonging was discussed in connection to motivation and shifting perspectives. One parent of a 13-year-old with an unspecified diagnosis and matched with a swim team wrote, “He has hope! Seeing his teammates gives him the drive to get up and keep going.” A parent of a 12-year-old with a sickle cell disease diagnosis and matched with a basketball team added, “[He is] determin[ed] to be the best he can be.” This general hope and motivation highlights the potential for these relationships to shift children’s attitudes and behaviors in a way that will likely carry on outside of the program.

While these responses note changes in children's day-to-day determination, some parents discussed larger life perspective shifts concerning their child's diagnosis and newfound talk about the future. One parent of a 12-year-old with Crohn's disease and matched with a baseball team wrote, "[He wants] to go to college and play for a baseball team, getting excited about his future." A parent of an 11-year-old with a gastrointestinal disorder and matched with a track and field team added, "His excitement of being accepted and being a team member. Role models and thinking about what he wants to study in college." These perspectives show the participants' viewing their futures in a new positive light. These responses also emphasize the importance of empowerment on the road to general positive youth development.

A parent of a 14-year-old with connective tissue disorder and matched with a volleyball team wrote

He has something to look forward to... and a positive situation to relate to his medical condition. Previously most things related to his condition were negative... doctor's appointments, etc., but being part of Team IMPACT has provided a silver lining.

While it is likely difficult and perhaps counterproductive for children to entirely reframe their diagnosis as positive, responses like this show the impact of creating positive associations. In this case, the child sees the experience as unique and generally positive, providing him the opportunity to balance the good and bad aspects attached to his diagnosis.

Across all survey responses, confidence was the most frequent change parents reported seeing in their children. This concept was mentioned in many responses and was a significant talking point for the parents in the focus group as well. One parent of a 15-year-old with an unspecified diagnosis and matched with a tennis team wrote, "The biggest change we have seen in him is the improvement in his confidence and self-esteem to want to try new activities."

Another parent of an 11-year-old with immune dysfunction and matched with a hockey team responded that their child had “More confidence being around people he doesn't know and being willing to go out and try.” Both of these responses not only mention increased confidence levels but also a path to increased determination and participation. This increased interest in engagement was a common response and often related to activities beyond the Team IMPACT program. One parent of a 15-year-old with a heart condition and matched with an equestrian team wrote, “She has started her riding lessons again and feels more confident doing so because of her connection to the equestrian team!” This response not only highlights the child’s increased confidence and activity participation beyond Team IMPACT but directly credits these changes to the meaningful connections built through the program. A parent of an 11-year-old with Crohn’s disease and matched with a track and field team wrote, “Our son has wanted to be more physically active even when not with the team and willing to try things (a track meet) and not discouraged even when not the best.” Similarly, in the parent focus group, a parent of a 10-year-old with cerebral palsy and matched with a softball team discussed how, as a result of the program, her child’s determination had significantly increased, causing her to become more physically active. It is clear from these responses that confidence and engagement likely come hand-in-hand with children being more willing to participate and being more assured in doing so.

Some parents also discussed confidence as leading to perspective shifts and an increase in emotion-management skills. One parent of a 12-year-old with a neurological disorder and matched with a basketball team wrote, “He feels more confident and proud of himself. He is learning to regulate emotions, most of which stem from struggles to accept disappointment. Sports provide that opportunity to win and lose and have role models.” A parent of a 10-year-old with a heart condition and matched with a baseball team added, “His confidence has improved so

much. The team makes him forget he even has an illness when he is around them.” Both of these responses underscore that increasing confidence also provides children with the skills to reframe situations and leads back to a positive life view.

The Emergence of Social Skills From Team-Based Factors and Empowerment

Social growth was reported as a major change seen in participants as a result of their experience in the program and built in tandem with the previously discussed internal assets. Factors related to social skills and social growth were mentioned frequently by parents. It was recognized that becoming more social is a broad area of growth and thus was broken down into categories of proactive involvement, becoming more socially confident or coming out of one’s shell, and becoming more talkative with increased conversational content. Participants who noticed their child coming out of their shells around the team naturally recognized a comfortability with teammates and a start down the path of overall confidence. One parent of an 11-year-old with an organ transplant and matched with a softball team wrote, “She is more outgoing. Not shy at all anymore. She loves her team, they have [brought] so much out of her we didn’t even know she had in her. She has grown so much.” This parent acknowledges the team’s role in helping her child blossom and notes that she has grown more than could have been expected. This social comfortability was also often discussed as a precursor for proactive involvement and children’s interest in engaging with others.

In some cases, this engagement was with their teammates and adults, and in other cases, parents noted their children becoming more socially involved with peers outside of the program. One parent of an eight-year-old with a genetic disorder and matched with a basketball team said their child had “Increased interest in engaging with others. Presenting less anxiety at the beginning of events/new situations which had been a barrier to easing in and becoming

comfortable at those events/situations.” While this parent noted their child becoming more socially comfortable leading to an increased interest in proactive social engagement with others, some parents discussed increased proactive social involvement as tied to shifting perspective and conversational content. One parent of a 12-year-old with leukemia and matched with a lacrosse team wrote

I see her reaching out and trying to connect with people. She is looking at college not as something to be afraid of and to not want to go to but as something positive with the opportunity to make friends.

As previously discussed, in many cases children who had a shift in perspective also experienced motivation and determination. Across many responses, it is clear that perspective and attitude shifts likely stem both from this determination as well as positive social experiences and the development of social confidence.

