

From Ambition to Achievement: Parental Support in U23 Biathlon Athletes' Career Path to the Elite Level

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Abstract

Parents play a crucial role in athletes' careers and athletic development. This study employed a qualitative method using semi-structured in-depth interviews with four talented Norwegian junior biathletes and one parent each. The study is aimed to gain comprehensive insights into the interplay between parental support and the athletes' development. The data analysis generated four central themes. The findings confirm the essential role of parents' practical support, such as transportation, equipment, and financial contributions, in the developmental phase. This support, significant in the early stages, continues throughout the athletes' careers, but the need for it gradually reduces as athletes become independent and other support systems become more crucial. Over time, the shift in 'the parents' role necessitates developing other support networks in athletes' athletic development, where the magnitude of parents' later involvement are related to providing emotional support. Parents' continuous support and focus remain crucial despite the growing importance of other support systems. Notably, fathers maintain a significant leadership role, particularly concerning equipment and sponsorship, suggesting their enduring influence even during mastery. This study contributes to the understanding of parental involvement in athletic development by highlighting the evolving nature of parental roles, particularly emphasizing the sustained leadership of fathers in equipment and sponsorship, and underscoring the necessity of emotional support as athletes transition to independence.

Keywords: *Biathlon, Athletic Development, Early Career, Parental Role, Parental Support*

Researchers interest in parental involvement in youth sports dates back to the 1980s, with early studies underscoring the crucial role of parents in encouraging children to participate in sports (Gould et al., 1985). From the initial recognition of parents' significance, Côté's study (1999) focused specifically on the importance of parents in talent development, highlighting their dynamic influence on the trajectory of young people's sporting careers.

In the decades following Côté's research, the role of parents in youth sports has gained increasing attention. More recent studies have supported parents' key involvement in an athlete's career (Knight, 2019), leading to a significant surge in research on parental involvement in youth sports. Despite this increased focus, contemporary researchers continue to call for further exploration into the influence of parents in sports (Bonavolontà et al., 2021; Holt & Knight, 2014). A budding area of focus for research is the various transition periods in athletes' careers,

considering their pivotal role in their development path. Nevertheless, Tessitore (2021) underlined that despite the critical parental role in supporting dual career (DC) athletes, only 14 contributions over 20 years reflect a lack of scientific literature in this area, indicating that research in this field is still in its infancy.

Parental influence may vary extensively across transition periods (Tessitore, 2021). In a special issue about dual careers and transitions (Stambulova & Wylleman, 2015), the authors contemplated on how their research supports athletes coping with changing transitioning demands by utilizing social support and personal resources—overcoming barriers to adjust to demands both in sports and studies, and furthermore living situations in elite sports schools. The transition from secondary school to higher education among talented athletes can coincide with increased parental academic expectations, intensified training, and significant biological,

psychological, and psychosocial changes (Debois et al., 2015). Brown et al. (2015) discussed how student-athletes faced two athletic transition demands: competition for selection and training, and lifestyle expectations. They also identified potential barriers to successful transitions, such as parental overprotection. In their study, Debois and colleagues (2015) reported significant discrepancies in how parents supported the interviewed athletes. Some had logistical and emotional support, whereas others felt a lack (and even constraining) of parental impact.

These varied parental roles emphasize the importance of a holistic approach to career development. One of the first to outline athlete transitions was Wylleman and Lavalée (2004), who used their developmental model, which included athletic, psychological, psychosocial, and academic/vocational levels. Later, Wylleman (2019) incorporated financial and legal levels, creating the Holistic Athletic Career Model (HAC). In HAC, parents' involvement is considered necessary on many levels and expected to evolve as athletes' needs change, particularly in the athletic, psychological, and psychosocial dimensions. Previous research has significantly progressed from merely outlining parents' roles to examining their influence on the performance and well-being of young athletes. This exploration has underscored individual, environmental, and cultural factors as critical elements in this context (Dorsch et al., 2021), facilitating recommended strategies for optimizing parental involvement (Knight, 2019).

Parental involvement is characterized by the extent of interest, knowledge, and active participation in their children's sports (Holt et al., 2009). This involvement can vary among caretakers, with research pointing to differences between mothers' and fathers' roles (Coakley, 2006; Messner, 2009; Wuerth et al., 2004). Parental involvement and support in youth sports are multifarious, including different types of backing such as informational support, instrumental support, emotional support, and autonomy support, all of which evolve as the young athlete develops (Burke et al., 2023a; Holt & Knight, 2014; Lundy et al., 2019). A recent systematic review study shows the importance of parents for young athletes' motivation (Gao et al., 2024). Studies have demonstrated how parents influence children's sports participation and performance through their attitudes, expectations, and actions (Eccles & Harold, 1991; Fredricks & Eccles, 2005). Research also points to differences in how mothers and fathers support their children in sports, where fathers often take on coaching roles, providing more directive behavior, while mothers typically act as facilitators, offering practical and emotional support (Coakley, 2006; Messner, 2009; Wuerth et al., 2004). This distinction stresses the need to consider gender differences in parental support and their impact on athletic career development.

