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SPECIAL ISSUE PAPER

Career experiences of support from coaches: A comparison between elite and super-elite athletes

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ABSTRACT

Although we know that significant others play an important role in athlete development, the specific role of coaches' support along the developmental pathway remains unclear. Using qualitative methods, we compared perceptions of coach support among 16 elite and 16 super-elite Olympic athletes as they progressed through *Fundamentals*, *Emerging Commitment*, *Commitment to Excellence*, and *Mastery* stages of development. Thematic analysis with exemplar quotes highlighted the critical role of coach support. The results also revealed differences in the experience of coach support between elite and super-elite athletes – super-elite athletes perceived their support needs were met, whereas elite athletes did not. Complementary frequency counts indicated that super-elite athletes reported more support instances across all stages and fewer reports of lacking support at three of the four stages. A supplementary chi-square test further revealed that these coach support differences were significant at the Mastery stage. This study provides the first evidence that coach support influences the super-elite athlete career pathway, perhaps most notably at the Mastery stage. The findings suggest that coaches should ensure athletes perceive consistent support from them throughout development and recognise the significant positive impact their support can have at the Mastery stage—that is, it is never too late to provide support.

KEYWORDS

Elite; super-elite; athletes; development; coaches; support

In parallel with the burgeoning literature on expertise (Hambrick et al., 2018) more generally, there has been recent considerable growth in talent identification and development research specifically in sport (Baker et al., 2020; Cahill & MacNamara, 2023; Collins et al., 2019; Schlawe et al., 2025). Researchers acknowledge that the development of athletic talent is multi-faceted (e.g., Baker et al., 2019). However, alongside aspects of the performer (e.g., genetics, physiology, psychology) on the one hand, and practice and training on the other, the role of social environmental factors has been noted as an important, yet relatively under-researched area (Henriksen & Stambulova, 2023; Rees et al., 2016). In the present article, we examined one key social aspect: athletes' perceptions of their coaches' support as they progressed along the pathway to elite and super-elite levels of achievement in sport.

Significant others have long been understood to play an important role in athletic development, success, and coping with stress and injury (Freeman, 2020), and athletes consistently cite support as a key ingredient in their progression (Greenleaf et al., 2001; Rees, 2016; Rees & Hardy, 2000). While social support has often been examined in injury or stress contexts, its role in long-term talent development remains underexplored. Although support is acknowledged in some relevant frameworks (e.g., Collins et al., 2016; MacNamara et al., 2010; Martindale et al., 2010), and development programmes are sometimes referred to as 'athlete *support* programmes' (Güllich & Emrich, 2012), we still know relatively little about the nuanced role of coach support across the developmental pathway. This is surprising given that coaches are often central to athletes' lives and that support is widely recognised as integral to the coaching process (Lu et al., 2016; Robbins & Rosenfeld, 2001). Reviews (e.g., Rees et al., 2016) reinforce the importance of understanding how athletes perceive and respond to support from their coaches. For example, Sauvé et al.'s (2022) sample of Olympians highlighted their coaches' support (or lack thereof) as an important contributor to well-being.

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The aim of the present research was to examine retrospectively World Championship and Olympic athletes' perceptions of their coaches' support. Social support is generally considered to be multidimensional. Although there has long been debate over how many dimensions comprise social support (Cutrona & Russell, 1990), we were initially guided in this investigation by four specific dimensions of support regularly noted in the sport literature (e.g., Freeman, 2021; Hartley et al., 2020; Rees & Hardy, 2000): *emotional support*—providing comfort, security, and a sense of being loved and cared for; *esteem support*—bolstering an individual's self-esteem and sense of competence; *informational support*—providing advice and guidance; and *tangible support*—providing practical and instrumental assistance.

In addition to these four widely cited dimensions, we examined three additional aspects that reflect more nuanced coaching practices: individualised training support; protection from overtraining; and discipline, structure, and limits. These were informed by previous literature linking them to athlete dropout, injury vulnerability, and developmental environments (Fraser-Thomas et al., 2008; R. E. Smith et al., 1990; Strachan et al., 2011).

By examining support *across* the athletes' development, we were able to examine whether any differences in support were evident between two groups of athletes (elite – performing at senior international level; and super-elite – Gold medalists at Olympics or World Championships) at specific stages of the athletes' pathways. While different models of athlete development have been proposed (e.g., Balyi & Hamilton, 2000; Côté et al., 2012), we adopted UK Sport's four-stage timeline: (a) *Fundamentals*—comprising aspects of 'deliberate play' (within a given sport) and a first taste of coaching and exposure to competition. This stage typically involves athletes competing at a local level; (b) *Emerging Commitment*—specialisation emerges, with an increased input from the national governing body of sport. This stage typically involves athletes competing at regional and national levels; (c) *Commitment to Excellence*—the athlete demonstrates the potential to achieve podium performance and is typically competing at international level; and (d) *Mastery*—the programme is focused on medal success, and *marginal gains* are sought and exploited. The athlete is typically competing at a World and Olympic level.