In addition to furthered social comfortability, many children’s experiences in the program gave them something positive of their own to discuss. Many children with disabilities and serious illnesses may not have an abundance of unique and positive experiences in their personal lives to discuss with their peers. In the first parent focus group I attended, one parent of a 10-year-old with cerebral palsy and matched with a softball team talked about her daughter’s peers often discussing their sports teams, family vacations, and accomplishments that her daughter was not able to relate to. Once her daughter received her match team from Team IMPACT, she had a unique positive experience to discuss with her friends. She noted how it made her daughter feel special to have this aspect of her life that she could ‘brag’ about and that her peers were interested in, in contrast to her formerly unique experiences including medical appointments and treatments. Similarly, the response of one parent of a seven-year-old with a

genetic disorder and matched with a soccer team indicated a similar increase in conversational content saying, “He likes to use it as a conversational piece when talking to new friends. He now feels like he has something to be proud of.” Another parent of a six-year-old with an unspecified diagnosis and matched with a softball team included

Team IMPACT has given [her] more confidence and given her a real source of pride. It gives her something to talk about when her peers discuss the sports they participate in and it’s also been a great talking point for her.

From both of these responses, it is clear that these children not only have more to talk about because of an added extracurricular activity but also because of the sense of pride they have gained through the program. In the parent focus group, the parent of a 10-year-old with an immunodeficiency diagnosis and matched with a track and field team discussed her child’s experience during a ‘show and tell’ activity at their school. They chose to bring in their Team IMPACT ‘player cards’ and was proud to have this aspect of their life to share at school. The parent described the beneficial timing of starting their Team IMPACT experience as it gave her child social confidence and the opportunity to socially succeed for the first time.

Team IMPACT Participation is Centered in Positive Emotions and Experiences

Across responses, many parents wrote about their child experiencing joy while spending time with their team and feeling excited about seeing their team in the future. At the core of the Team IMPACT experience, while significant developmental growth occurs, it is crucial that the child enjoys their time with the team and generally has fun. This concept is seen as an overarching goal spanning throughout the present timeline model and resulting from strong team factors that foster relationships, and from building internal assets and social skills. One parent of an 11-year-old with type 1 diabetes and matched with a basketball team wrote, “[His] overall

spirit has been lifted so much. Any opportunity he has getting to see or be part of his team is so rewarding to him.” Many responses noted similar sentiments with parents discussing excitement in 16 responses and experiencing joy with the team in 23. One parent of a 13-year-old with an organ transplant and matched with a volleyball team wrote, “Loving to be a part of a team. The bond she has created with the team as a whole. Her excitement she has to be willing to do certain things because the team is doing it.” This response not only shows the child’s eagerness to be with the team but alludes to the child’s view of her teammates as role models and the excitement to be like them.

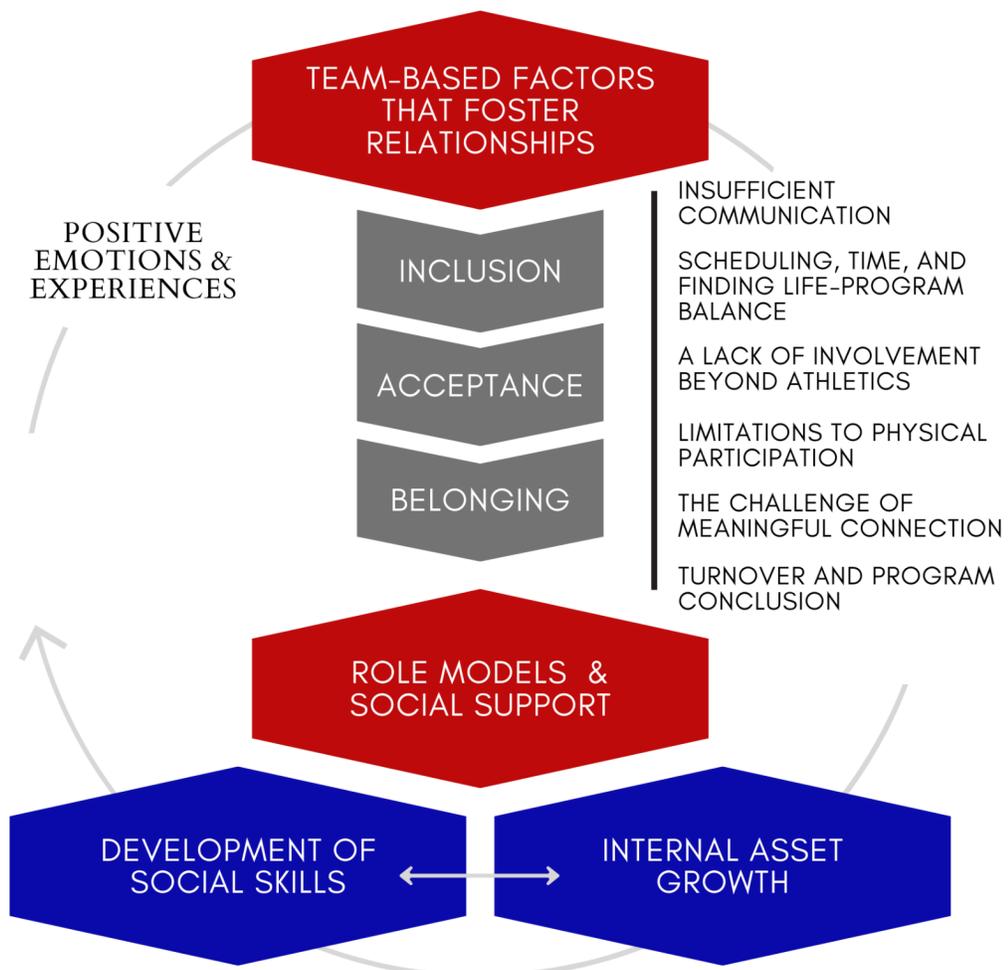
Challenges to Program Participation

In addition to the prevalent positive changes participants saw in their children, parents also identified various challenges they faced during their participation in the program ranging from minor weather barriers to difficulty making meaningful connections. These challenges are broadly mapped onto the empowerment model of mentorship along the pathway from Team-Based Factors to outcomes of social support, internal asset growth, and the development of social skills (see Figure 3). These challenges were often tied with the process of empowerment in that they hindered optimal developmental outcomes to some degree.

