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https://doi.org/10.1080/00336297.2026.2754140

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The State of Youth Sport: Practice, Values, and the Children We Serve

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Abstract

Over the past three decades, youth sport worldwide has increasingly been organized around a single assumption: that more structured practice produces better athletes. This belief, often linked to the deliberate practice model, shapes coaching, parental expectations, and institutional programs across diverse contexts. While the empirical base for evaluating youth sport is substantial, empirical evidence and developmental theory suggest a more complex reality in which expertise emerges through varied pathways, and early intensive training is neither necessary nor universally beneficial. Drawing on Kuhn's concept of paradigms, this article situates contemporary youth sport within a dominant model that privileges practice volume, highlighting anomalies revealed by research in psychology, developmental science, and longitudinal studies. It also emphasizes the moral, social, and cultural dimensions of sport, including the role of values, autonomy, and play in child development. This conceptual analysis posits that the youth sport system, though global in reach, often prioritizes performance metrics over holistic growth and calls for a paradigm shift that integrates evidence, ethics, and children's rights into practice and policy.

Keywords: deliberate practice, early specialization, child autonomy, coaching culture, children's rights

The State of Youth Sport: Practice, Values, and the Children We Serve

For decades, youth sport has been shaped by a powerful assumption: more practice produces better athletes. Informed by the deliberate practice model, this notion has influenced coaching systems, academies, and parental expectations across North America, Europe, East Asia, and elsewhere (Baker et al., 2003; Côté et al., 2009; Ericsson et al., 1993). Training hours have consequently become a common marker of seriousness and levels of commitment, even though pediatric and sport-development research cautions that early specialization and year-round single-sport participation can increase the risk of overuse injuries, burnout, and reduced enjoyment (Brenner, 2016; Jayanthi et al., 2015).

Borrowing from the philosopher of science Thomas Kuhn (1962), youth sport today can be understood as a field operating within a dominant paradigm. Paradigms shape the questions researchers ask, the evidence considered legitimate (i.e., assumptions), and the practices institutions normalize. However, as Kuhn observed, paradigms persist until accumulating anomalies force reconsideration.

Empirical research spanning expertise, athlete development, and motivational outcomes reveals patterns that complicate a simple practice-centered account (Güllich et al., 2025; Macnamara et al., 2016; Mossman et al., 2024; Upenieks et al., 2025). In this article, the practice-centered paradigm refers to a cluster of assumptions and practices that position accumulated, adult-directed, and increasingly specialized training as the primary route to performance and development; it includes deliberate-practice claims, practice volume, early specialization, and institutional and commercial incentives that can reward more programming (Aspen Institute, 2024; Brenner, 2016; Ericsson et al., 1993). Globally, many elite athletes

follow trajectories characterized by diversified early activity, later specialization, and gradual progression (Güllich et al., 2025). These patterns challenge the assumption that highly structured, high-volume practice in early childhood is essential for long-term success.

While the practice paradigm remains influential, youth sport systems also raise ethical and developmental concerns. Participation is mediated by adults (e.g., coaches, parents, governing bodies, and commercial providers) whose priorities may privilege performance, discipline, and achievement over autonomy, creativity, and social-emotional growth. For clubs and commercial providers, continued participation can also have organizational or financial value within a youth sport economy built around fees, travel, private coaching, tournaments, facilities, and equipment (Aspen Institute, 2024). Research documenting the decline of children's independent activity, together with evidence linking controlling sport climates to diminished motivation and well-being, suggests that highly adult-directed environments can restrict self-directed play and exploration (Gray, 2013; Gray et al., 2023; Ryan & Deci, 2017). These concerns do not imply that structure is inherently harmful; rather, they underscore the need to distinguish supportive structure from excessive control.

This article critically examines the global youth sport landscape through three lenses: (1) empirical evidence on practice and expertise, (2) developmental and moral dimensions of participation, and (3) the cultural assumptions that sustain current models. By highlighting gaps between institutional claims and research evidence, it calls for a reevaluation of youth sport systems worldwide. Children are not training projects but developing human beings. Sport systems should reflect this truth.

The Rise of the Practice Paradigm

The contemporary emphasis on practice traces largely to research on expertise. In a landmark study, Ericsson et al. (1993) proposed that expert performance arises primarily from deliberate practice that is highly structured and includes activities designed specifically to improve performance. Their research on musicians suggested that elite performers accumulated roughly 10,000 hours of deliberate practice by early adulthood. The idea quickly migrated beyond psychology. Popular books such as *Outliers* (Gladwell, 2008) and *The Talent Code* (Coyle, 2009) popularized the message that mastery is essentially a function of accumulated practice time. In sport, the concept aligned neatly with existing coaching traditions (i.e., traditional behaviorist approaches) that emphasized repetition, discipline, and technical refinement.