The present research

In the first study of its type, we sought to provide a comprehensive examination of athletes' perceptions of coach support along their developmental timeline. Using a truly elite sample of Olympic and World Championship athletes, we employed primarily qualitative methods to explore perceptions of support over time, and to examine differences in support between elite and super-elite athletes. Through this novel focus, we sought to make a unique contribution to both the support and talent development literature, and to provide new insights for athletes and coaches into the key role played by support processes.

Method

The present study represents the final investigation from the Great British Medalists' project, with previous papers focusing on practice, training, and psychosocial experiences. The focus on perceptions of coach support is unique to this study.

Participants and procedure

The participants were 32 former UK Sport-funded British athletes from seven Olympic sports, who, in line with the performance standard levels noted in Rees et al. (2016, p. 1042), could be defined as 'elite' or 'super-elite'. Sixteen athletes (6 male, 10 female) were *super-elite*, as they had been Olympic and/or World Champions, with all bar one winning at least one subsequent further gold at a major international championship. These super-elite athletes (M_{age} = 40.25 years, SD = 6.16) had competed at 15.3 (SD = 6.0) important international championships across 13.0 (SD = 4.5) years, winning 8.5 (SD = 5.1) medals (4.6 golds; SD = 3.8). The 16 *elite* athletes (6 male, 10 female) were also UK Sport-funded, but, bar two silvers, had not medaled at Olympics or World Championships. The elite athletes (M_{age} = 33.44, years, SD = 2.53) had competed at 6.7 (SD = 4.2) important international championships over 7.3 (SD = 2.9) years. Athletes were matched by sport, sex, discipline, age, and era of their career. Athletes were not blinded to the purpose of the study – we clarified at the outset of interviews (a) the group (super-elite vs elite) to which participants were assigned, and (b) that participant responses would be compared across groups.

Data collection

We obtained ethical approval from the UK Sport Ethics Committee. To recruit participants, we enlisted the support of four highly respected former Olympic and World Champion athletes to act as project ambassadors. These ambassadors endorsed the study and allowed us to send signed letters from them to participants, encouraging them to take part. This approach helped to establish trust and legitimacy. Following initial expressions of

interest, each athlete was contacted by telephone to explain the study in more detail. A follow-up letter was then sent to provide a written summary of participation requirements, and interviews were scheduled accordingly. The lead author conducted the interviews (pre-piloted on two non-elite athletes; piloted on four former funded elite or higher athletes), which lasted 3 hours 54 minutes ($SD = 35$ minutes). To guide data collection while retaining flexibility, we used a semi-structured interview approach. Athletes were invited to begin by recounting their journey from their earliest sporting memory through to their Olympic career. To support memory recall and provide structure, each interview was preceded by media abstraction to develop an individualised timeline and brief biography, which was discussed at the outset. Although interviews followed an unstructured flow, a flexible interview guide was used to ensure that coach support – our central topic – was explored across all stages of development. Open-ended questions were used throughout, supplemented by elaboration and clarification probes (Kallio et al., 2016), with questions about support woven into the conversation as they naturally arose (Low, 2019). For example, participants were asked, 'Can you tell me about your relationship with your coach at that stage?' The interviewer ensured that all participants reflected on support experiences across their developmental pathway, even if the order and emphasis varied. At the close, participants were invited to add any final thoughts. This approach allowed athletes to tell their stories in their own words, while ensuring consistent and in-depth exploration of perceived coach support.

Analysis

Verbatim interview transcripts were checked for errors and member checked by the athletes. For anonymity, all participants' personal identifiers were double coded prior to analysis. Athletes were identified with a single letter (A to P) with the addition of *SE* for Super-Elite (e.g., F-SE) or *E* for Elite (e.g., P-E). We initially employed thematic analysis (Braun & Clarke, 2006; Braun et al., 2016), informed by theoretical concepts (e.g., perceived support; dimensions of support) while remaining open to data-driven insights based on athletes' own interpretations of coach support across stages. Authors 1, 3, and 5 first familiarised themselves with the data through repeated reading of transcripts. Authors 3 and 5 then independently conducted line-by-line coding, identifying labels relevant to the perceived nature and function of support. These codes were reviewed collaboratively, and key patterns were developed into candidate themes (e.g., emotional support, esteem support). Themes were reviewed and refined by Authors 1–5, to ensure clarity and coherence. Once finalised, each illustrative quote was tagged against one of the four developmental stages – Fundamentals, Emerging Commitment, Commitment to Excellence, or Mastery – by Authors 3 and 5. This temporal categorisation allowed us to compare support experiences between elite and super-elite athletes across developmental stages.

Drawing on a content analysis framework (Schreier, 2012), we also examined the frequency of athletes reporting each type of support (and reporting explicit absences of support) at each stage, giving an indication of support prevalence – albeit this does not explicitly speak to its relevance or importance. This also allowed us to run chi-square tests on these combined aspects of support at each stage.