There were six primary challenges discussed including difficulties forming meaningful connections, insufficient communication, challenges with scheduling, time, or finding program-life balance, limitations to physical participation, and turnover or program conclusion. Throughout, I explore how these challenges may have hindered the developmental opportunities of the Team IMPACT experience; however, oftentimes the challenges parents reported could not be connected directly to specific influences on their children’s development given the depth of data.

Figure 3.

The Empowerment Model of Mentorship and Associated Challenges



Insufficient Communication

Communication was a challenge parents frequently encountered which may be a precursor for difficulties in forming meaningful connections and engagement. Communication was mentioned in 19 responses, however, there was a range of ways within which it was brought up. In many cases, parents mentioned communication with the team as a general challenge. A parent of a nine-year-old with lymphoma and matched with a hockey team wrote that their family experienced “Inconsistent communication and follow through with the team.” Similarly, a parent of an 11-year-old with cerebral palsy and matched with a baseball team wrote that the biggest challenge with the program was a “Lack of communication and connection with the team and my child.” While in responses like these, it may be difficult to determine the root of the communication difficulties or whether they were within the control of the family, team, or program, other responses expressed more pinpointed communication troubles.

Some parents noted feeling like they always had to take initiative and be the one to reach out when coordinating plans with the team. One parent of a 12-year-old with Crohn’s disease and matched with a baseball team wrote, “The team never really made much effort, either we did or team impact did. They were always welcoming, but never initiated things.” Similarly, a parent of an 11-year-old with immune dysfunction and matched with a hockey team added that the most challenging part of their experience was “Feeling like we need to initiate activities with the team versus the team taking the lead.” In these cases, it is clear that the parents want to make connections with the team, but are searching for reciprocity on the team's end.

Some responses noted that communication primarily happened with the coach rather than with players or vice versa. When there is a lack of communication and initiative on the team’s end, it may lead the family to feel disconnected from the team, especially in domains outside of

athletics. One parent of a 12-year-old with spina bifida and matched with a basketball team wrote that they experienced “Little involvement or engagement with team members off the court. Coach does weekly check-ins, but players are not involved.” As outlined in the Mentorship Model (see Figure A), the first step towards positive developmental and program outcomes in these matches is having strong team-based factors that foster relationships. Insufficient communication in any capacity presents a difficulty in optimal relations and therefore has the potential to limit the developmental outcomes. Additionally, on a day-to-day scale, when a family and team are unable to effectively coordinate meetups whether that be as a result of communication or scheduling difficulties, the child is likely not engaging with the program as much as they would like. While the *desire* to further participate is previously discussed as an internal asset driven by motivation, the *opportunity* to participate is a relational factor, and shortfalls in this area may have developmental consequences.

The Challenge of Scheduling, Time, and Finding Life-Program Balance

Across all responses, scheduling was the leading factor mentioned as the most challenging aspect of the program. In writing about the most challenging part of the program, one parent of a 15-year-old with an unspecified diagnosis and matched with a tennis team wrote, “Scheduling time during teams regular season to attend practices and tournaments. Most occurred during school times.” Similarly, a parent of a 10-year-old with neurofibromatosis and matched with a baseball team wrote that the most challenging part was “Scheduling time together. I think there is excitement at the beginning when not in season and staff/players have time but I’m guessing scheduling gets more complicated as they have more going on.” These kinds of responses were very common, noting that the schedules of college athletes often do not naturally align with the schedules of elementary and middle schoolers and their families. This

response also notes an initial surge in successful coordination when the meetups are new, and then the scheduling becomes more challenging over time. Notably, some parents did acknowledge in their responses that while scheduling was challenging, it was not in control of the team or family and was part of the experience in programs like this. One parent of an eight-year-old with muscular dystrophy and matched with a volleyball team wrote, “There really hasn’t been much for challenges. Maybe just scheduling everything but that’s going to happen regardless!” A parent of a ten-year-old with an unspecified diagnosis and matched with a basketball team added, “Not many challenges other than we are all busy so it's difficult to connect with the team. THAT IS NOT ON THE TEAM...we are a busy and active family.”

Another challenge that many families discussed was trying to balance program participation with other activities, commitments, and familial responsibilities. One parent of a seven-year-old with leukemia and matched with a baseball team wrote, “Finding the right balance of time with the team due to their school/baseball /vacation schedules to make a consistent and sincere connection.” Notably, this response not only highlights the challenges of balancing commitments and scheduling but also that this often leads to difficulties in forming meaningful connections. A parent of a 15-year-old with a genetic disorder and matched with a hockey team wrote, “Having more than one child in our family with disabilities and illnesses. Double the doctor appointments, care, etc.” Across all responses, it is important to keep in perspective that this program is solely one aspect of these family’s lives. Beyond typical school and work schedules, as noted in this response, these families often have to allot time for medical appointments and treatments, and may not always be able to make participating in this extracurricular program a priority. As previously discussed, this type of difficulty likely operationalizes as a lack of optimal participation and engagement in the program. Due to the

limited two-year nature of the program, deficient participation may be linked with less developmental change and benefit.

A Lack of Involvement Beyond Athletics

Within the challenge of feeling like they are the ones needing to take initiative, some families discussed struggling to plan and come up with ideas for activities outside of athletics. A parent of an 11-year-old with a cancer diagnosis and matched with a lacrosse team wrote, “For us, the most challenging part has been for my family to come up with activities. The coach has been great, but I'd like to be able to suggest some things.” Likewise, a parent of a 10-year-old with a genetic disorder and matched with a basketball team wrote,

I wish we had more opportunities for him to be involved with the players doing whatever.

His sisters are both big volleyball players and we are very busy with that at times. He voices his sadness that he can't be involved in a sport like that.

From both these responses, it is clear that when participants are not largely involved with the team beyond athletics, they may not be making as meaningful connections and may not be getting the full benefits of the program.