At approximately the same time, long-term athlete development models were gaining traction. The Long-Term Athlete Development (LTAD) framework described by Balyi et al. (2013) offered national governing bodies and coach-education systems a readily communicable sequence (FUNdamentals, Training to Train, Training to Compete, and Training to Win) for coordinating participation, talent identification, and performance planning across age groups. Its spread was driven not only by research claims but also by policy needs: governing bodies required a common language for aligning clubs, schools, coaches, and funding systems, while coach-education materials and institutional workshops provided both mediated and face-to-face channels for implementation (Dowling et al., 2020; Ford et al., 2011; Lloyd et al., 2015). The model had constructive effects, including greater attention to developmental timing, physical literacy, and long-term planning. However, critics have noted that its physiological assumptions were often treated as more settled than the evidence warranted and that standardized stages could become prescriptive when applied without sensitivity to individual, developmental, social, and

cultural differences (Dowling et al., 2020; Ford et al., 2011).

Children in youth sport often have limited bargaining power and may have little control over schedules, training intensity, selection procedures, or exit from programs without adult mediation (Matthews et al., 2026). Where access and advancement depend on adult-controlled selection and training structures, high volumes of structured practice increases the dependence on coaches and institutions as gatekeepers of opportunity (Matthews et al., 2026). Although repetition can improve performance during practice, short-term performance gains should not be assumed to represent durable learning; conditions that make practice more difficult can sometimes produce stronger retention and transfer (Soderstrom & Bjork, 2015). This learning-versus-performance distinction cautions against judging training quality solely by immediate technical improvement. The concern is not practice itself but the conversion of practice into an unquestioned moral measure of commitment, in which compliance is rewarded and alternative developmental pathways are treated as insufficient.

Together, deliberate-practice claims and staged development models helped reshape youth sport by legitimizing earlier organization, more systematic coaching, and clearer progression pathways (Dowling et al., 2020; Ericsson et al., 1993; Ford et al., 2011). These developments sometimes improved access to qualified instruction and continuity across age groups, while also reinforcing earlier specialization and practice volume as organizing principles in some settings (Brenner, 2016; Côté et al., 2009; Dowling et al., 2020). The resulting paradigm appeared coherent, yet it contained unresolved empirical, developmental, and ethical tensions.

The Evidence Behind Practice

Empirical research has never fully supported the strong claims often made about

deliberate practice. Studies across domains show that deliberate practice explains only part of performance differences. Gobet and Campitelli (2007), studying chess players, found a moderate correlation between deliberate practice and performance (r = .42). Yet the number of hours required to reach master level varied dramatically, from roughly 3,000 to over 23,000 hours, indicating that practice alone cannot account for expertise. In sport specifically, the relationship is even weaker. A meta-analysis by Macnamara et al. (2016) found that deliberate practice explained only a small proportion of performance differences among athletes, particularly at the highest levels. Subsequent reviews have raised additional concerns, noting that deliberate practice lacks a precise operational definition, making empirical testing difficult and often inconsistent (Hambrick et al., 2020).

Large-scale analyses of nearly 34,000 participants, reported by Güllich et al. (2025), indicated that many world-class athletes develop through diversified early activity, later specialization, and gradual performance progression rather than through early intensive discipline-specific training. In general, studies may fail to capture the benefits of positive transference, in which skills acquired in one sport positively translate to another, thereby improving skill outcomes without deliberate practice in that sport. These findings weaken the argument that highly pressurized childhood environments are required for long-term excellence.

Using a population sample of roughly 4,000 adults, Upenieks et al. (2025) reported that people who participated in childhood sport but later opted out reported worse mental health than both continuous participants and nonparticipants. Reasons for opting out, especially lack of fun and negative social experiences, were associated with higher anxiety and depressive symptoms in adulthood (Upenieks et al., 2025). Here, we use opt-out terminology to acknowledge young people's agency while recognizing that decisions to leave organized sport are shaped by social

processes (Persson et al., 2020). The study indicates that the quality of youth sport experiences, not participation alone, may shape long-term well-being.

