## Finding Flow: A pilot study investigating the flow state in students and student-athletes

Original Research Platform (approx 30 minute presentation)

The primary purpose of this study was to identify if college students can achieve flow state and their strategies used to enter flow state in either academics or sports. A secondary aim was to identify which of Csikszentmihalyi's domains of flow state are most commonly reported in the academic and sports setting for those who entered flow. 25 college students and student-athletes (24 identified as female; 1 identified as male). Mean age 20±1.6 years. The researchers developed a 35-question survey based on the existing Flow State Scale and Flow Short Scale.

Questions asked participants to rate their level of agreement pertaining to experiences during academics and sports, before and after given a formal dimension of flow state. If a participant was a student only, they completed only the academic portion of the survey. If a participant was a student-athlete, they completed the entire survey. Participants were recruited via email, flyers, word of mouth, and social media. The survey was distributed via Qualtrics, and was open for three months. Response frequencies, and short-answer were the primary means of analysis.

3 respondents were students only; 22 were student-athletes. Student-athletes reported playing a wide range of team-focused and individual sports: basketball, field hockey, lacrosse, rowing, soccer, softball, swimming, and tennis. When comparing the two groups, neither group was more frequently entering flow state than the other. For both academics and sports, 20(80%) respondents reported frequently entering flow and 23(92%) agreed that their performance was enhanced when they are able to achieve a flow state. For those in flow, the most common domains were action-awareness merging, autotelic experience, sense of control, time transformation, and unambiguous feedback (all >80% agreement threshold). Two domains, challenge-skill balance and time transformation had more variability in academics compared to sports. Common themes for strategies used to help facilitate flow state were: music, mindfulness, breathing, rituals/routines, meditation, and focusing on the present moment.

This study suggests that both students and student-athletes are generally familiar with flow state and able to access flow during academics and sports. Individuals from both groups who entered flow reported good performance outcomes on exams and during competition.

By identifying the most commonly reported domains of flow experienced in academics and athletics, intentional focus on these domains during preparation may further improve performance in the classroom and during competition. Facilitating pretest/pregame routines that encompass these domains, students and student-athletes may be able to more easily find flow during studying and exams, or during competition. While this pilot study focused on student and student-athletes and their performance, future research is needed to determine if these strategies may translate for use in a clinical setting to guide patients and providers into entering flow prior to or during treatment sessions.

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