Limitations to Physical Participation

Although Team IMPACT emphasizes that its program is centered around relationships and connections rather than sports participation, in some cases, parents noted physical or illness-related barriers that limited their child from participating as much as they would like. A parent of an 8-year-old with leukemia and matched with a basketball team wrote, “He has frequent treatments and often must cancel participation due to his illness making him be away from his team.” Similarly, a parent of a seven-year-old with cerebral palsy and matched with a lacrosse team discussed the challenge of “Finding a way for her to physically participate in the

sport (she needs switch adapted things) besides ‘running’ with the team.” Though sports participation is not the organization’s goal, for some children and families, being able to do what the players are doing may feel closely linked to inclusion. This type of limitation may inhibit optimal program outcomes if a child feels that their diagnosis ‘others’ them or prohibits them from fully engaging with the team. Despite experiencing diagnosis-based barriers, some families note that as a result of these difficulties, teams found ways to ensure inclusion off the field and other families noted this challenge bringing about a positive shift in perspective.

For some participants, a shifting perspective relates more to accepting one's condition rather than having an entirely new self-view. When asked about the biggest change in their child since the start of the program, one parent of a 12-year-old with a kidney disease diagnosis and matched with a football team wrote, “Experiencing the sideline and understanding the physical demand that goes into the game and why he actually can’t play. Accepting the reality/his medical condition and coming to terms with it.” While it is likely difficult for a child to be aware of physical limitations to participation, this response notes the child processing these limitations through observation of the team. Seeing this firsthand while still being socially and recreationally included allows the child to make this discovery on their own rather than simply being told they are not able to physically participate.

The Challenge of Meaningful Connection

As identified by the timeline model, meaningful connections begin being built once a child has already been included and accepted into a group. These connections not only require buy-in on both ends but also an abundance of time once a family has coordinated scheduling and meetups. These connections also often require strong social skills and confidence as developed through the program. Participants discussed feeling discouraged when their child did not form

immediate bonds with their teammates and frustrated around the ebbs and flows of tight-knit connections. One parent of a nine-year-old with an unspecified diagnosis and matched with a basketball team wrote,

I think the most challenging part is once the season is over and he's finally bonded and formed trust in the guys it takes steps back because he doesn't see or talk to them for months, so then he has to start over again in getting to know them.

This response intertwines the present challenge around forming meaningful connections with seasonal challenges. When sports teams are out of season, many players return to their out-of-state homes and there are no scheduled games or practices, significantly decreasing the amount of meetups possible. Not only does this limit participants from creating initial bonds with their teammates, but also prevents them from sustaining consistent relationships. Another parent of a 14-year-old with a genetic disorder and matched with a basketball team wrote, "The most challenging part has been making a solid connection with the team, versus being there as spectators." It is clear from this response and others that even in cases where scheduling and meetups go smoothly, there is a step to be taken between inclusion into the team and forming lasting bonds. Meaningful connection was the second most mentioned difficulty.

Turnover and Program Conclusion

Many parents discussed the emotional toll of players or coaches leaving the team after having formed meaningful connections. When asked about the most challenging part of the program, a parent of a 12-year-old with immune dysfunction and matched with a football team wrote, "Seeing players leave the program. Thankfully, we've been able to keep in touch with most of them through social media, but some of the players leaving were really hard to navigate!" While this parent does acknowledge that they will stay in touch with the graduated

players, they also recognize that it will not be the same experience as seeing them for every meetup and maintaining the same level of closeness. A parent of a 10-year-old with an unspecified diagnosis and matched with a basketball team wrote, “Coach left after the first year. This was devastating to him. Sometimes it's difficult finding ways for him to ‘fit in’ or feel like he is giving back to the team.” This response alludes to the coach being one of the primary individuals ensuring the child’s belonging on the team, and thus, the loss of the coach has made it difficult to navigate finding a role on the team.

Though the Team IMPACT program is designed to be an organized experience for two years, some families expressed difficulty and sadness around the end of their time with the team as a result of having an extremely positive experience. A parent of a 13-year-old with leukemia and matched with a wrestling team wrote that their biggest challenge with the program was “The fact that it ends. We are hopeful that the connections he made will continue even after he graduates from the program.” Similarly, when asked about the biggest challenge with the program, a parent of an 11-year-old with a blood disorder and matched with a basketball team wrote, “Nothing, being a part of team impact was life-changing. The hardest part was graduating from the program. Wish we could stay with you all forever!!!” Though these responses are from the question regarding the biggest challenge to program participation, the struggle with program conclusion alludes to a presence of meaningful connections making it difficult to part ways.

Follow-Up Exploratory Chi-Square Analysis of Relationships Between Thematic Findings

One-way classification chi-square analyses were performed to examine the relationships between themes reported at least 5 times at 12 months and 24 months. It should be noted that no tests were run on the reported challenge of ‘COVID’ despite having 5 inclusions at 24 months due to the increased prevalence of this challenge at the time of data collection. Regarding

reported changes parents saw in their children, the frequencies of confidence were not significantly different at 12 months and 24 months, $\chi^2(1, N = 177) = .0025, p = <.05$. The frequencies of reported belonging were also not significantly different at 12 months and 24 months $\chi^2(1, N = 177) = 1.10, p = <.05$. All frequencies of reported themes are seen in Table 1.

Discussion

Parents of Team IMPACT participants largely identified and expressed positive changes in their children as a direct result of their program experience while also noting prevalent challenges to participation. Guided by positive youth development (PYD; Lerner et al., 2005) and the self-determination theory (SDT; Ryan & Deci, 2002), I identified how a range of developmental outcomes in participating children emerged from relational factors of mentorship. Overall, the data suggested that team-based factors that foster relationships promote a phased process of empowerment which leads to children having role models and social support, growing in a range of internal assets (i.e., confidence, motivation, etc.), and developing their social skills (i.e., increased conversational content, proactive social involvement, etc.). The overwhelmingly positive responses support the idea that the program was both fun and beneficial for participating families and led to lasting outcomes rooted in positive development and self-determination.