Research quality

In line with B. Smith and McGannon (2017), we used several strategies to enhance the trustworthiness of our findings. First, member checking was conducted by providing each participant with a transcript of their interview and the opportunity to clarify or amend any aspect of their account. Second, discussion until consensus was reached occurred between Authors 1–5 during the development and refinement of codes and themes, allowing for shared interpretation and resolution of any discrepancies. Third, peer debriefing was undertaken through consultation with two senior colleagues who were not involved in data collection or analysis but had substantial knowledge of athlete development and Olympic sport systems. Their external perspective provided valuable challenge and feedback on the coherence and credibility of our interpretations. In addition, we report findings using participants' direct quotes, in line with Braun and Clarke's (2006) and Lochmiller's (2021) recommendations to enhance transparency and support analytic claims. This approach also allowed participants' voices to be heard in their own terms, supporting reflexivity and reducing the influence of researcher bias (Guest et al., 2012). Finally, the research team engaged in prolonged and systematic interaction with the data, facilitating iterative reflection both individually and collaboratively (Braun & Clarke, 2021; Levitt et al., 2017).

Results

In reporting our findings, (a) where possible we provide raw participant quotes so that the data speak for themselves and the voices of the participants are heard; (b) for each of the developmental stages within each type of support, where super-elite and elite athletes shared

similar perceptions of support, we report just one exemplar quote; and (c) where super-elite and elite athletes differed across stage and support, we report two exemplar quotes, from a super-elite and an elite athlete. Participant quotes are presented as indented block quotes, regardless of length, in line with qualitative reporting conventions and APA guidance (American Psychological Association, 2020), to enhance clarity and distinguish participant voice. Finally, we report chi-square tests for the frequencies of athlete reports of support versus its absence at each stage. In line with the known empirical overlap between support dimensions (Cohen & Wills, 1985; Rees & Freeman, 2009), and in conjunction with our data's focus on technical aspects, we collapsed the dimensions of informational and tangible support into one, focusing on *technical* aspects of support (e.g., technical expertise, advice, guidance, and information concerning solutions to a problem).

Emotional support

Fundamentals

Six super-elite and five elite athletes reported emotional support; none reported its absence. F-SE described Coach-1 as providing acceptance, belonging, and a surrogate parent role:

> Coach-1 was great. I absolutely loved him. Coach-1 was picking up waifs and strays and I was one of them. The training group was probably a surrogate family.

Emerging Commitment

Nine super-elite and seven elite athletes reported emotional support; none reported its absence. A-E described Coach-1 as approachable and supportive:

> You could talk to him . . . about anything, even if it wasn't athletics-related. . . . if something to do with your home life or whatever was bothering me, you know that you could talk to him.

Commitment to Excellence

Nine super-elite and seven elite athletes reported emotional support; two super-elite and three elite athletes reported its absence. B-SE highlighted the depth of emotional support and connection with Coach-3:

> [Coach-3] would be mum and dad, granny, psychologist, nutritionist—everybody in one role. . . . Even now, I still regard him as a father figure.

Mastery

Ten super-elite and four elite athletes reported emotional support; two super-elite and ten elite athletes reported its absence. P-SE described a strong and enduring emotional bond with Coach-2:

> [Coach-2] treats me like a third son, and he's like a surrogate Dad to me . . . I just had loads of respect for him and what he has done. . . . He was just the person I needed to have alongside me.

In contrast, J-E reported a breakdown in emotional support with Coach-2 at this stage:

> [Coach-2] just ignored me. . . . He brought me in and said, 'Right we're just not picking you this year'. I might have been invisible for all he cared. . . . I got [success in sport] in spite of [Coach-2].

Esteem support

Fundamentals

Six super-elite and five elite athletes reported esteem support; none reported its absence. N-E described an 'influential' sense of esteem support from Coach-1:

> [Coach-1] was quite influential, because he actually really believed I could do well and his belief in me helped. That gives you a bit of confidence when people actually believe in you.

Emerging Commitment

Six super-elite and six elite athletes reported esteem support; one elite athlete reported its absence. A-SE described the impact of working with a coach who had 'total belief' in him:

> [Coach-2] was very . . . positive. . . . Being with a coach that instilled in you, 'There's no such word as can't' . . . He had total belief in me . . . and I . . . thought, 'Well I can do it because he said it'.

Commitment to Excellence

Five super-elite and four elite athletes reported esteem support; two super-elite and five elite athletes reported its absence. F-SE described how praise from Coach-4 inspired motivation and effort:

> I respond so much better to someone who is excited and can see my potential. That's when I started trying to work for [Coach-4]. . . . He just said, '[F-SE] this is brilliant you are doing great'. Suddenly he was just so [encouraging], and I will do anything for that.

Mastery

Nine super-elite and no elite athletes reported esteem support; three super-elite and ten elite athletes reported its absence. H-SE described a turning point in his career following the death of his father, when support from Coach-6 helped him recover:

> [Coach-6] was probably the most influential coach . . . He said, 'You haven't done any [training due to the death of your father] and yet . . . I know you are [really] good, and I know you've got the talent'. When he believed in me, suddenly I felt like I could do it.

In contrast, C-E experienced a lack of esteem support that reflected his coach's self-doubt:

> I didn't ever feel that [Coach-6] really backed me. . . . I really needed to have somebody that really believed in me. . . . I lacked real inner confidence and self-belief . . . it wasn't fed well by . . . the fact that he wasn't very confident in himself and in his coaching ability.