Studies have found that parents' competence and experience in the sports field significantly impact their child's sports development (Gao et al., 2024). Mastering sports parenting involves various skills, such as choosing suitable sporting opportunities, providing necessary support, employing appropriate parenting styles, and adjusting commitment according to the athlete's career stage (Larson et al., 2022). Parents with sports competence may incidentally know how to support their children's autonomy and guide decisions related to their sports careers. The unique context of biathlon parents plays a vital role in developing skiers at an elite level by providing practical support, financial support, and time investment (Rykhus, 2017; Lundy et al., 2019). However, there is minimal research on the parental role in biathlon. Biathlon, combining cross-country skiing with rifle shooting,

necessitates significant involvement from parents due to its complex preparation and safety concerns. Jørgensen and colleagues (2000) highlighted that interactions with parents and siblings were valuable for learning life-coping skills in biathlon athletes. To develop our understanding of athlete transitions and parental involvement, the present study explores the role of parents' practical and emotional support on the holistic development of talented biathletes. This includes personal, academic, social, and sporting evolution during their athletic careers' development and mastery phases.

Methods

Design and Philosophy

We assert that "truth" is not singular in our examination but emerges from interactions and co-creates with the participants during our investigation. Therefore, we position ourselves within a social interactionist ontology, utilizing an interpretivist approach (Ponterotto, 2005), to understand participants' meaning of their experiences and the relationships between athletes and parents.

Besides his academic career, the first author has extensive experience working in elite sports in Norway, including attendance at four Olympic and four Paralympic Games as a sports psychology consultant and working with more than 50 national teams, including biathlon. The second author has a Master of Science in sports psychology and extensive general knowledge about sports and biathlon. The third author also has extensive knowledge about sports in general as a sports science professor specializing in talent development in sports. With colleagues, he is currently focusing on research on elite youth athletes and their parental involvement, which the present investigation is part of. He is also a dad to children in sports.

Our diverse experiences and backgrounds give us meaningful insights into elite sports' psychological and social dynamics. This allows us to approach the research with rich contextual understanding and practical expertise. However, our close association with the sports community and personal involvement as parents in sports could introduce potential biases. We acknowledge that our perspectives shape our interpretations, emphasizing the importance of reflexivity and ongoing dialogue to ensure a balanced understanding.

Participants

The sample included eight individuals: four athletes (two male and two female, mean age 21.8 years, $SD = 0.56$) and four parents (two mothers and two fathers). The athletes were chosen based on their ambition for elite status in biathlon, and one parent of each athlete was included for convenience and availability. This method allowed us to capture nuanced perspectives within a manageable framework and ensured consistency in representing each athlete's support system.

Our sample size, while small, reflects the focused nature of the cohort, consisting of young athletes and their parents. This approach aligns with the notion that targeted research questions can yield valuable insights even with fewer participants (Malterud et al., 2016). As Braun and Clarke (2021) highlight, sample size in qualitative research is often guided by pragmatic considerations, including local norms and practical constraints like time and resources. These factors influenced our decision, ensuring the feasibility and relevance of the study.

Procedure

The study was conducted per the Declaration of Helsinki and approved by Norwegian Social Sciences Data Services (reference number 191682). This document used AI tools, specifically ChatGPT and Grammarly, to proofread the language, strictly following their designated purpose and guidelines and ensuring ethical usage. The AI did not generate new content but facilitated the editing and proofreading. No personal or sensitive data was shared with these AI tools.

The participants were given written information in advance and volunteered their written consent to participate. The data was collected through separate semi-structured interviews (players and parents independently) conducted in the spring of 2023. The interviews were conducted using video meetings (Teams) and an audio recording service (Nettskjema-dictaphone mobile app). The procedures were adapted and adjusted to accommodate the 'biathletes' and 'parents' schedules and requirements. Participants were informed of their voluntary participation and the ability to withdraw at any time before publication.

