

Domain	Common Challenge	Neuroinclusive Strategy	Mechanism	Performance Benefit
Information Processing	Overload in chaotic, high-variability environments	Simplify early task constraints; progressively increase variability	Reduces irrelevant noise, allowing efficient perception–action coupling	Faster decision-making in dynamic situations
Pattern Recognition	Difficulty generalizing across contexts if variability is too high early	Use representative design with consistent core patterns before adding variability	Stabilizes affordances, enabling recognition of invariant features	Improved anticipation and reading of situations
Detail Sensitivity	Over-fixation on minor cues or irrelevant details	Direct attention to task-relevant external cues (e.g., target zones)	Channels attentional resources toward functional information	More precise execution and technical refinement
Hyperfocus	Inconsistent attention regulation; fatigue after prolonged focus	Use short, high-intensity training blocks with clear objectives	Aligns training with natural attentional periods	High-quality repetitions and accelerated skill acquisition
Selective Attention Under Stimulation	Under- or over-arousal depending on environment	Manipulate arousal (music, tempo, competitive elements) to find optimal zone	Matches arousal level to task demands	Improved performance consistency under pressure
Repetition Tolerance	Risk of burnout or disengagement with monotonous drills	Embed variability within repetition	Maintains engagement while reinforcing motor patterns	Greater movement consistency and adaptability
Implicit Learning Preference	Overload from explicit instructions disrupting automaticity	Use modeling, analogies, and external focus cues	Promotes unconscious motor learning pathways	More robust performance under pressure
Consistency / Preference for Structure	Difficulty adapting when routines abruptly change	Maintain predictable session structure; introduce change gradually	Reduces cognitive load and anxiety, preserving attentional resources	Reliable execution and competition readiness
High Energy Output	Difficulty sustaining low-intensity or passive activities	Incorporate intermittent, high-intensity tasks and active rest	Aligns physiological output with training demands	Enhanced conditioning and engagement
Persistence / Routine Adherence	Rigidity if routines are disrupted	Use structured goal-setting with small progressive changes	Leverages intrinsic motivation while building flexibility	Long-term skill development and adherence
Intrinsic Motivation / Special Interests	Narrow focus on preferred tasks at expense of others	Link non-preferred tasks to athlete’s interests or goals	Enhances dopaminergic engagement and task value	Increased effort and persistence across domains