Given the above, it is reasonable to question whether the deliberate practice proposition is scientifically defensible; that is, whether it can be consistently conceptualized and empirically tested. Popper (1959) argued that scientific statements must be falsifiable, meaning they can be empirically refuted; if a theory cannot be rejected under any circumstances, it loses its claim to scientific meaning. The deliberate practice framework struggles on both empirical and rhetorical grounds. Empirically, its definitions and operationalizations shift across studies, allowing evidence to be selectively interpreted. Rhetorically, the very notion of *greatness* is elusive; by definition, it is rare, singular, and often unpredictable, a lightning bolt rather than a reproducible outcome. Taken together, these limitations raise fundamental questions about whether deliberate practice can reliably explain or predict exceptional performance. Collectively, these findings represent the type of anomalies Kuhn described; there is evidence that cannot be comfortably accommodated within a simple practice-volume account of expertise. Nevertheless, many youth sport systems have continued to intensify structured practice.

The Institutionalization of Practice

While the evidence has become more nuanced, many youth sport settings have moved toward longer seasons, year-round participation, and earlier specialization (Brenner, 2016; Jayanthi et al., 2015). Clinical and policy reviews describe increasing pressure on young athletes to train in a single sport for more than eight months per year, often across multiple teams, despite associations with overuse injuries and burnout (Brenner, 2016; Jayanthi et al., 2015). Research on the transition from preadolescent to adolescent youth soccer similarly shows that participants

perceive an increase in seriousness, with potential consequences for enjoyment (Jørgensen et al., 2024).

Commercialization reinforces these trends. The Aspen Institute estimates that U.S. families spend more than $40 billion annually on youth sports (Solomon, 2025). Examples include club fees, travel, private coaching, tournaments, facilities, and equipment, creating incentives to expand seasons and differentiate “serious” participants from recreational ones (Aspen Institute, 2024). In such systems, training hours and financial investment may be interpreted as evidence of commitment, even when developmental and medical evidence supports adequate rest, diversification, and age-appropriate play (Brenner, 2016; Côté et al., 2009; Güllich et al., 2025; Matthews et al., 2026). The result is not uniform across sports or countries, but structural incentives often favor more programming over higher-quality experiences.

Coaching practice within this system is consequential because formal policy is filtered through what coaches actually enact. Studies have identified gaps in coaches’ understanding of skill-learning principles and difficulties translating abstract development frameworks into complex sport settings (e.g., Carson & Collins, 2011; Grecic & Ryan, 2018; Williams & Hodges, 2005; Wulf & Shea, 2002). Moran et al. (2026) distinguished among intended, enacted, experienced, and hidden curricula in youth Gaelic games: governing bodies may prescribe one experience, yet players encounter the curriculum primarily through coach-player interactions. Their findings suggest that coaches can exert a greater influence on the lived experience than top-down program documents, while community norms may normalize practices that disadvantage individual participants. Recent research with coaches of junior athletes likewise found that feedback, questioning, physical guidance, and motivational strategies varied across

netball, athletics, and tennis in response to sport structure, coach-athlete ratios, resource availability, and other contextual demands (Park et al., 2026).

Youth sport has, accordingly, built substantial institutional structures around simplified interpretations of practice science, but those structures are maintained by multiple actors rather than a single source. Governing bodies define pathways and competition formats; commercial providers benefit from expanded participation; parents respond to perceived opportunity and scarcity; and coaches translate or depart from formal curricula in daily practice. The paradigm becomes self-reinforcing when each stakeholder interprets the others' behavior as evidence that more training is necessary.

Coach development offers one potential point of intervention. A longstanding critique of coach education is that formal programs can fail to engage sufficiently with coaches' experiential knowledge and the situated nature of coaching practice (Cushion et al., 2003). Coaches increasingly use online resources to develop practice-design and interpersonal competencies (Koh et al., 2018), making digital education a flexible supplement to in-person learning (Szedlak et al., 2023). However, brief interventions are more effective when followed by opportunities for reflection, feedback, and reinforcement (Su & Reeve, 2011). For the present argument, the concern is not simply whether coach education transmits enough content, but whether it reproduces practice-centered assumptions by presenting drills or stage models without helping coaches examine how language, selection decisions, relationships, and local incentives shape the enacted and hidden curriculum (Cushion et al., 2003; Moran et al., 2026). Practice-based accounts of coach development similarly suggest that effective support depends on understanding the coach's organizational context and helping coaches interpret problems rather than applying one-size-fits-all solutions (Quick & Baghurst, 2025).

The Missing Dimension: Values

A dimension often marginalized in practice-centered accounts is the explicit consideration of values. Sport is not merely a technical activity; it is a cultural practice. As Huizinga (1955) argued, play is a foundational element of human culture, shaping social norms, identity, and community life. However, youth sport increasingly treats development as a product of practice, rather than a moral or social endeavor. This shift is particularly visible in the decline of independent activity among children. Research shows that opportunities for self-directed play and exploration have steadily diminished over the past several decades (Gray, 2013; Gray et al., 2023). At the same time, children's daily lives have become more structured and supervised.