To ensure confidentiality, the participants were given pseudonyms. As mentioned, the interviews took place digitally (Teams) in March and April 2023, lasted approximately 31 minutes ($SD = 4,53$), and were held by the second author. The interview guide was inspired by Wylleman's perspective (2019) and organized around the themes: 1) parents role and support in the development phase, 2) parents role and support in the mastery phase.

The interview guide was meticulously designed to align with the study's theme and theoretical framework, enabling a socially constructed understanding of the parental role in biathlon. Inspired by Wylleman's (2019) emphasis on the interaction between developmental domains, the questions sought to capture both the positive and challenging aspects of parental involvement. The guide included targeted questions to explore practical and emotional support at various developmental stages, providing a comprehensive view of athletes' experiences. For example, athletes were asked about their typical day and changes over their career to understand practical support dynamics. Questions also probed the emotional support required in biathlon and how parents contribute to this aspect. Additionally, inquiries into parental involvement aimed to uncover both beneficial and less favorable perceptions.

Data Analysis

The analysis aimed to generate patterns and themes within the qualitative data using an inductive thematic approach. This method allowed themes to emerge organically from the participants' experiences, ensuring the analysis was deeply grounded in their narratives (Thagaard, 2018). Inspired by Wylleman's (2019) Holistic Athlete Career (HAC) model, the analysis targeted the development-to-mastery phase and the psychosocial aspects of athletes' careers, particularly the long-term role of parental support. While the model provided a conceptual backdrop, the analysis remained open-ended, allowing for the social construction of understanding through participant interactions.

We followed Braun and Clarke's (2006) guidelines for conducting thematic analysis, which involve iterative steps: familiarizing oneself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. This structured approach ensured a comprehensive exploration of the qualitative data, revealing patterns of meaning-making within the participants' experiences.

Based on Braun and Clarke's approach, the second and third authors commenced with a systematic review of interview transcripts (Step 1). Key elements were distilled into codes and sub-themes (Steps 2 & 3), focusing on the development and mastery phases. During Step 4, the team critically examined and discussed the emerging themes and sub-themes, particularly around parent-child relationships and the specific roles of parental involvement. In step 5, we refined these into four main themes, finally, in Step 6, representative quotes were selected to illustrate these themes, ensuring alignment with the study's objectives and existing literature.

We continuously discussed theme perspectives and interpretations to ensure peer validity, adhering to Patton's (2014) guidelines. Our approach was not to verify an independent truth but to generate additional insights, consistent with our social interactionist framework. This perspective allows for a nuanced understanding of the data, recognizing the co-construction of knowledge through social interactions. In line with Smith and McGannon's (2018) recommendations on research rigor, our investigation emphasized depth and richness over singular truth claims.

Peer debriefing sessions were conducted with colleagues, providing critical feedback to identify and mitigate potential biases. This collaborative process hopefully enhances the credibility of our analysis by incorporating diverse perspectives and ensures theoretical sensitivity to the complexities of social interactions. We analyzed iteratively, continuously refining themes to ensure they were deeply rooted in the data.

Table 1: Participants in the study

Parent ID	Role	Number of children	Sports experience	Roles within sports
P1	Father	3	Cross-country skiing, football	Coach, administrative role
P2	Father	3	Biathlon	Coach, administrative role
P3	Mother	3	Cross-country skiing, football	Non-sport roles within a sports team
P4	Mother	3	Biathlon, cross-country skiing	Sportingly role, administrative role, and non-sport roles within a sports team
Athlete ID	Gender	Athlete level	Residence during US school	Experience from other sports
A1	Female	International	Away (Elite Sport Programme)	Cross-country skiing, football
A2	Male	International	Away (Sports Programme)	Cross-country skiing, football
A3	Female	International	Away (Elite Sport Programme)	Cross-country skiing, football
A4	Male	International	Home (Sports Programme)	Cross-country skiing, football

Results and discussion

Our findings resonate with prior research on the evolving roles of parents in supporting their children's sporting pursuits (Tessitore et al., 2021). In summary, our study points to the vital role of parental instrumental support in the biathlon's developmental phase, such as providing transportation, equipment, and financial aid (Wylleman, 2019). This support, however, becomes less significant as athletes progress into the mastery phase and gain independence. This transition aligns with Wylleman's

model, suggesting an increasing reliance on sports support staff and federations.

Our study further enriches the understanding of development and mastery stages in Wylleman's (2019) Holistic Athletic Career Model (HAC). Wylleman and colleagues (2020) suggest that the HAC model provides a framework for understanding dual career evolution. For the Parental Support in Athletes' Development Phase, we generated two themes: Athletes prioritizing specialized schools and a coaching environment in Athletes' Development Phase, and Parents assisting with dual careers: balancing academic and athletic pursuits in Athletes' Development Phase. For the Parental Support in Athletes' Mastery Phase, the two themes were Athletes increased demands leading to role changes in the Mastery Phase and national team selection causing further role changes. As we delve deeper into these themes, we will reveal insights that meaningfully expand on the current understanding of parental support, both practically and emotionally.

