Balancing specificity and generality in motor learning can transform lives of beginners and elite performers in sport

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The Skill Acquisition research group at Sheffield Hallam University applies key ideas of ecological dynamics to better understand motor learning, practice and talent development in sport. An ecological dynamics rationale can transform lives of sport participants by alleviating problems identified with traditional pedagogical practices demanding early specialization in one sport, predicated on the key tenets of the deliberate practice approach to acquiring expertise. In contrast, ecological dynamics proposes that sport practitioners need a more nuanced balance between specificity and generality of training for athlete development and performance preparation. The implication is that sport practitioners need to view themselves as designers of affordance landscapes (termed opportunities for action by James Gibson (1979)), with learning designs being most effective when scaled to each individual's current capacities, abilities and skills (known as effectivities). This presentation discusses how well-documented emotional, psychological and physical problems associated with early specialization can be mediated by an individualized balance between specialized sports training and more diverse and varied physical activities and experiences to enrich athlete learning and performance.