Recent national survey data from the First Tee organization provide a revealing snapshot of how about 2,000 parents perceive the values of youth sports. When asked what life skills their children learned from coaches, the reported outcomes were surprisingly modest. Perhaps most notably, only 63% of parents reported that their children learned character through participation in youth sports (First Tee & The Harris Poll, 2024). For a system that frequently justifies its existence on the grounds of character development, this figure suggests a substantial gap between youth sport's stated developmental goals and parents' perceptions of its outcomes. Only 45% of parents reported that their children learned honesty from a coach; 42% reported learning work ethic; 39% reported learning creativity; 34% reported learning open-mindedness; and only 23% reported learning curiosity (First Tee & The Harris Poll, 2024). These parent-reported percentages should not be interpreted as direct measures of children's character or as evidence that youth sport fails to develop these qualities; they do, however, caution against assuming that specific character outcomes follow automatically from participation. The research suggests that

the moral benefits of youth sport are not automatic products of participation. Rather, they depend heavily on the values embedded within the environment created by coaches and institutions.

Developmental psychology also reinforces this point. Bandura's (1965) work on social learning demonstrated that children acquire behaviors and norms primarily through modeling. Values are therefore transmitted not only through slogans or mission statements, but even more so through the everyday behaviors children observe in adults who hold authority over them. When coaches prioritize winning, status, or technical mastery above all else, those priorities become the implicit curriculum of the environment. Whether the claim is that performance sport leads to a more active population (Lion et al., 2023), assists disadvantaged individuals in achieving social mobility (Spaaij et al., 2015), brings people together regardless of social stratification (Coalter, 2007), or has the unique ability to develop character (Coakley, 2016), the performance sport model continues to fall empirically short in delivering what its followers preach. An 18-month ethnographic study in high-performance gymnastics similarly found that coaches struggled to reconcile athlete welfare with performance pressure, with acting in alignment with values emerging as one of five central themes (Quick et al., 2025).

Values must therefore be intentionally cultivated through observable practices, accountability, and relationships rather than assumed to emerge automatically from participation. Without explicit attention to values, practice can become a mechanism of social conditioning. In such environments, the language of grit and discipline risks becoming a justification for systems that prioritize adult expectations over children's developmental needs.

Structure, Autonomy, and Unintended Effects

Although not directly concerned with youth sport, historical research offers an important

reminder that interventions designed to support young people may produce unintended consequences. The Cambridge–Somerville Youth Study provides a historical illustration, rather than a direct analog to youth sport, of how well-intentioned adult intervention can produce unintended long-term effects (Cabot, 1940; McCord, 2007). Because the study began in a different era, involved a substantially different intervention, and did not examine sport, its relevance to contemporary youth sport is limited. We therefore use it only as a caution against assuming that greater adult-directed structure necessarily produces better developmental outcomes.

The Cambridge–Somerville Youth Study followed children exposed to highly structured institutional programming and compared them with peers experiencing more typical developmental environments (Cabot, 1940; McCord, 2007). Long-term follow-up did not consistently favor the intensively supervised intervention group, indicating that greater adult oversight did not guarantee better outcomes (McCord, 2007). The value of the study lies in this possibility of unintended effects, not in treating its intervention as equivalent to organized sport.

Contemporary research provides a more direct basis for considering structure and autonomy in sport. A recent systematic review and meta-analysis across sport and exercise settings found that coach autonomy support was positively associated with athlete well-being, autonomous motivation, and basic psychological need satisfaction and negatively associated with distress (Mossman et al., 2024). In youth sport and physical education, autonomy-support interventions have also frequently improved teachers' and coaches' autonomy-supportive behavior (Raabe et al., 2019). Accordingly, the Cambridge–Somerville study is retained as a historical caution. In contrast, the contemporary literature provides a stronger basis for asking not simply how much children train, but how adult structures are designed, experienced, and

made responsive to young participants.

Children's Rights and the Limits of Autonomy

Youth sport is often discussed as a developmental system, but legally it operates as a governance system in which adults exercise authority over minors who lack bargaining power. Within Europe, scholarship has increasingly framed youth sport through the lens of children's rights. Matthews et al. (2026) argued that sport specialization, year-round training, and high training volumes may threaten rights protected under Articles 24 and 31 of the United Nations Convention on the Rights of the Child, including rights to health, leisure, and play. This rights-based perspective does not reject performance or competition; it requires adults and institutions to justify training demands in relation to children's health, development, voice, and opportunity for play (Matthews et al., 2026).