Parental Support in Athletes' Development Phase *Athletes prioritizing specialized schools and a coaching environment in Athletes' Development Phase*

The biathletes identified their decision to enroll in a sport-specific upper secondary school program as a pivotal juncture, marking the commencement of their dedicated pursuit towards a potential professional career in biathlon. This decision was significantly influenced by parental support, which provided the necessary resources and encouragement for this commitment. Parents played a crucial role in prioritizing their children's biathlon careers by endorsing their decisions and providing logistical, financial, and emotional support. This decision necessitated a geographical move for three athletes to attend these specialized institutions. However, the fourth athlete experienced a somewhat different trajectory, undergoing this transition at the junior level (A4). This strategic decision facilitated greater structure and better goal-setting, focusing on attaining the sport's elite level. The following quotes illustrate how parental (first quote) encouragement and logistical support during the early years helped the athlete (second quote) prioritize biathlon over other activities, setting the foundation for a serious commitment to the sport:

He has always, in a way, had a dream, ever since he was little. It was play-like until he was a junior, I would say. There has always been much training, and then it became somewhat different when he moved up to the junior level. He got a different coach, and I would say it became a bit more serious. But [he] always trained a lot and [have] been determined. Something happened back then (Parent 4).

At that time, I was 15-16 years old. It was actually when I became a junior that I took a step up and started to really invest in it (Athlete 4).

As evident above, the athletes in our study stressed that their parents endorsed their decision to commit fully, and the parents echoed this sentiment. While the athletes viewed their abilities as crucial for their development, they deemed the parents' contribution indispensable in aiding their commitment, a finding in line with Lundy and colleagues (2019). External factors such as the environment and school also influenced their motivation.

The biathletes undeniably held strong ambitions. Paraphrasing Athlete 1, biathlon was the sport they enjoyed the most, and this passion led them to prioritize ski races

and training over social activities, even during the weekends. Such a choice was made early on and felt quite natural to them. Others expressed similar opinions about their ambitions, saying that they always considered biathlon the most fun sport and that receiving positive feedback at an early age indicated their talent. The parents also confirmed this. Athlete 2 explained it this way:

I aim to be the best. I've had that goal for quite a few years now. I don't know when I first said it. It was probably when I started with biathlon, that I said I was going to be the best in the world.

Related to parents' expectations of their children's athletic careers, it was clear that both the athletes and their parents valued the joy of doing sports and wanted the athletes to be honest with themselves. Thus, parent 2 valued the importance of staying healthy as an expectation.

Wylleman and colleagues (2020) discuss different competencies that may help adapt to a dual career's demands. Despite the importance of effort and perseverance in advancing to senior levels in sports, decreased self-belief and motivation can emerge due to the combined performance stress in athletes' academic and athletic pursuits, often exacerbated by sub-optimal conditions for balancing studies with elite sports (Wylleman et al., 2013). In line with this, the biathletes described their parents' expectations but considered the expectations to center around "doing their best" (A1, A2, A4), not exerting pressure. Athlete 3 harbored aspirations to sustain her performance at a specific level, an ambition that her father readily backed. In contrast, the mother (parent 3) offered unwavering support, irrespective of the realm of sports.

She is my oldest child and I've been fairly strict about expecting her to be a good role model. Not just for her sisters, but for others too. I have probably been quite strict about her needing to be a good role model in terms of making good choices like eating enough and healthy. (...). More about healthy values than expectations of performance. And the expectation that she should find it fun. (...). Expectations about health-related matters, there I am quite strict.

This quote highlights how the mother (parent 3) emphasizes healthy values and enjoyment, indirectly supporting the athlete's ability to manage academic and athletic demands. By fostering a balanced and healthy lifestyle, the parent helps the athlete maintain the physical and mental resilience required for a dual career. Parents' expectations might contribute to the athletes making good decisions and developing their skills further and over time (Lundy et al., 2019). These results indicate that athletes from an early age had goals of being as good as possible, which were also encouraged by their parents, while also focusing on joint interests and joy related to doing sports. The parents seemed to function as a support network, giving advice based on competence, interest, and economic support, enabling the athlete's development and investment in sports.

