

Coaching Modern Generation Athletes

‘You haven’t taught until they have learned’ - John Wooden

Introduction

The focus of the coach extends far beyond technical and tactical knowledge now more than ever, with most players from digitally native generations unlike those of their coaches. Coaches have the complex task of engaging players who are shaped by rapidly changing cultural and technological forces. Since Generation Z (born roughly between 1997 and 2012), each generation has grown up in environments increasingly characterised by immersion in digital technology, social media, and instant access to information, communication and feedback (Seemiller & Grace, 2016; Twenge, 2017). These changes bring unique challenges to both the rugby training and competitive environments, particularly in terms of athletes’ attention spans, learning preferences, expectations for feedback and communication and consideration of psychological safety.

This paper explores how rugby coaches must adapt their methods to effectively engage and develop athletes born in generations where their formative years were greatly influenced by the embodying of technology in their everyday lives. It begins by defining the common characteristics of these athletes and examining how being ‘digital natives’ influences their learning. It then considers research relating to the attention span, information processing and learning behaviors of these athletes and its implications for session planning, delivery and athlete engagement. The paper outlines practical coaching strategies drawing on contemporary coaching theory and educational psychology. Finally, it concludes by encouraging coaches to remain responsive and player-centred in the face of ongoing generational change.

Understanding athletes from digitally native generations

Digital natives are constantly connected to a world characterised by high smartphone and social media usage and are accustomed to instantaneous access to information and communication. This constant connectivity has shaped their cognitive habits, attention patterns, and learning styles (Twenge, 2017; Seemiller & Grace, 2016). Compared to athletes from previous generations, they tend to process information more quickly, but also exhibit a lower tolerance for passive, one-way communication and extended concentration tasks (Williams, 2015). Psychological safety is also arguably more important for members of digitally native generations, because their cognitive and social conditioning has occurred in environments of constant visibility, accelerated feedback cycles, and highly networked peer interaction (Twenge, 2017).

Research highlights several core traits of athletes from these generations that are particularly relevant for coaches. First, they are highly visual learners, gravitating toward video content, infographics, and digital demonstrations over lengthy verbal explanations (Fromm & Read, 2018). Second, they expect immediacy - whether in feedback, answers to questions, or changes in structure - a byproduct of growing up with on-demand media and fast-paced digital environments (Williams, 2015). Third, they value personalisation and autonomy and they are more likely to engage when they feel their input matters and when they are given opportunities to co-create their learning (Seemiller & Grace, 2016).

A recurring concern among educators and coaches is the shrinking attention span of young people. A widely cited 2015 study by Microsoft Canada claimed the average human attention span had decreased to just eight seconds, shorter than that of a goldfish (Microsoft Canada, 2015). While this claim has been critiqued for oversimplifying complex cognitive processes, it does highlight a growing issue. Modern athletes are bombarded with constant stimuli and competing demands for attention. This has led to what some researchers describe as “continuous partial attention” or the tendency to pay limited attention to multiple sources of input simultaneously, without deeply focusing on any one (Small & Vorgan, 2008).

Psychological safety is arguably more important for athletes from the digital native generations as they have grown up in a culture that openly addresses mental health. They expect their emotional wellbeing to be supported and are less likely to tolerate environments where they feel unsafe or emotionally invalidated (Henriksen et al., 2020). While previous generations were more accepting of authoritarian coaching, athletes now expect relational and inclusive coaching styles. Psychological safety supports this by enabling constructive dialogue, vulnerability, and shared ownership of learning (Edmondson, 1999). Exposure to social media and performance visibility has heightened their sensitivity to criticism. Psychological safety helps athletes take risks, make mistakes, and seek feedback without fear of ridicule, fostering resilience and learning (Fransen et al., 2020). Modern teams are also more socially and culturally diverse, as is the society we live in. Psychological safety ensures that all athletes, regardless of background, feel a sense of belonging and contribution. This inclusivity strengthens team cohesion and overall performance (Harwood et al., 2015; Eastwood, 2021).

Considerations for coaching practice

One challenge facing rugby players from digital generations is that they are less likely to consume sports such as rugby through traditional viewing behaviours, if at all (Vizrt, 2024). This means they are often underexposed to the visual cues, tactical triggers, and game scenarios that previous generations absorbed simply by watching matches. As a result, they may enter competitive environments with a less instinctive understanding of cues essential for decision-making, those perceptual markers such as defender alignment, body language, or spatial manipulation (Zhao et al, 2022). Athletes from digitally native generations are less likely to regularly watch a rugby game in its entirety and need coaches to explicitly teach perception-action cues - not assume they'll absorb them. This places greater responsibility on coaches to create learning environments where athletes can see, name, and act on critical game triggers. The less today's athletes spectate, the more deliberately coaches must embed vision and decision into every training session.