Technical support

Fundamentals

Three super-elite and no elite athletes reported technical support; three super-elite and nine elite athletes reported its absence. H-SE described early technical exposure from both his father and a club coach:

> My dad was a coach . . . to Olympic standard . . . from the age of four I would be out . . . watching him coach. . . . I begged him . . . I wanted to [do my sport]. I would [also] be coached [technically] by [Coach-1], one of the coaches of the [major] club.

In contrast, E-E perceived a lack of structured technical support:

> [Coach-1] . . . was more making sure everyone was safe rather than [teaching]. . . . There were no structured debriefs. It was . . . 'Go and try this!' . . . That's how we learnt [laughs], in at the deep end, a lot of figuring it out for yourself.

Emerging Commitment

Four super-elite and three elite athletes reported technical support; six super-elite and eight elite athletes reported its absence. H-SE noted that a lack of technical support contributed to long-term technical flaws:

> With [Coach-2], I never had any extra coaching. . . . The way I [do the most basic element of my sport] is technically wrong, because I never got taught correctly.

Commitment to Excellence

Eight super-elite and eight elite athletes reported technical support; three super-elite and three elite athletes reported its absence. C-E described a performance break-through following targeted technical input:

> I . . . knew very little [technically] . . . I remember the first youth nationals I went to where I had a pre-event training session with [Coach-4] . . . and I didn't know how to [do the basics]. . . . He said, 'Well this is going to make a big difference'. . . . and it really did.

Mastery

Twelve super-elite and nine elite athletes reported technical support; no super-elite and three elite athletes reported its absence. P-E described a turning point after switching to Coach-5:

> I could see [Coach-5]'s programmes were more structured, offered more support, gave the technical feedback that I wanted. . . . [Coach-5] was very good on technique. . . . When I moved to [Coach-5] is when it really started changing [positively] for me.

Individualised training support

Fundamentals

No super-elite and two elite athletes reported individualised training support; five super-elite and two elite athletes reported its absence. N-SE described a lack of personal attention:

> I never really had [individualised coaching]. . . . I just got chucked into group sessions . . . With [Coach-1] it's just group sessions, no one-to-one.

Emerging Commitment

Three super-elite and three elite athletes reported individualised training support; seven super-elite and three elite athletes reported its absence. G-E described being singled out within a larger group:

> With [Coach-4] I was sometimes one of twenty, but . . . I was being singled out and given a lot of [individualised] coaching.

Commitment to Excellence

Seven super-elite and six elite athletes reported individualised training support; three super-elite and four elite athletes reported its absence. K-SE noted the limits of a one-size-fits-all training model:

> [With Coach-2, we] had . . . a single training schedule which everyone was following, but they were breaking down . . . they couldn't do the same workload and . . . intensity [as me].

Mastery

Twelve super-elite and five elite athletes reported individualised training support; two super-elite and five elite athletes reported its absence. O-SE trained in a group but valued the tailored input:

> [Coach-2] was very big on the individual. . . . Sessions were individualised in the technical aspects . . . each person doing their own thing.

In contrast, L-E highlighted the absence of one-to-one input:

> With [Coach-3, the coaching] was … not good enough for me to reach my full potential. … There was a squad … I didn't have a one-on-one dedicated coach. … If I had someone that was just focused on me … it could have been better.

Protection from overtraining

Fundamentals

No super-elite and two elite athletes reported protection from overtraining; no athletes reported its absence. With only two quotes, no exemplar is presented.

Emerging Commitment

Three super-elite and three elite athletes reported protection from overtraining; one super-elite athlete reported its absence. A-SE reflected on a coach's protective decision:

> [Coach-2] wouldn't let me go [to a training event] … I remember … thinking I would have liked to have gone but I never argued with him. … I look back now, I think it was totally the right decision … he always had the plan.

Commitment to Excellence

Eight super-elite and two elite athletes reported protection from overtraining; three super-elite and five elite athletes reported its absence. B-SE described being nurtured appropriately:

> [Coach-3] was able to nurture me … letting me develop naturally. … [My teammate] could do a lot more work. … I was very easily broken down, always getting ill, easily tired.

In contrast, A-E struggled to communicate concerns:

> I couldn't approach [Coach-2]. … I knew he would get upset. … so … instead of listening to my body … I just carried on training, and then I was … laid out for 3–4 months.

Mastery

Fourteen super-elite and three elite athletes reported protection from overtraining; one super-elite and six elite athletes reported its absence. K-SE described a key coaching insight:

> [Coach-2] knew I'd always be on the side of doing too much. … Sometimes … [Coach-2] would say, 'Less is more' and that was a massive, massive lesson for me.

G-E contrasted the approaches of two coaches:

> [Coach-4] … could see when I was doing too much. … [He] knew when to push me or when to say … 'Take it easy'.

> [Coach-5] … was setting the bar high. … I did everything to the letter and would then be really struggling … I couldn't cope with that.