Parents Assisting with Dual Career: Balancing Academic and Athletic Pursuits in Athletes' Development Phase

The parents described a hectic everyday life for all parties. They focused on supporting and facilitating their children's dual career development, which encompasses sports participation and academic pursuits. They provided logistical support, such as transportation to training and

competitions, and emotional support to help their children manage the demands of balancing sports and studies. This support was crucial in managing the athletes' dual careers, helping them balance academic and athletic commitments. Parents provided transportation, equipment, and emotional support, alleviating stress and allowing the athletes to focus on their training and competitions. Athlete (2) described this follow-up as crucial:

It's absolutely crucial, I would say. I've always had support and they back me up. They've helped me with equipment and money, and what I need to be able to compete. They drove me to and from training, basically every day.

They helped schedule, ensuring their children had time for schoolwork and training. For instance, parents often coordinated with school authorities to accommodate their children's training schedules and competition dates. This logistical support was vital in preventing conflicts between academic responsibilities and sports commitments.

Even so, parents did not describe that they had sacrificed anything, because they considered being part of the sports environment as positive socially and for new friendships for themselves and their children. Moreover, as a bonus, they have spent much time with their children and seen them master and develop in this environment. Here with the words of parent 4: "No, not at all. It's something we've been part of. We also have our friends in this." This quote (parent 4) reflects the integration of social support within the sports environment, indicating that parents valued the social benefits of sports participation. This support helped athletes feel more connected and balanced in their dual career pursuits. Furthermore, the athletes themselves confirmed this sentiment. They acknowledged the sacrifices and recognized the engagement and the rewards it brought. The female athlete did not perceive any personal social sacrifices, attributing this to her priorities. She found friendship within the biathlon community, which simplified her decision to prioritize the sport.

The athletes experienced a significant difference entering upper secondary school, parallelly as they started to work systematically and with clear goals for their potential biathlon career. Making this choice while being aware of the psychosocial changes that will ensue is discussed by Wylleman and colleagues (2020). In accord with Wylleman et al., the parents in our study supported their children in these transformations. According to an athlete (1) and the parent (1), the parent's role changed as the parent stood down as their children's coach. Parent 1 described the support change when the daughter started upper secondary school:

The difference occurred when she went to upper secondary school. Then there was less involvement in training. I have been a waxer. I have been closely involved with everything to do with equipment (...). At races, we have been very closely involved.

Most athletes emphasized that their parents gave practical support (equipment and transportation to competitions), even though they were not living at home. Still, some parents continued their involvement in their children's development. An example was athlete 3's relationship with her father, who continually offered guidance and support. His daughter appreciated this, often seeking his advice proactively. According to the mother of

the athlete, she described the change as challenging as she had to let go and trust their child to manage her own life, which also made her more like an adult (parent 3): "When she moved away from home, wanting to pursue elite sports, I felt that I just had to let go of her. She suddenly grew up very quickly and I just had to trust that everything would go well." Fredricks and Eccles (2005) emphasized that the parents' view of their children's skills correlates with the child's motivation and engagement in sports. So, when parent 3 had trust in their child managing this change, it might be related to the athlete's increased independence as part of the psychological development during adulthood (Wylleman & Lavallee, 2004).

Transitioning to a school environment can appeal to athletes as it promotes independence from their parents, facilitates new relationships, and introduces student life (Wylleman et al., 2020). Balancing the transition, our results indicate that while attending the school was necessary for their development and investment in sports, the biathletes still received practical and emotional support from their parents. This "home support" could be decisive in enabling athletes' opportunities to succeed. Notably, a gender difference was evident in our sample. Male athletes predominantly maintained their parent-coach relationship during upper secondary school, while female athletes were more inclined to assign increased responsibility to the school coach, albeit still soliciting guidance and support from their parents. Given our small sample size and research design, this gender difference needs more examination in future research.

Overall Support During the Development Phase: Adviser and Supporter

The results indicate that the parents have an essential role in competitions regarding facilitation and equipment handling, similar to research on cross-country athletes (Rykhus, 2017). Still, the most decisive support considered by the athletes was emotional support, which they consider impacts their performance in competitions just by being present and showing engagement. This corroborates earlier research (Kirk et al., 1997; Kristiansen & Stensrud, 2020). Some of the parents speak about the difference between the initiating years and the development years, with changing from practical support to emotional support, as the athletes become more self-sufficient as they grow older (Wylleman & Lavallee, 2004) parents going from a leading role to a supporting role (Côté, 1999; Cote & Hay, 2002). Athlete 1 draws attention to the significance of engaging in dialogues with his parents, emphasizing their essential presence throughout his journey. The parents reciprocated his sentiment, also featured by Wylleman (2019). Despite feeling less capable as he matured, they strived to provide psychological support. Here in the words of parent 1:

We have talked about what it means that we are there, and that we care. That we try as best we can to give support that is our role in relation to others' roles. Our expertise has its limits, so we are a bit careful about saying too much about how. More about psychologically handling things. She can get good help with that from the support personnel she has from the federation.