The limited attention spans and preference for fast, visual feedback of the digital generations, underscore the need for adaptive, evidence-based coaching practice. Attention habits shaped by fast, high stimulus and interactive content on platforms like TikTok, YouTube, and Instagram influence how players attend to information during training (Twenge, 2017). Coaches who fail to adapt to this reality risk losing the attention and engagement of their athletes, regardless of the quality of their technical or tactical instruction. Cognitive load theory suggests that learners process information more effectively when it is broken into manageable segments. This is especially important for modern athletes, who are more likely to disengage if overwhelmed or under-stimulated (Sweller, 1988). Spacing theory argues that information retention improves when re-visited at intervals, which is increasingly important for digital-native learners who are distracted more frequently or may only be giving partial attention (Cepeda et al., 2006). Flow Theory indicates that athletes are capable of intense focus when the challenge of a task matches their skill level, reinforcing the importance of engaging, appropriately challenging practice design in psychologically safe environments (Csikszentmihalyi, 1990).

Students invest more deeply when they first feel socially and culturally safe, known, and connected within the group. Athletes need experiences that strengthen identity and social inclusion (McLeod, 2024). People perform for groups that reflect “who we are” vs “what we do” (Tajfel & Turner, 1979). They are more likely to develop shared expectations based on identity rather than authority. This is especially relevant in team sports like rugby that require vulnerability (physical contact, tactical uncertainty, making mistakes, etc.). They also rely more on social trust and emotional safety as precursors to engagement (Twenge, 2017). This lowers anxiety, which is a major attention disruptor in adolescents. Belonging frameworks lower the psychological cost of showing up, reduce fear of failure, and improve willingness to commit to difficult physical learning environments like rugby (Eastwood, 2021).

Coaching Practice

Session Design

Coaches should aim to structure sessions that resemble the rhythm of digital content: concise, engaging, and layered (Williams, 2015). Longer isolated drills risk cognitive disengagement and low-yield retention (Sweller, 1988). Instead, structuring sessions in modelled micro-blocks, for example, replacing a 15-minute closed drill with short 3–5 minute game representative activities that repeatedly require players to scan and act on critical perceptual information, such as defender numbers, alignment, spacing, body language, and intent before selecting the appropriate action, including carrying to contact, pass type and timing, and support lines (Renshaw et al., 2019; Light & Harvey, 2015). The use of evolving constraints toward the same outcome better sustains engagement, reinforces learned cues through play, and mirrors how digital-native learners absorb and encode information (Light & Harvey, 2015; Williams, 2015). Integrating constraints-led and representative game design actively involves athletes to make decisions under pressure in rugby contexts while keeping learning tasks concise, layered, and psychologically accessible (Renshaw et al., 2019). Furthermore, game-based learning models such as Teaching Games for Understanding (TGfU) and Game Sense pedagogy support deeper engagement through contextual, problem-solving approaches (Light & Harvey, 2015).

To improve long-term retention of tactical and technical rugby knowledge, coaches should intentionally embed principles from the spacing effect in the planning of sessions. Information is recalled more reliably when reviewed periodically rather than intensively in one exposure (Cepeda et al., 2006; Roediger & Karpicke, 2006). This is even more important for modern athletes, who often retain less from single exposures to information due to fragmented attention behaviours shaped by repeated exposure to short-form, high stimulus digital content (Small & Vorgan, 2008; Williams, 2015). This can be achieved through revisiting tactical information such as attack and defence systems, or technical information such as the tackle contest across multiple training sessions, supported by video-based self-review platforms including HUDL or similar performance-analysis tools (Light & Harvey, 2015; Zhu et al., 2024). Athletes can strengthen memory through repeated retrieval and transfer that knowledge into competitive play (Roediger & Karpicke, 2006). This process becomes even more powerful when paired with retrieval-based and interleaved practice between different aspects of play, enabling players to access information under pressure in representative game design rather than merely recognise it in training (Cepeda et al., 2006). For coaches, integrating spacing into session design is not just a cognitive strategy, it is a necessary adaptation to the modern athlete's learning profile (Côté & Gilbert, 2009).

Instruction and Feedback

Modern athletes benefit from concise, vivid external cues that reduce cognitive load, improve retention, and support decision-making under pressure (Williams, 2015). External cueing aligns with how they attend and process information (Winkelman, 2020). They prefer concise, visual and interactive instruction and feedback that supports the kind of implicit, game-relevant learning that constraints-led and athlete-centred coaching promotes (Light & Harvey, 2015; Renshaw et al., 2019). While internal cues direct an athlete's attention to their own body and movement mechanics, external cues shift focus to the intended outcome or interaction with the environment, reducing cognitive load and enhancing performance, learning, and attention under pressure (Sweller, 1988; Winkelman, Porter, & Haff, 2015). In a high-stimulus world, coaches must simplify complexity, and external cueing is a critical tool for achieving this end (Winkelman, 2020; Winkelman, Porter, & Haff, 2015).