Understanding the Empowerment Model of Mentorship in the Context of PYD and SDT

The findings and model outline the complementary aspects of these theories and how the processes of building PYD and SDT may often occur hand-in-hand. The identified first step towards empowerment and general positive outcomes through mentorship was the presence of strong team-based factors that support relationships (e.g. strong communication and inclusion leading to a child feeling like they belong). In alignment with SDT, inclusion is often the first step in empowerment towards children developing a sense of belonging and ultimately a range of

other developmental benefits (Ryan & Deci, 2002). As a result of teams making children feel included, empowered, and like they belong, athletes emerge as role models and a source of social support for participants. PYD is seen in this emergence through the formation of connections. Subsequently, the qualities outlined in both PYD and SDT are seen developing symbiotically in participants' internal asset growth resulting from program participation. The internal assets developed including confidence, participatory competence, and motivation (i.e. the emergence of self-determination) are discussed as stemming from children forming connections with the team and a sense of belonging with the group. These factors such as confidence additionally support the development of social skills, further aligning with the competence outlined through PYD and SDT. The present model brings together these theoretical frameworks in demonstrating the symbiotic emergence of PYD and SDT qualities.

In addition to supporting the unison of these theories, this study also sheds new light on PYD and SDT in addressing the specific needs of children with disabilities and serious illnesses. While present literature on PYD typically discusses five developmental components for thriving (i.e. competence, connection, confidence, character, and care/compassion) as individual inputs (Lerner et al., 2005), this study expands this framework to consider the interactions between these factors within mentorship programs for children with disabilities and serious illnesses. As previously discussed, competence, connection, and confidence emerged as the three most prominent of these qualities in the present study. Rather than appearing as independent inputs, these qualities were found to influence and rely on one another. Many families who discussed the building of meaningful connections, for instance, also mentioned this experience giving their children confidence and allowing them to develop social competence. Former literature and studies that utilize PYD to understand mentorship relationships acknowledge there has not been

direct research on the 5Cs of PYD as cumulative entities in considering nuances of co-occurring aspects of mentorship that may impact positive development as a broad process (Erdem et al., 2016).

This study additionally contributes to knowledge of how SDT evolves via mentorship with children with disabilities and serious illnesses. Teams that made children feel included and accepted fostered a sense of belonging, which was identified as a key phase of the program and in their development of self-determination. In addition to fulfilling a basic human need, finding belonging allows children to better form their identities, gain a sense of which communities they fit into, and develop protective factors against future adversity (Sulimani-Aidan et al., 2021; Theriault & Witt, 2014; Rhodes, 2005). Though autonomy was not directly analyzed in the present study, the development of belonging and competence were closely related and likely not independent of one another. As explained by SDT, autonomy likely was present in many participants' program experiences as results of motivation and self-determination were reported. In identifying belonging and competence as symbiotic, belonging, in many cases, appeared as a precursor for competence. Upon feeling a sense of belonging, children commonly flourished in their development of social and participatory competence among several other skills and capacities. This finding is particularly significant for children with disabilities and serious illnesses in informing future methods for the fostering of competence in similar groups of children. While there likely are alternate successful forms of promoting competence, it is beneficial to understand that this quality can be developed through first fostering a sense of belonging. The study also revealed connections between belonging and competence in several areas of growth, thus expanding the SDT framework in suggesting that these factors foster more than motivation (i.e. internal assets, social skills, and the emergence of role models and social

support). It is beyond the scope of the study to determine if these areas of growth (i.e. confidence, perspective, etc.) occur in synchrony with motivation (i.e. as a direct result of developing belonging and competence) or as a later result of increased motivation (i.e. whether they emerge as part of the SDT or beyond it).

Through recognizing the prominent challenges families faced in aspects of their Team IMPACT experience, we can understand which developmental goals and areas of growth may have been hindered and how those may limit the optimal PYD and SDT outcomes. For example, social support and meaningful connection have been identified as crucial in mitigating social isolation and promoting positive protective factors (Chapman et al., 2017). For participants who discussed struggling to form these meaningful connections, this challenge likely puts children at significant risk of falling short of getting the full potential benefits of the experience. Within this, as previously discussed, the formation of meaningful connections is tied closely to allowing children to feel like they belong as well as the emergence of social skills and confidence. Without this sense of belonging or opportunity to develop these skills, a barrier is placed between a child being an ‘outsider’ with the team and their potential to integrate and thrive. Though less clearly linked to disturbing a developmental capacity, it should also be noted that the prominence of logistical challenges (i.e. scheduling, time, transportation) likely limited children’s optimal level of immersion in the program and subsequently their developmental outcomes.

Organizational Implications

The identified benefits of participation in Team IMPACT speak to the program’s importance as well as the value of mentorship programs in general. This research highlights the aspects of matches that support the utmost developmental benefits for participating children and

the actions teams can take such as practicing inclusion, acceptance, and strong communication to support successful match experiences. There are some changes Team IMPACT could implement to further promote positive experiences and outcomes for participating families. First, while building meaningful relationships likely requires time beyond the first few meetups, the importance of this factor could be emphasized. The organization could recommend more frequent meetups within the first months of matches when feasible. This may expedite the process of initial bonds becoming meaningful connections and allow children to gain developmental benefits for the majority of their time in the program. As previously discussed, the presence of meaningful connections mitigates the social isolation for which these children are at increased risk. If children are also building competence and confidence simultaneously, they become equipped with the skills and assets to be more social and independent in forming relationships in their futures, further protecting them from predisposed risk factors. Prior research on mentorship programs notes that increased intensity or dose of interactions in mentorship relationships leads to increased perceived support by children and therefore likely increased presence of meaningful connections (Erdem et al., 2016)

Additionally, the training program that all teams go through before meeting their match could include direct connections to the qualities we now know are crucial to positive development and general program experience. For example, while the importance of making a child feel included is implied through the nature of the program, the typical three stages of empowerment could be directly named in the team training program for athletes to better understand how to support their teammate's development through inclusion, acceptance, and belonging. Parents routinely included in responses the concept of their child finding belonging through their program experience. As previously discussed, children with disabilities and serious

illnesses may often feel socially “othered” or like they do not fully fit in with their peers. Given these predisposed risk factors including social isolation, heightened anxiety, depression, and emotional difficulties (Maes et al., 2017; Merikangas, 2010), these findings suggest that these dangers may be lessened through informed actions and promotion of empowerment by mentors. Within this, if a child only feels accepted into the team in sports-based settings, they may sense their belonging with the team as conditional and may have difficulty transferring the resulting confidence and social skills from these relationships to life aspects beyond the program and sports spaces. Teams’ actions being developmentally informed may also help them practice inclusion and acceptance in spaces less familiar than sporting environments.