Other parents, such as parent 2, describe adapting their involvement according to the athletes' needs. Athlete 3 appreciates the guidance and assistance provided by her parents, particularly cherishing her mother's adeptness at listening and offering counsel. She, however, does not shy away from setting boundaries, candidly expressing when

she perceives their involvement as sufficient. This accentuates the different preferences of the athletes related to which type and degree of support they want from their parents (Burke et al., 2023a, 2023b; Knight, Neely, & Holt, 2011). Athlete 4 had a strong bond with her parents and valued their support. Yet, she emphasized her autonomy in decision-making, aligning with research that suggests parental autonomy support fosters opportunities for further personal development (Holt et al., 2009). Another example is parent 4, who gives emotional support but stresses that having fun is the most important, while his father is more into giving practical support. These findings show that the athletes value the parents' role and how they complete each other to provide holistic support to optimize their experience and performance (Pynn, Dunn, & Holt, 2019; Wylleman et al., 2007; Wylleman & Lavallee, 2004). Parent 4 gives an example of their collaboration:

What I always do before every competition. I always tell him to have fun, and that is the most important thing. Have fun. And never forget that. When it's not fun anymore, then it won't work. That's what I care about. That's the most important thing I focus on. It should be fun. The father is perhaps more practical about it.

These findings correlate with psychological and psychosocial maturation, indicative of individual-level advancement (Wylleman & Lavallee, 2004). It accentuates the pivotal role of parents transitioning from a directing to a supporting role to cater to athletes' evolving needs (Côté, 1999; Cote & Hay, 2002). Consequently, the present study underlines the crucial need for parents to serve as practical advisers and emotional pillars during athletes' formative years to maximize their sports development.

Parental Support in Athletes' Mastery Phase

Athletes Increased Demands Leading to Role Changes in the Mastery Phase

The mastery phase started around 19 years old, which also aligns with when the athletes started to compete at the junior level. In their summary, Wylleman and colleagues (2020) comment on junior elite athletes' difficulties in successfully reaching mastery. In a sport like biathlon, this phase is particularly critical as both the volume of training and performance expectations escalate significantly. Nevertheless, the unwavering support from parents remains a crucial element (Knight et al., 2016). The parallel transition from youth to adulthood, both psychologically and legally, also means that the athletes are expected to be more independent (Wylleman, 2019; Wylleman & Lavallee, 2004; Wylleman & Rosier, 2016). This is exemplified in the following quote by athlete 1: "He has had less control over training and such. Mostly just observing and supporting, really."

Both parents and athletes recognized the evolving dynamics of parental roles. Although parents remain crucial during competitions for tasks such as waxing and transport, they now also navigate their athletes' emotional challenges. Parent 4 described the transition to the junior level as smooth, welcoming the new coach while aiding the athlete's reflections on this coaching shift. Comments from parents and athletes indicate that athletes consistently require support amidst various changes. Parents seemingly prioritize their children's holistic sporting growth, offering essential support that spans logistics, finances, and emotional guidance (Gould et al., 2008; Knight et al., 2016).

The selection to a national federation camp was another milestone, which could offer new opportunities and

change the roles of their parents, including new coaches and a new training regime. A gender-related distinction was apparent here, as the parent-coach relationship ceased for female athletes but persisted for male athletes till the end of upper secondary school. Despite this, female athletes continued to seek advice and training tips. Whether this difference was coincidental or intentional remains uncertain, something future research may study.

Selection to the Federation Team Causing Further Role Changes for parents in the Mastery Phase

Athlete 1 describes how the coach and parent roles could be interconnected. She experienced it as positive that she changed coaches when entering upper secondary school, strengthening her as an athlete. This may be related to both the psychological and social-psychological development (Wylleman & Lavallee, 2004), and the parent coach role could have both positive and negative aspects (Eliasson, 2018). She (athlete 1) expressed it this way: "Sometimes the dad role and the coach role can overlap a bit. (...). It was actually good to move to a sports-focused high school. It hasn't hurt anything in later times either." She (athlete 1) furthermore described that, entering upper secondary school and being selected to the federation team, her father had a lesser role as a coach, even though he is still present and gives advice. She also highlighted that their relationship and knowledge about each other gave her social security.