While verbal instruction will always have a place, coaches where possible should flip the learning experience for digital native athletes (Light & Evans, 2013). This involves players accessing the instruction or knowledge building component before training, so that the field session becomes the place for application, decision-making, peer feedback, and refinement, not first exposure to information (Light & Evans, 2013). They arrive having already seen terminology, shapes, clips, or cue-code language, so sessions develop deeper game awareness and decision accuracy rather than spending working

memory decoding new concepts (Sweller, 1988; Twenge, 2017). Online visual tools can be used to prepare players for learning (Light & Evans, 2013; Fromm & Read, 2018). Short-form, visual and self-directed learning before training uses the same content mediums they already engage with daily such as Instagram or TikTok (Twenge, 2017). Coaches can deliberately front-load the vision and decision literacy component (e.g. lineout movements, transition play), which the modern player may not otherwise see given they are often not whole game viewers of rugby union (Light & Harvey, 2013; Zhao et al., 2022).

Athletes from digitally native generations expect fast and personalised feedback (Twenge, 2017). Integrating peer feedback into technical and tactical drills strengthens the athletes' ability to translate coached cues into perception-action responses by increasing deliberate observation, articulation, and shared reflection inside the learning loop (Light & Harvey, 2015). When athletes coach or review a teammate using concise, pre-agreed external cue language, for example "hips to space first" for ball carry or "shoulder through the far pocket" for cleanout, they are not only rehearsing a technical action, but also training the brain to scan, name the trigger, and couple the movement to the environment, rather than absorbing instruction passively (Winkelman, 2020; Winkelman et al, 2015). Structured peer review moments build shared accountability and psychological safety, shifting feedback from a coach-only directive to a team code of behaviour players can enact and repeat (Edmondson, 1999; Fransen et al., 2020; Harwood et al., 2015).

The embedding of rapid review loops in tactical focused micro game blocks caters for digital natives maintaining their engagement while embedding decision making cues repeatedly without long cognitive drop-off (Twenge, 2017; Seemiller & Grace, 2016). The use of 30-35 second reviews that use video-delay tools on a tablet (e.g. BAM Video Delay) provides opportunities for athletes to immediately see the outcome of their decision and movement, reinforcing the critical coupling between what they perceive such as defender numbers, positioning and intent (Small & Vorgan, 2008) and what they do next, such as movement towards the defence line, pass selection and timing, footwork, penetration and support lines of fellow players (Light & Harvey, 2015; Renshaw et al., 2019). This accelerates learning because players aren't guessing about the result, they can visually confirm it within seconds of execution (Zhu et al., 2024). When paired with peer voice reviews using cue-coded verbal feedback, perception-action recall is actively supported by teammates. This allows teammates to rehearse the mental model, filter the key visual trigger/s, and repeat the play decision in the next block (Sweller, 1988). This approach normalises feedback as team dialogue. This helps build shared accountability, reduces cognitive load, and strengthens psychological safety through structured, athlete-owned coaching interactions. This enables players to embrace vulnerability, repeat cue-code language, and form durable habits of scanning, deciding, acting, and recalling, skills that transfer reliably to many aspects of play (Harwood et al., 2015; Eastwood, 2021).

Psychological Safety and Culture

Modern athletes thrive in environments that are collaborative, flexible, and purpose-driven (Seemiller & Grace, 2016). Coaches should create inclusive team cultures where players understand the why behind each task (Harwood et al., 2015). Explaining the connection between a drill and a game scenario increases motivation and cognitive engagement (Côté & Gilbert, 2009). Autonomy-supportive coaching, where players are given meaningful choices and input, fosters deeper engagement and ownership (Côté & Gilbert, 2009). Examples include athlete-led warm-ups, leadership in peer review, and involvement in setting training objectives (Light & Harvey, 2015; Fransen et al., 2020). This approach also supports psychological safety, a key predictor of team performance and wellbeing (Edmondson, 1999; Harwood et al., 2015). Importantly, the digital generations respond poorly to rigid hierarchies and authoritarian styles (Seemiller & Grace, 2016). While discipline and accountability remain essential in rugby, the methods of delivering them must evolve (Renshaw et al., 2019; Light & Harvey, 2015). Coaches must strike a balance between authority and approachability, ensuring their communication is relational rather than transactional (Edmondson, 1999; Côté & Gilbert, 2009).

Conclusion

The transition of the digital generation into our teams represents both a challenge and an opportunity for performance coaches. These athletes bring new expectations, behaviours, and learning styles into the rugby environment, shaped by a world of digital immediacy and constant connectivity. While their attention spans may be shorter and their communication preferences different, they are also capable of incredible focus, creativity, and resilience when coached in ways that resonate with their lived experience. Coaches must move beyond outdated methods and embrace an adaptive, athlete-centred approach. This involves shorter, more engaging sessions; visual, interactive feedback; and a culture that values autonomy, relevance, and inclusion. These changes not only respond to the needs of modern athletes but also align with best practice in modern coaching theory. Coaching is not about teaching less. It is about teaching smarter. If coaches are able to appropriately adapt their practices they are not only more likely to better prepare their athletes for competition, but also create a shared identity within their team, the game and promote a long-term involvement in rugby union.

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