Children cannot legally consent to binding agreements and lack full contractual capacity (Ryan, 2026). Yet, participation in youth sport is therefore mediated by adults (i.e., parents, coaches, and institutions) who design the systems through which children participate. This existing structure shifts the focus from abstract claims about autonomy toward concrete questions of governance. Performance and competition are legitimate features of sport, but their legitimacy does not remove institutional duties of care. The central issue is whether institutions governing youth sport maintain adequate safeguards against coercion, excessive pressure, exclusion, and structural inequality. When adults control access, define expectations, allocate playing time, and regulate exit options, ethical responsibility rests with governing bodies, clubs, coaches, and parents collectively (Quick et al., in press).

Rethinking Youth Sport

A pragmatic reform agenda does not require youth sport to be rebuilt from first principles. Instead, existing systems can set developmentally defensible boundaries around training and competition while allowing context-sensitive adaptation across sports, ages, competitive levels, and resource settings. The immediate goal is not to replace competition or disciplined practice, but to reduce avoidable developmental risks and preserve multiple pathways for participation and progression. Practical steps include preserving diversified physical activity and free play in childhood, delaying irreversible specialization decisions, increasing training demands gradually, and protecting meaningful rest (Brenner, 2016; Côté et al., 2009; Güllich et al., 2025). Competition structures and selection processes can be reviewed against developmental readiness and accompanied by viable pathways for continued participation rather than treated as uniform prescriptions. No single configuration will suit all sports or contexts, so these principles should function as boundaries for local adaptation rather than a universal template.

Implementation should begin with a limited set of explicit values and measurable safeguards rather than an idealized single model. These can include respect for childhood as a developmental stage, recognition of diverse pathways to excellence, physical and psychological safety, and protection of children's voice and right to play. Governing bodies can translate these principles into minimum expectations for season length, coach education, complaint procedures, and monitoring of injury, retention, sport exit, playing time, and participant experience. Clubs can evaluate coaches using a broader set of indicators than wins or advancement. Coaches can explain training purposes, invite age-appropriate input, and treat mistakes as information rather than moral failure, practices consistent with autonomy-supportive coaching (Mossman et al., 2024). Parents can attend to children's enjoyment, fatigue, and willingness to continue rather

than equating expenditure or training volume with developmental quality. In school sport, Baghurst and Benham (2020) similarly framed quality coaching around broader educational responsibilities, including safety, sportspersonship, cooperation, civility, and personal well-being, rather than competitive performance alone.

Change is also likely to be incremental because stakeholders operate with different incentives, resources, and constraints. Effective reform still requires alignment across governing bodies, clubs, coaches, parents, researchers, health professionals, and young participants. Governing bodies can alter standards and competition structures; clubs can pilot and audit policies; coach developers can support reflective practice; researchers can evaluate implementation; parents can reward quality rather than quantity; and children can be included in age-appropriate decisions that affect their participation. Where capacity is limited, reforms can be piloted, monitored, and revised before wider adoption rather than assumed to work uniformly across settings.

Without alignment among these actors, reforms risk remaining an intended curriculum that is neither enacted nor experienced as promised (Moran et al., 2026). Practice remains essential, but its volume, timing, and form should be justified by developmental purpose rather than treated as an unquestioned good. This need for alignment also extends to the coaching workforce itself. Baghurst (in press) argued that youth sport increasingly assigns coaches professional-level responsibilities while often relying on low-paid, volunteer, or minimally prepared labor, creating a mismatch between expectations and the infrastructure available to prepare, support, and retain coaches, with implications for the consistency of athletes' experiences.

Conclusion

For a generation, youth sport has been organized around a powerful but simplified idea: that success is primarily the product of practice. This belief has informed coaching, parenting, and institutional structures across the sporting world. Without attention to values and holistic development, training can become a cul-de-sac: an endless loop of hours that produces repetition but not growth.

The evidence supports a more complex account. Expertise emerges through diverse developmental pathways; early specialization is often unnecessary; and autonomy, play, varied experience, and supportive relationships contribute to sustainable participation and development. A credible youth sport system must therefore judge success by more than accumulated hours or short-term performance. Viewed through Kuhn's lens, the field may be approaching a paradigm shift in which practice is retained but repositioned within a broader framework of evidence, ethics, children's rights, and institutional accountability. The task for governing bodies, coaches, educators, parents, and practitioners is not to abandon practice, but to place it in its proper developmental and moral context. Children are not training projects; they are developing human beings, and youth sport should be organized accordingly.

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