Athlete 2's transition into a federation team saw his father evolve into a mentor role, reducing family expenses as the team covered more costs. Parent 2 stressed the importance of support in the athlete's development, including emotional encouragement, guidance, and advice (Beets et al., 2010). Although the athlete maintains a good relationship with her coach, she still occasionally seeks her father's advice. The federation team's support in meeting practical needs lessens the parents' involvement. During her non-federation years, her father, acting as a manager, assembled a team, greatly aiding her training and competitions. Her mother also recognized the importance of team participation and external support for success in biathlon (parent 3): "(...). And being able to become part of a team. Maybe the fact that others also believe in you, and not just you yourself. I believe it's very helpful when others also have faith in you." Parent 4 recounted the difficulty of adhering to an unsuitable training regimen in a team setting, highlighting his mother's crucial role in helping him manage mentally. Similarly, athlete 3, who was not part of a federation team and lacked an optimal training plan, felt torn between her coach and father's divergent approaches, adversely affecting her performance. These experiences demonstrate how athletes' relationships with their environment can evolve (Wylleman & Lavallee, 2004), and unresolved conflicts can trigger stress.

High-level athletes often attract sponsorships that significantly impact their relationships with their parents, who typically assume a managerial role. They represent the athlete, handle sponsor deals, and indirectly facilitate their child's sports investment and potential success. This role is critical as financial issues can impede an athlete's progress. Sponsorships fundamentally cover expenses and mitigate economic hurdles, enabling parents to support their child's sporting development. A stable personal economy and appropriate prioritization may be critical to the athlete's opportunities, potentially linked to the parent's socioeconomic status. Parent 1 shared his active involvement in securing sponsorships to support his child's athletic pursuits: "Even though we have supported her

financially, we have also helped her secure sponsors and maintain existing sponsorship agreements. I have taken on a sort of manager role in this work."

Overall Support During the Mastery Years: Mentor and Supervisor

The results show that emotional support was more critical for the athlete's development in the junior-to-senior transition, but it was also related to the selection of the federation team – as the federation covers much practical support. The athletes became more independent and responsible for their training during this phase. According to Jørgensen and colleagues (2020), parents play an essential role in introducing independence, social support, and learning. Even so, the findings of this study show that the athletes still got practical support, primarily related to the equipment and prepping of the skies, especially in competitions.

Athletes' practical and emotional support needs are evolving as they encounter varying situations, including illness, affecting their careers. Such episodes may not always follow expected patterns (Stambulova & Wylleman, 2019), and transitioning between stages can be challenging (Wylleman et al., 2013). Both parents and athletes emphasize the importance of emotional support in these scenarios. Athletes regularly sought this reinforcement, frequently consulting their fathers for advice, practical training, and competition solutions. These tactics could be seen as informative support but are also tied to social support (Beets, Cardinal, & Alderman, 2010). Parent 2 highlighted the increased need for emotional support during difficult periods in an athlete's career; a sentiment echoed universally. During a challenging time when their child was ill, Parent 2 assumed parental and coaching roles. They believed that standing firm as a parent during these taxing times is vital, viewing adversity as a precursor to a comeback. This period saw a dip in the athlete's morale, necessitating a recovery phase. Meanwhile, Parent 3 detailed her involvement in her daughter's career, emphasizing her role as a confidante – a fact her daughter verified:

Perhaps mostly the emotional support. And [I] have been there when she has felt the flipside of the medal, and when it has been tough. And perhaps not daring to show vulnerability to the coach or the dad or teammates, I think it may have been easier with mom. Trying to motivate and inspire and lift back up on the mental plane with thoughts and the destructive that can also come.

General Discussion

The primary objective of this study was to develop our understanding of athlete transitions and parental involvement, the present study explores the role of parents' practical and emotional support on the holistic development of talented biathletes. This includes personal, academic, social, and sporting evolution during their athletic careers' development and mastery phases.

Our findings reaffirm the critical role of parents in providing both practical and emotional support during the developmental phase (Knight, 2019; Tessitore et al., 2021). This support includes transportation, equipment, financial contributions, and initial coaching, which are integral to athletes' early sporting pursuits. As athletes mature and progress into the mastery phase, their reliance on practical support may reduce and change as they

increasingly depend on sports support staff and federations.

