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# **Mixed Gender High Performing Optimization (HPO) Teams: The Roles of Adult Learning Theories in the Enhancement of Endurance Teams' Capabilities**

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**Abstract:** This session examines the use of adult learning theories in enhancing the high-performance optimization (HPO) of mixed gender endurance teams. The research round table proposal explores effective learning approaches for improving endurance teams' performance during conditions of mental and physical fatigue, uncertainty, and ambiguity. The session presents literature that examines the learning styles of national and international endurance teams with focus on behaviorist and progressive learning approaches.

**Keywords:** high-performance optimization, endurance teams, chaos theory

Literature defines HPO teams as “professionals of character who demonstrative comprehensive improvement of knowledge, skills, attributes in education, training, and experience to optimize and sustain an individual’s ability to succeed at any assigned mission as part of a trusted team” (U.S. Army Combined Arms Center (CAC), 2014, p. 13). These teams perform complex tasks requiring rapid critical decision making under chaos theory conditions and a barrage of attractors (Morgan, 2006). Further exacerbating the conditions, organizational and individual cultural biases influence mixed gender teams’ conception of their identity and what they are trying to accomplish (Weick, 2001). Given these type of conditions and organizational structure, endurance teams and their sponsors seek adult learning approaches that contribute towards improved teams’ performance and optimization while executing tasks under conditions of uncertainty and chaos. The session discusses two possible learning approaches for application; behaviorism and progressive.

## **Behaviorism**

Theorists present behaviorism as an educational platform for learners to survive within any environment through: (a) the process of repetitive stimuli; (b) the recognition by learners of the consequences associated with the stimuli; and (c) the reinforcement of desirable behavior (Skinner, 1974). Instructors’ are accountable for setting the applicable conditions and contingencies with the end results being the learners behave appropriately under similar environments (Elias & Merriam, 2005). Jacobs (1987) presents that through instructors providing knowledge, skills, motivation, and environmental stimuli, learners become human engineered to perform effectively and efficiently. While behaviorist theory holds promise for enhancing endurance teams’ HPO, the instructors’ capacities to repetitively stimulate all possible conditions seems in conflict with the very premise of chaos theory where conditions are ill-defined and cultural and human behaviors are ambiguous.

## **Progressive**

Progressives credit the theory as providing unlimited opportunities for learners’ growth and optimization through the scientific method of knowledge and the centrality of experience (Elias & Merriam, 2005). The problem-solving methods include the gathering of facts and

intelligence from members within the community and the intelligent exploration of possible solutions sets or hypotheses (Dewey, 1938). Lindeman (1956) presents the instructors' role is to facilitate learners with reconstructing their experiences. In turn the learners reflect upon the experiences, seek to discover new meaning, and elevate to new levels of optimization. This practice shows merit in addressing endurance teams' needs to apply a critical thinking process when faced with conditions of uncertainty. Additionally, the practice focuses on a civilizing process where an individual matures from a survival mode to functioning as a contributing group member (Bergevin, 1967; Kidd, 1973). However, in contrast to other learning styles, the progressive theory lacks a focused academic or conditioning structure. This lack of structure may lead to an over-abundance of optimism resulting in endurance teams' failure to acquire an acute awareness of complex conditions enveloping them (Lloyd & Somerville, 2006).

### **Implications of Learning Approaches**

Literature directly analyzing behaviorist and progressive learning approaches for mixed gender HPO teams operating under dangerous and ambiguous conditions is limited. An examination of behaviorism and progressive learning approaches demonstrates potential for improving the performance of endurance teams. Additionally, the application of these theories show promise in applying the research towards the development of learning methods for endurance teams operating within chaotic conditions such as military, law enforcement, search and rescue, and fire fighters.

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