Discipline, structure, and limits

Fundamentals

Eight super-elite and no elite athletes reported discipline, structure, and limits; one elite athlete reported its absence. C-SE described early structure:

> [Coach-2] was an ex-naval officer … very military about everything; that suited me. … Even as kids, you [had to] get up at 7 am and do your … press-ups, run the hill … that was … his way.

M-E described a lack of structure:

> I was just sort of drifting, doing [my sport] when I wanted … having fun … no structure, nothing.

Emerging Commitment

Seven super-elite and no elite athletes reported discipline, structure, and limits; two super-elite athletes reported its absence. N-SE recalled growing expectations:

> [Coach-2] stopped being so nice … If you were messing about in a session, you got told off. … I realized … if you want to improve, you've got to listen … it's like a school.

Commitment to Excellence

Seven super-elite and four elite athletes reported discipline, structure, and limits; two super-elite and two elite athletes reported its absence. G-E highlighted the positive influence of structure – and its absence when a coach departed:

> [Coach-4] had … a very 'follow the rules' training programme. … When [Coach-4] left, this structure had gone. … I liked being able to see my progression … that wasn't there anymore.

Mastery

Ten super-elite and five elite athletes reported discipline, structure, and limits; two super-elite and three elite athletes reported its absence. J-SE explained how structure helped him thrive:

> I like a structure, a plan, and to know what I am doing. … [a] training schedule. … I loved having a structure … not just a day-to-day … over your whole year … competitions … training … when I am going to be tapering off … it was just brilliant.

Table 1. Number of super-elite and elite athletes reporting dimensions of support within each stage.

Support Type		Fundamentals	Emerging Commitment	Commitment to Excellence	Mastery
Emotional	Super-Elite	6	9	9	10
	Elite	5	7	7	4
Esteem	Super-Elite	6	6	5	9
	Elite	5	6	4	0
Technical	Super-Elite	3	4	8	12
	Elite	0	3	8	9
Indiv Support	Super-Elite	0	3	7	12
	Elite	2	3	6	5
Protect Overtrain	Super-Elite	0	3	8	14
	Elite	2	3	2	3
Discipline	Super-Elite	8	7	7	10
	Elite	0	0	4	5
All Support Combined	Super-Elite	23	32	44	67
	Elite	14	25	31	26

Indiv Support = Individualised Training Support; Protect Overtrain = Protection from Overtraining; Discipline = Discipline, Structure, and Limits.

Table 2. Number of super-elite and elite athletes reporting an absence of support within each stage.

Support Type		Fundamentals	Emerging Commitment	Commitment to Excellence	Mastery
Emotional	Super-Elite	0	0	2	2
	Elite	0	0	3	10
Esteem	Super-Elite	0	0	2	3
	Elite	0	1	5	10
Technical	Super-Elite	3	6	3	0
	Elite	9	8	4	3
Indiv Support	Super-Elite	5	7	3	2
	Elite	2	3	4	5
Protect Overtrain	Super-Elite	0	1	3	1
	Elite	0	0	5	6
Discipline	Super-Elite	0	2	2	2
	Elite	1	0	2	3
All Support Combined	Super-Elite	8	16	15	10
	Elite	11	12	23	37

Indiv Support = Individualised Training Support; Protect Overtrain = Protection from Overtraining; Discipline = Discipline, Structure, and Limits.

Chi-square tests

Tables 1 and 2 provide cross-tabulations of support (and its absence) across the four developmental stages, including combined support frequencies. Super-elite athletes reported more support at all stages compared to elite athletes, and fewer reports of absence at three of the four stages. Chi-square tests revealed a significant effect at the Mastery stage, χ^2 (1) = 32.51, $p < .001$, Cramer's $V = .48$. Effects at other stages were non-significant: Fundamentals, χ^2 (1) = 2.04, $p = .153$, Cramer's $V = .19$; Emerging Commitment, χ^2 (1) = .01, $p = .930$, Cramer's $V = .01$; and Commitment to Excellence, χ^2 (1) = 3.72, $p = .054$, Cramer's $V = .18$. The effect at the Mastery stage (Cramer's $V = .48$) is considered large (small = .10, medium = .30, and large = .50).

Discussion

We examined elite and super-elite athletes' experiences of coach support across their developmental pathway. The results show a consistent message: super-elite athletes perceived their support needs were met, whereas elite athletes did not. When support dimensions were combined, super-elite athletes reported more support across all stages and fewer instances of its absence in three of the four stages. Notably, the most striking difference appeared at the Mastery stage, for which a significant chi-square test provided additional evidence for this conclusion. This study uniquely extends previous research in at least two key ways: (a) it identifies differences in the experience of coach support between world's best and other world-class performers (i.e., super-elite and elite); and (b) it highlights how these differences vary across specific stages of development. Although support appears important throughout the athlete journey, the marked difference at the Mastery stage underscores that it is never too late for coaches to provide meaningful support.