As per the psychological and psychosocial phases of the development phase (Wylleman & Lavalée, 2004), this support remains necessary and evident as athletes mature physically and mentally. This shift underscores the evolving nature of parental roles in line with Wylleman's (2019) HAC Model. The study highlighted that parents contribute significantly to fostering athletes' independence, providing social support, and facilitating learning opportunities. The athletes valued their parents' involvement, particularly during critical transitions such as moving to sport-specific upper secondary schools and joining national federation teams. These transitions necessitated adjustments in the type and degree of support provided, with parents shifting from a more hands-on role to one emphasizing emotional backing and mentorship. One notable finding is the differentiation in roles between mothers and fathers. Fathers often took on coaching and practical support roles, while mothers focused more on the athletes' well-being and emotional support. This differentiation aligns with previous research (Coakley, 2006; Messner, 2009) and suggests that both parents play complementary roles that collectively enhance the athlete's development and performance. Jørgensen et al. (2020) reported similar findings; for instance, the family environment nurtured a sense of autonomy, provided social support, and created scope for learning (p. 408). However, our study also identified unclear expectations between parents and athletes – a topic that may be valuable to consider investigating in future research.

Despite the essential support provided by parents, our study also identified potential challenges, such as managing expectations and balancing the dual demands of sports and academics. Athletes perceived their parents' expectations as centered around effort and personal bests rather than performance pressure, positively influencing their motivation and commitment. With their expertise, parents can play a decisive role in helping athletes strike a healthy balance between sports and other activities and encouraging the development of healthy habits and lifestyles (Harwood & Knight, 2015), although past research has shown that 'parents' input is most significant earlier in the athletes' development path (e.g., Harwood & Knight, 2015; Jørgensen et al., 2020).

Limitations of the Study and Future Research Suggestions

One limitation of this study is the decision to interview only one parent per athlete. Although this approach was chosen for convenience and to streamline data collection, it may not capture the full diversity of parental perspectives within each family. Different parents might offer unique insights and experiences that could enhance the understanding of the parental role in an athlete's development. Future research could include both parents to explore these additional dimensions and provide a more holistic view of parental support. Furthermore, some of the interviews were fairly short, which could indicate either that the participants had exhausted the topic, were unaware, or had difficulties recollecting the subject. The study participants all had higher education and experience in biathlon or cross-country skiing, which likely influenced their ability to provide effective support. Financial challenges can limit the chances of success at a high level in sports (e.g., Curran & Hill, 2022), implying that financial factors play a crucial role in athletes' success. Financial challenges can limit opportunities for success at a high level in sport, and the significant financial resources required for biathlon highlight the importance of

socioeconomic factors in athlete development. Biathlon is a sport that requires significant financial resources and is associated with large expenses for athletes and their families. Athletes in the initiation and development phases depend on the family's financial support (Wylleman, 2019; Wylleman & Rosier, 2016), and parents often continue to provide this support even when athletes enter their peak years (Wylleman, 2019).

The study was conducted with Norwegian athletes and parents. Past researchers have pointed out differences between Norwegian and international elite sports, highlighting a more egalitarian approach to leadership and coaching in Norway (e.g., Abrahamsen & Bentzen, in print; Arnesen & Lundahl, 2006; Ronglan, 2015). Additionally, Norway typically ranks high on official gender equality indexes. Our present results may be part of this picture. A strength of this study is its focus on Norwegian athletes and parents, providing insight into a context known for its potential egalitarian values and gender equalities. However, this focus also presents a limitation, as the findings may not be generalizable to other countries with different cultural and sporting environments. Future research should compare these environments within Norway and between Norway and other countries. Such studies could explore how different cultural and organizational contexts influence leadership, coaching approaches, and gender equality in elite sports. This would provide a more comprehensive understanding of the factors contributing to successful athlete development and support.

Implications for Practice and Future Research

The findings of this study have several practical implications. Sports organizations and coaches should recognize the critical role of parents in athlete development and provide resources and support to help parents navigate

their evolving roles. Fostering open communication between parents, athletes, and coaches can help manage expectations and support athletes' holistic development. Future research should explore the impact of including both parents in the study to capture broader perspectives. Additionally, examining the role of socioeconomic status and financial support in athlete development can provide further insights into the barriers and facilitators of sporting success.

Conclusion

In conclusion, this study points out the vital role of parental support in biathlon athletes' development and mastery phases. By understanding and addressing the evolving needs of athletes and the complementary roles of parents, we can enhance the support systems that contribute to athletes' success and well-being.

Although the need for practical support tends to decrease as athletes become more independent, the continuous involvement of parents, particularly fathers, remains crucial. The differentiation of roles between mothers and fathers also contributes to a well-rounded sporting experience for the athletes. However, the study highlights the crucial impact of financial resources, suggesting that parents' financial support and sponsors are indispensable for athletes to succeed in high-level sports like biathlon.

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