Many participant’s responses aligned with the findings of Andrade et al. (2021) about children’s perceptions of their environments influencing their motivation and determination. When children perceived their team environments as inclusive, accepting, and like they belonged, responses indicated increased motivation. Within this, it may be beneficial for teams to be aware of families’ specific developmental goals for their children. Using the empowerment model of mentorship and the previously discussed results, teams may be able to tailor their actions based on the families’ demonstrated needs and goals (i.e. small group interactions with a shy child hoping to come out of their shell, adapted or non-sport activity plans for a child with limited physical participation). This also aligns with prior research suggesting the importance of defining clear outcome goals in the early stages of mentorship relationships (Adams et al., 2019). In conducting exploratory quantitative analysis, I hoped to find differential frequencies of reported themes across time points which could have informed teams’ actions and goals more specifically. For example, if the code of ‘confidence’ had been reported significantly more frequently at 24 months than 12 (i.e. not seeing a surge in confidence until the second year),

teams could have used this knowledge in effortfully promoting confidence more during the first year.

Finally, given the frequency with which families discussed challenges with communication, scheduling, and involvement beyond athletics, creating a plan in these domains early on in the match may be beneficial. In this, case managers may work with participating teams and families to overview preferred communication styles, typical schedules, and ideas for meetups outside of sports during the beginning stages of each match. This would ensure that teams, families, and case managers have aligned understandings and have an outlined plan for the next two years which may help eliminate or lessen several of these logistical challenges.

Limitations and Future Research

The completion of this study includes limitations that can be addressed in future research. First, because of the rolling data collection and the fact that baseline surveys do not include open-ended questions, most of the analyzed data did not have multiple time point responses from the same participants. Though data collection continued over this year, I only looked at responses that were received by Team IMPACT between August 2022 and October 2023 to feasibly analyze the data within the time frame of this thesis. This relatively short time frame also made it unlikely for participants to complete multiple surveys spaced 12 months apart. Among the survey responses analyzed, several were cut short by the online survey technology. While these responses typically had notable and valuable information, it is important to note that I was unable to analyze some parents' responses in full. Additionally, though I was planning to virtually attend two to three parent focus groups throughout the year to collect anecdotal data, these sessions often had to be rescheduled and canceled due to a lack of sign-ups. Future studies can consider other methods that align with parents' availability and interest in further triangulating data.

Finally, though the sample size was moderate and included a range of child characteristics, the sample was not especially racially diverse. Given this knowledge, these findings should not be generalized to all Team IMPACT participants, some of which may not be represented by the present sample. Future studies could aim to collect survey responses from a more diverse population which may require working to diversify program participants in general. This research could also use survey responses from a longer time period to ensure the inclusion of the same participants' responses over multiple time points to identify potential changing trends in responses over time. Another limiting factor of the present study was the small response rate, particularly at 12 months and 24 months. Because of this, the sample was likely biased and therefore the analysis should not be considered all-encompassing program evaluation.

I conducted an exploratory quantitative analysis of my qualitative findings to detect any longitudinal changes in response trends for both questions. While the sample size at 24 months was too small to yield any significant results, this research may be built upon in the future to systematically expand the implications of the Mentorship and Empowerment models. Using more data and perhaps including open-ended questions in the baseline survey may allow for more notable frequency trends in reported themes throughout the program. This would allow Team IMPACT's clinical team greater insight into which changes and challenges may be more prevalent in the first year of program participation and which in the second. Further research in this area would allow the organization and participating teams to make any necessary actionable changes to counter challenges at pinpointed times.

Conclusion

Team IMPACT participants saw positive growth in a range of developmental areas as a result of their experience in the program. The significance of building strong internal assets and

social skills, particularly as protective factors for children with disabilities and serious illnesses, underscores the crucial role of mentorship relationships in helping children build connections, competence, and a sense of belonging. The development of each of these qualities supports the connections between exposure to mentorship relationships, positive youth development, and self-determination, consequently setting children up for developmental success in and beyond the program.

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Table 1. Thematic Trends*Question 1: Biggest Change Seen in Child Through Team IMPACT*

Theme	Number of Responses at 12 Months (N = 144)	Percent of Responses at 12 Months	Number of Responses at 24 Months (N = 33)	Percent of Responses at 24 Months
Acceptance	12	8.33%	2	6.06%
Belonging	13	9.03%	5	15.15%
Coming out of shell	9	6.25%	1	3.03%
Confidence	43	29.86%	10	30.30%
Conversational content	8	5.56%	0	0.00%
Excitement	17	11.81%	1	3.03%
Feeling special	8	5.56%	0	0.00%
Inclusion	7	4.86%	3	9.09%
Joy	10	6.94%	2	6.06%
Joy of sport	10	6.94%	1	3.0%
Joy with team	16	11.11%	1	3.03%
Meaningful connection	6	4.17%	4	12.12%
Motivation	4	2.78%	3	9.09%
No change	4	2.78%	1	3.03%
Other	1	0.69%	0	0.00%
Participation/engagement	18	12.50%	1	3.03%
Perspective	9	6.25%	1	3.03%
Pride	6	4.17%	0	0.00%
Proactive involvement	14	9.72%	0	0.00%
Problem-solving/identification	1	0.69%	2	6.06%
Role models	6	4.17%	1	3.03%
Support	5	3.47%	1	3.03%
Synergy	1	0.69%	1	3.03%
Talk of future/hope	3	2.08%	1	3.03%
Talkative	12	8.33%	0	0.00%
Team pride	3	2.08%	0	0.00%

Note. Shaded rows indicate those included in quantitative analysis.