Our analysis also revealed more nuanced stage-specific differences. At the Fundamentals stage, elite athletes more frequently reported an absence of technical support compared to their super-elite counterparts. For athletes who began their primary sport relatively late, this technical input was especially important for helping them 'catch up' with peers. Similarly, at the Fundamentals and Emerging Commitment stages, only

super-elite athletes emphasised the value of discipline, structure, and limits. This may align with previous research on foundational critical life events in athlete development (e.g., Hardy et al., 2017), which suggests that adverse early experiences may increase an individual's desire for stability and structure – qualities often found in sport environments (Flett et al., 2012).

At the Commitment to Excellence stage, the only notable difference was in perceived protection from overtraining, which became more pronounced at the Mastery stage. Athletes with high training commitment may be vulnerable to overtraining and injury unless coaches intervene appropriately (MacKinnon, 2000). As such, protection from overtraining may be particularly important for athletes with a high commitment to training (Hardy et al., 2017). Although we did not objectively assess overtraining, super-elite athletes perceived themselves to have received greater protection. This suggests that perceived protection from overtraining involves not just managing training loads, but also fostering trust and care – hallmarks of emotional support.

At the Mastery stage there were additional differences. Super-elite athletes reported more emotional and esteem support, as well as more individualised training support. Tailored, *individualised* training may foster a deeper sense of being cared for, which Sarason et al. (1990, p. 119) described as the 'essence of social support'. This reinforces the well-established idea that social support is multi-faceted, with overlapping functions often observed in real-world settings (Freeman, 2020; Rees, 2016). In contrast, generic training support might signal a lack of personal investment by the coach.

Although we found no group differences in emotional or esteem support at earlier stages, it seems unlikely that these forms of support are irrelevant to high-level performance. Previous work has consistently highlighted the importance of both emotional and esteem support in shaping athletes' confidence, affect, and broader developmental outcomes (e.g., Freeman & Rees, 2009; Freeman et al., 2014; Wachsmuth et al., 2025). Notably, emotional and esteem support were the most frequently cited forms of support – both in terms of their presence and absence.

The finding that emotional and esteem support differentiated athletes at the Mastery stage – while technical support did not – invites reflection on coaching priorities. Historically, coaching at later developmental stages has been heavily focused on refining athletes' technical and tactical skills (Miller & Kerr, 2002). The lack of between-group differences in technical support at later stages may reflect large between-sport variability in technical demands – variation our multi-sport design could not account for. Nonetheless, athletes' willingness to engage with technical support appeared to depend on their perception of the coach's expertise.

It is important to recognise that sport-specific developmental demands vary widely. Early specialisation sports (e.g., gymnastics) may differ substantially from late specialisation sports (e.g., rowing or track cycling) in how coach support is experienced. Thus, some variation in perceived coach support may reflect these within-sport differences. While the present design allowed for broad insight across Olympic experience, it limited our ability to examine how specific sport cultures shape coach support dynamics. Future research should consider within-sport designs to explore stage-specific support needs in more depth.

Strengths and limitations

Strengths of the present research include the genuinely elite and super-elite status of the athletes, the comparison between two such high-performing groups, and the detailed examination of support dimensions across four developmental stages.

Against these strengths, several limitations should be acknowledged. First, retrospective recall introduces the potential for memory bias. Second, although the multi-sport design enhances generalisability, it likely masks within-sport variation in developmental pathways and support structures. Future studies might examine these nuances within a single sport context. Third, the absence of a low-achieving comparison group limits our ability to determine whether observed similarities reflect shared developmental needs or irrelevant support dimensions.

It is also possible that super-elite athletes, having achieved greater success, were more inclined to report support more positively. That said, the elite athletes in this study would be considered highly accomplished by almost any standard than Olympic and World gold medals. Importantly, the athletes were aware of their group assignment and knew their responses would be compared.

Conclusions

At every stage of development, at least one support dimension differentiated super-elite from elite athletes, with the clearest difference at the Mastery stage. Across all dimensions, super-elite athletes were more likely to feel their support needs had been met. These findings offer a novel contribution to our understanding of coach-athlete support and

highlight that even in the final stages of development, it is never too late to provide meaningful, individualised support.

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Data availability statement

The data (the full transcribed interviews) that support the findings of this study are held by UK Sport. Due to the sensitive nature of the data collected, access is restricted in accordance with ethical guidelines to protect participant confidentiality.

Ethics approval statement

This study was approved by UK Sport's Institutional Ethics Review Board (Committee), and all participants provided written informed consent prior to participation.

References

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). https://doi.org/10.1037/0000165-000

Baker, J., Wattie, N., & Schorer, J. (2019). A proposed conceptualization of talent in sport: The first step in a long and winding road. *Psychology of Sport & Exercise*, *43*, 27–33. https://doi.org/10.1016/j.psychsport.2018.12.016

Baker, J., Wilson, S., Johnston, K., Dehghansai, N., Koenigsberg, A., de Vegt, S., & Wattie, N. (2020). Talent research in sport 1990-2018. A scoping review. *Frontiers in Psychology*, *11*, 607710. https://doi.org/10.3389/fpsyg.2020.607710

Balyi, I., & Hamilton, A. (2000). Key to success: Long-term athlete development. *Sport Coach*, *23*, 10–32.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, *18*(3), 328–352. https://doi.org/10.1080/14780887.2020.1769238

Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (Vol. 1, pp. 191–205). Routledge.

Cahill, G., & MacNamara, Á. (2023). Contextual factors in sport talent identification research. *Sport in Society*, *27*(7), 1180–1216. https://doi.org/10.1080/17430437.2023.2288149

Cohen, S., & Wills, T. A. (1985). Stress, social support and the buffering hypothesis. *Psychological Bulletin*, *98*(2), 310–357. https://doi.org/10.1037/0033-2909.98.2.310

Collins, D., MacNamara, Á., & Cruickshank, A. (2019). Research and practice in talent identification and development-some thoughts on the state of play. *Journal of Applied Sport Psychology*, *31*(3), 340–351. https://doi.org/10.1080/10413200.2018.1475430

Collins, D., MacNamara, Á., & McCarthy, N. (2016). Super champions, champions, and almosts: Important differences and commonalities on the rocky road. *Frontiers in Psychology*, *6*, 2009. https://doi.org/10.3389/fpsyg.2015.02009

Côté, J., Murphy-Mills, J., & Abernethy, B. (2012). The development of skill in sport. In A. M. Williams & N. J. Hodges (Eds.), *Skill acquisition in sport* (2nd ed. pp. 269–286). Routledge.

Cutrona, C. E., & Russell, D. W. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 319–366). Wiley.

Flett, M. R., Gould, D., & Lauer, L. (2012). A study of an underserved youth sports program using the youth program quality assessment. *Journal of Applied Sport Psychology*, *24*(3), 275–289. https://doi.org/10.1080/10413200.2011.641061

Fraser-Thomas, J., Côté, J., & Deakin, J. (2008). Examining adolescent sport dropout and prolonged engagement from a developmental perspective. *Journal of Applied Sport Psychology*, *20*(3), 318–333. https://doi.org/10.1080/10413200802163549

Freeman, P. (2020). Social support in sport. In G. Tenenbaum, R. C. Eklund, & N. Boiangin (Eds.), *Handbook of sport psychology: Social perspectives, cognition, and applications* (4th ed. pp. 447–463). Wiley. https://doi.org/10.1002/9781119568124.ch21

Freeman, P. (2021). Social support. In R. Arnold & D. Fletcher (Eds.), *Stress, well-being, and performance in sport* (pp. 240–258). Routledge.

Freeman, P., Coffee, P., Moll, T., Rees, T., & Sammy, N. (2014). The ARSQ: The athletes' received support questionnaire. *Journal of Sport & Exercise Psychology*, *36*(2), 189–202. https://doi.org/10.1123/jsep.2013-0080

Freeman, P., & Rees, T. (2009). How does perceived support lead to better performance? An examination of potential mechanisms. *Journal of Applied Sport Psychology*, *21*(4), 429–441. https://doi.org/10.1080/10413200903222913

Greenleaf, C., Gould, D., & Dieffenbach, K. (2001). Factors influencing Olympic performance: Interviews with Atlanta and Nagano US Olympians. *Journal of Applied Sport Psychology*, *13*(2), 154–184. https://doi.org/10.1080/104132001753149874

Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied thematic analysis*. SAGE. https://doi.org/10.4135/9781483384436

Güllich, A., & Emrich, E. (2012). Individualistic and collectivistic approach in athlete support programmes in the German high-performance sport system. *European Journal for Sport and Society*, *9*(4), 243–268. https://doi.org/10.1080/16138171.2012.11687900

Hambrick, D. Z., Campitelli, G., & Macnamara, B. N. (2018). *The science of expertise: Behavioral, neural, and genetic approaches to complex skill*. Psychology Press.

Hardy, L., Barlow, M., Evans, L., Rees, T., Woodman, T., & Warr, C. (2017). Great British medalists: Psychosocial biographies of super-elite and elite athletes from Olympic sports. *Progress in Brain Research*, *232*, 1–119. https://doi.org/10.1016/bs.pbr.2017.03.004

Hartley, C., Haslam, S. A., Rees, T., & Coffee, P. (2020). Social support. In S. A. Haslam, K. Fransen, & F. Boen (Eds.), *The new psychology of sport and exercise: The social identity approach* (pp. 245–264). SAGE.

Henriksen, K., & Stambulova, N. (2023). The social environment of talent development in youth sport. *Frontiers in Sports and Active Living*, *5*, 1127151. https://doi.org/10.3389/fspor.2023.1127151

Kallio, H., Pietilä, A.-M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, *72*(12), 2954–2965. https://doi.org/10.1111/jan.13031

Levitt, H. M., Motulsky, S. L., Wertz, F. J., Morrow, S. L., & Ponterotto, J. G. (2017). Recommendations for designing and reviewing qualitative research in psychology: Promoting methodological integrity. *Qualitative Psychology*, *4*(1), 2–22. https://doi.org/10.1037/qup0000082

Lochmiller, C. R. (2021). Conducting thematic analysis with qualitative data. *The Qualitative Report*, *26*(6), 2029–2044. https://doi.org/10.46743/2160-3715/2021.5008

Low, J. (2019). Unstructured and semi-structured interviews in health research. In J. Allsop & M. Saks (Eds.), *Researching health: Qualitative, quantitative and mixed methods* (Vol. 2, pp. 123–141). SAGE.