Question 2: Biggest Challenge Family Faced in Team IMPACT Participation

Theme	Number of Responses at 12 Months (N = 144)	Percent of Responses at 12 Months	Number of Responses at 24 Months (N = 33)	Percent of Responses at 24 Months
Acceptance	1	0.69%	0	0.00%
Advanced notice	2	1.39%	1	3.03%
Balance	13	9.03%	3	9.09%
Belonging	1	0.69%	0	0.00%
Coach turnover	3	2.08%	0	0.00%
Communication	16	11.11%	2	6.06%
COVID	6	4.17%	5	15.15%
Developmental factor	2	1.39%	0	0.00%
Diagnosis barrier	2	1.39%	0	0.00%
Distance	6	4.17%	1	3.03%
Expectation management	2	1.39%	0	0.00%
Game/event time/length	2	1.39%	1	3.03%
Illness barrier	6	4.17%	0	0.00%
Initiative	4	2.78%	1	3.03%
Involvement beyond athletics	15	10.47%	1	3.03%
Meaningful connection	19	13.19%	0	0.00%
No challenge	11	7.64%	2	6.06%
Other	1	0.69%	0	0.00%
Personal factors/other	1	0.69%	0	0.00%
Physical barrier	4	2.78%	0	0.00%
Player turnover	0	0.00%	2	6.06%
Program ending	0	0.00%	1	3.03%
Scheduling	38	26.39%	3	9.09%
Seasonal challenges	6	4.17%	0	0.00%
Shyness/group size	2	1.39%	1	3.03%
Time	5	3.47%	0	0.00%
Transportation	4	2.78%	0	0.00%
Weather	2	1.39%	0	0.00%

Appendix A. Qualitative Codebook

Question 1: Biggest Change Seen in Child Through Team IMPACT

Metatheme	Code	Definition	Sub-Code	Sub-Code Definition	Sample Response
Team-based factors that foster relationships as reported by families - One or more aspects of the group experience specifically have impacted the child					
	Role models	The child sees their teammates as setting an example and looks up to them as individuals			"He felt included and like he was part of something. It took the focus off of the lack of friends he had during treatment. It made him feel important and included. It kept him inspired to return to his sports. It provided role models for him to look up to"
	Inclusion	The child has been brought into activities and is made part of the group			"Our son doesn't have friends his age and often feels left out. When he is with the team he feels included and special. The men make a point to be kind and treat him like everyone else."
	Team pride	The child feels connected to and satisfied with the team's performance and identifies with the team			"He feels proud to be a part of the team. His peers think it is so cool. All of his friends are in sports he cannot participate in. There are things he is unable to do in physed. Daily he feels left out. Some days his differences feel bigger..."
	Synergy	The child has the sense that they are part of something bigger than themselves			"He looks at life differently. He went from why me to feeling lucky that he is different. He now feels like this was meant to be so he could be a part of the team and something bigger."
	Belonging	The child feels like part of the group and does not feel 'othered'			"Pride and sense of belonging as well as a renewed interest in activity/basketball"
	Acceptance	The child feels welcome and included on the basis of who they are despite any particular trait			"His excitement of being accepted and being a team member. Role models and thinking about what he wants to study in college."
	Meaningful connection	The child feels socially linked to the team and others			"She feels she is a part of the team and enjoys receiving updates from players, learning about each teammate, sharing stories, finding commonalities with each other and genuinely looks forward to the back and forth of friendships."
	Support	The child knows they are not alone and feels that their teammates are there for them			"They have been so supportive on and off the court! They help with getting her through her many, many surgeries"
Internal asset growth - The child has developed personal skills, values, or characteristics that carry beyond the program					
	Confidence	The child trusts their abilities and is more independent and socially assured			"More confidence being around people he doesn't know and being willing to go out and 'try'"

	Perspective	The child has shifted their views, typically those relating to their diagnosis, and how 'important' it is/the degree to which it affects their daily life and thoughts. This could also relate to how the child views the world in general			"He has something to look forward to ... and a positive situation to relate to his medical condition. Previously most things related to his condition were negative ... dr's appointments, etc., but being part of Team IMPACT has provided a 'silver lining'"
	Participation/engagement	The child involves themselves more in activities in and out of the program	Motivation	The child feels determined to participate in activities in and out of the program	"He has genuinely loved being around the college women at UCI, though she does not like sports in 'general'—she's been more willing to take part in after school programs and she is definitely improving!!"
	Pride	The child feels satisfied with their performances and accomplishments			"More confident and proud"
	Feeling special	The child feels their differences are appreciated and like they positively stand out			"The fact that the team always makes him feel welcomed and SPECIAL."
	Problem-solving/identification	The child can name their struggles and independently come up with solutions			"The ability to recognize and name her frustrations and fears and come up with solutions."