Lu, F. J., Lee, W. P., Chang, Y. K., Chou, C. C., Hsu, Y. W., Lin, J. H., & Gill, D. L. (2016). Interaction of athletes' resilience and coaches' social support on the stress-burnout relationship: A conjunctive moderation perspective. *Psychology of Sport & Exercise*, *22*, 202–209. https://doi.org/10.1016/j.psychsport.2015.08.005

MacKinnon, L. T. (2000). Special feature for the Olympics: Effects of exercise on the immune system: Overtraining effects on immunity and performance in athletes. *Immunology and Cell Biology*, *78*(5), 502–509. https://doi.org/10.1111/j.1440-1711.2000.t01-7-.x

MacNamara, Á., Button, C., & Collins, D. (2010). The role of psychological characteristics in facilitating the pathway to elite performance part 2: Examining environmental and stage-related differences in skills and behaviors. *The Sport Psychologist*, *24*(1), 74–96. https://doi.org/10.1123/tsp.24.1.74

Martindale, R. J. J., Collins, D., Wang, J. C. K., McNeill, M., Lee, K. S., Sproule, J., & Westbury, T. (2010). Development of the talent development environment questionnaire for sport. *Journal of Sports Sciences*, *28*(11), 1209–1221. https://doi.org/10.1080/02640414.2010.495993

Miller, P. S., & Kerr, G. A. (2002). Conceptualizing excellence: Past, present, and future. *Journal of Applied Sport Psychology*, *14*(3), 140–153. https://doi.org/10.1080/10413200290103464

Rees, T. (2016). Social support in sport psychology. In R. J. Schinke, K. R. McGannon, & B. Smith (Eds.), *Routledge international handbook of sport psychology* (pp. 505–515). Routledge.

Rees, T., & Freeman, P. (2009). Social support moderates the relationship between stressors and task performance through self-efficacy. *Journal of Social and Clinical Psychology*, *28*(2), 244–263. https://doi.org/10.1521/jscp.2009.28.2.244

Rees, T., & Hardy, L. (2000). An examination of the social support experiences of high-level sports performers. *The Sport Psychologist*, *14*(4), 327–347. https://doi.org/10.1123/tsp.14.4.327

Rees, T., Hardy, L., Güllich, A., Abernethy, B., Côté, J., Woodman, T., Montgomery, H., Laing, S., & Warr, C. (2016). The Great British Medalists project: A review of current knowledge into the development of the world's best sporting talent. *Sports Medicine*, *46*(8), 1041–1058. https://doi.org/10.1007/s40279-016-0476-2

Robbins, J. E., & Rosenfeld, L. B. (2001). Athletes' perceptions of social su pport provided by their head coach, assistant coach, and athletic trainer, pre-injury and during rehabilitation. *Journal of Sport Behavior*, *24*(3), 277–297.

Sarason, I. G., Sarason, B. R., & Pierce, G. R. (1990). Social support, personality and performance. *Journal of Applied Sport Psychology*, *2*(2), 117–127. https://doi.org/10.1080/10413209008406425

Sauvé, J. L., O'Rourke, J. J., Wilson, B., Bundon, A., & Beauchamp, M. R. (2022). Looking back to move forward: Recently retired Olympians' perspectives of factors that contribute to and undermine athlete well-being. *Sport, Exercise, & Performance Psychology*, *11*(1), 44–60. https://doi.org/10.1037/spy0000273

Schlawe, A., Christiansen, A. V., & Henriksen, K. (2025). The high-performance sport environment: Laying the foundation for a new research topic. *Frontiers in Sports and Active Living*, *7*, 1503199. https://doi.org/10.3389/fspor.2025.1503199

Schreier, M. (2012). *Qualitative content analysis in practice*. SAGE.

Smith, B., & McGannon, K. R. (2017). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International Review of Sport and Exercise Psychology*, *11*(1), 101–121. https://doi.org/10.1080/1750984X.2017.1317357

Smith, R. E., Smoll, F. E., & Ptacek, J. T. (1990). Conjunctive moderator variables in vulnerability and resiliency research: Life stress, social support, coping skills, and adolescent sport injuries. *Journal of Personality and Social Psychology*, *58*(2), 360–370. https://doi.org/10.1037/0022-3514.58.2.360

Strachan, L., Côté, J., & Deakin, J. (2011). A new view: Exploring positive youth development in elite sport contexts. *Qualitative Research in Sport, Exercise and Health*, *3*(1), 9–32. https://doi.org/10.1080/19398441.2010.541483

Wachsmuth, S., Hauser, L.-L., Gierens, F. C., Wolf, S. A., Hermann, H.-D., & Höner, O. (2025). Examining football players' perceived social support across organizational levels and its links to holistic talent development outcomes in German youth academies. *Psychology of Sport and Exercise*, *76*, 102756. https://doi.org/10.1016/j.psychsport.2024.102756