Development of social skills - *The child has grown in their ability to interact with others independently*

	Coming out of shell	The child is overcoming a previous shyness and becoming more comfortable with others and their surroundings			"I think the best part of Team Impact is her coming out of her shell more and being more open to experiences."
	Talkative	The child is more vocal and confident in speaking with teammates and peers outside of the program	Conversational content	As a result of their experience in the program, the child has something of their own to discuss with others	"More confidence among her peers. She gets nervous to be around all the girls but talks nonstop when she gets there."
	Proactive involvement	The child involves themselves with others and actively relates with others			"She is more involved and wanting to get out and be with others. She has more friends now"

Increase in positive emotions - *The child is positively impacted in their experience and management of emotions*

	Joy	The child experiences general happiness	Excitement	The child looks forward to their time with the team	"He enjoys being part of a team and is excited to see the team."
			Joy with team	The child has experienced happiness as a result of or during their time spent with the team	"She is much more confident, she is much happier, especially when she is with the team."
			Joy of sport	The child's interest in the particular match	"Continues to love sports and follows the games when they are playing away."

				sport or sports in general has grown	
	Talk of future/hope	The child is inspired to expect positive outcomes in the future and is thinking beyond the present			“Wanted to go to college and play for a baseball team, getting excited about his future.”

Question 2: Biggest Challenge Family Faced in Team IMPACT Participation

Metatheme	Code	Definition	Sub-Code	Sub-Code Definition	Sample Response
Personal factors - One or more of a child's characteristics have made their experience challenging					
	Shyness/group size	The child is more reserved and struggles with the social or large group aspects of the program			"She is SUPER shy...so while her team is amazing and we see them plenty, it can ebb and flow depending on schedules and she's always slow to talk after a little while. I think a lot of kids thrive on having the entire team but she often does better in sma..."
	Expectation management	The family struggles with managing emotions around unpredictable schedules and changes to upcoming activities			"Managing the expectations of how much Josh should be involved. It's sometimes hard to go to a game but not get to greet teammates. Or not know about things until the last minute."
	Limitations to physical participation	One or more aspects of the child's diagnosis have held them from participating to the full extent	Illness barrier	The child's illness or medical treatments have impacted their engagement level or general program experience	"He has been sick or in the hospital so often he hasn't been able to spend much time with the team or interact with them"
			Physical barrier	The child feels unable to physically participate as much as they would like due to physical limitations	"That he's unable to run around with the team due to his illness"
	Developmental factor	One or more of the child's traits/abilities prevents them from having the fullest experience			"His ability to sustain attention"
Coordination factors - The family has had challenges with one or more aspects of coordinating meetups					
	Time	The family has had trouble, in general, finding or making time to fully participate in the program	Scheduling	The family has struggled to plan and set up times with the team due to family and/or team time frames	“Scheduling time during teams regular season to attend practices and tournaments. Most occurred during school times.”
			Balance	The family has found it challenging to manage the time spent participating in the	"Coordinating schedules, mostly on my end because she has two older siblings living their best life, and I'm their ride. =)"

				program with other life commitments including school and schoolwork, other children, medical appointments, etc.	
	Communication	The family has experienced difficulties in connecting with the team about plans or feels the team does not reach out as often as they would like	Advanced notice	The family has had difficulty with the timeliness of finding out about meetups/events	"The short notice of when we connect with the team outside of games."
			Initiative	The family struggles with feeling like they are typically the ones reaching out to the team	"The team never really made much effort, either we did or team impact did. They were always welcoming, but never initiated things."
	Involvement beyond athletics	The family has had difficulty in either planning, coming up with, or initiating activities and meetups outside of practices and games			"Connecting with the team outside of practices/ games and off season"
Travel barriers - The family struggled with one or more aspects of attending meetups					
	Transportation	The family struggles with a travel barrier including car access or gas/parking prices			"Travel & tickets/parking. We wish we could be at more games but out of town ones are tough. We did stay at a hotel for conference and went to the games. We pay parking regularly wherever we are. Sometimes we aren't on the ticket sheets so it can a..."
	Distance	The far location of the team/school in comparison to the family's home makes it difficult for them to make the trip as regularly as they would like			"The distance - we knew going in it was a long drive - but didn't expect gas prices to be so high. That was a stretch for us at times."
External Factors - Aspects that made the family's experience challenging but were not directly controllable by the family, the team, or Team IMPACT					
	COVID	The family's experience in the program was negatively impacted by the pandemic and lack of opportunities for in-person connections during that time			"Covid. We were virtual for 95% of her first year with team impact, which made it difficult to build relationships with the team over zoom. Now that we are able to see them in person, she is starting to build more meaningful connections to the girls on the"
	Weather	Physical outdoor elements and unpredictable have prevented the family from being as engaged as they would like			"The weather. Sometimes it's too cold to go out but we make it work in other events"

	Sports seasonal challenges	The family struggles with maintaining the same level of connection over the summer when school/sports are not in season			"Having regular meetings/communication in-season and when school is not in session. The players are so very wonderful to my son when we see them, but there hasn't been much carry over beyond that."
Relational traits - One or more aspects of the program and group experience specifically have been a challenge for the child					
	Belonging	The child does not yet feel like they are fully part of the team			"The most challenging part has been making a solid connection with the team, versus being there as spectators"
	Acceptance	The family doesn't feel that the child is fully appreciated and welcomed as a result of their differences			"Making her feel apart & not different because she doesn't have a uniform, as she already feels she's different in so many ways from others"
	Meaningful connection	The child has struggled in the making and/or maintenance of emotional connections with teammates			"Communicating with team, no communication or challenge to build a relationship with team members"
Team-based factors - Aspects of the team or sport have made the experience challenging					
	Turnover	Changes in the team have been difficult for the child	Coach turnover	The child/family struggled with the experience of a coach leaving the team with whom they had built an emotional connection	"Coach left after the first year. This was devastating to him. Sometimes it's difficult finding ways for him to 'fit in' or feel like he is giving back to the team."
			Player turnover	The child/family struggled with the experience of players leaving the team with whom they had built an emotional connection	"Seeing players leave the program. Thankfully, we've been able to keep in touch with most of them through social media, but some of the players leaving were really hard to navigate!"
	Program ending	The child/family struggles with the program only being two years long and doesn't want it to be over			"The fact that it ends. We are hopeful that the connections he made will continue even after he graduates from the program."
	Game/event time/length	The times and lengths of games or sporting events can be long hours and late in the evening which is challenging for kids			"Sitting through long meets. Not a big deal though... we made it work."