

# Understanding Substance (Mis)use, Physical Activity, and Psychological Stress

## Introduction

Recreational cannabis use is legal in nearly half of all states. With evolving laws, use patterns of alcohol, cannabis, and relationships with physical activity engagement and stress are unknown. Well-established relationships among physical activity engagement, stress, and alcohol (mis)use exist. Recent evidence challenges these relationships among those who use cannabis. To understand these relationships, we conducted a large-scale survey targeting West Texas college students and developed a laboratory-based research protocol to examine our variables with an extension to stress markers while exercising. Our research will advance the scientific literature on alcohol and cannabis use, physical activity engagement, and stress.

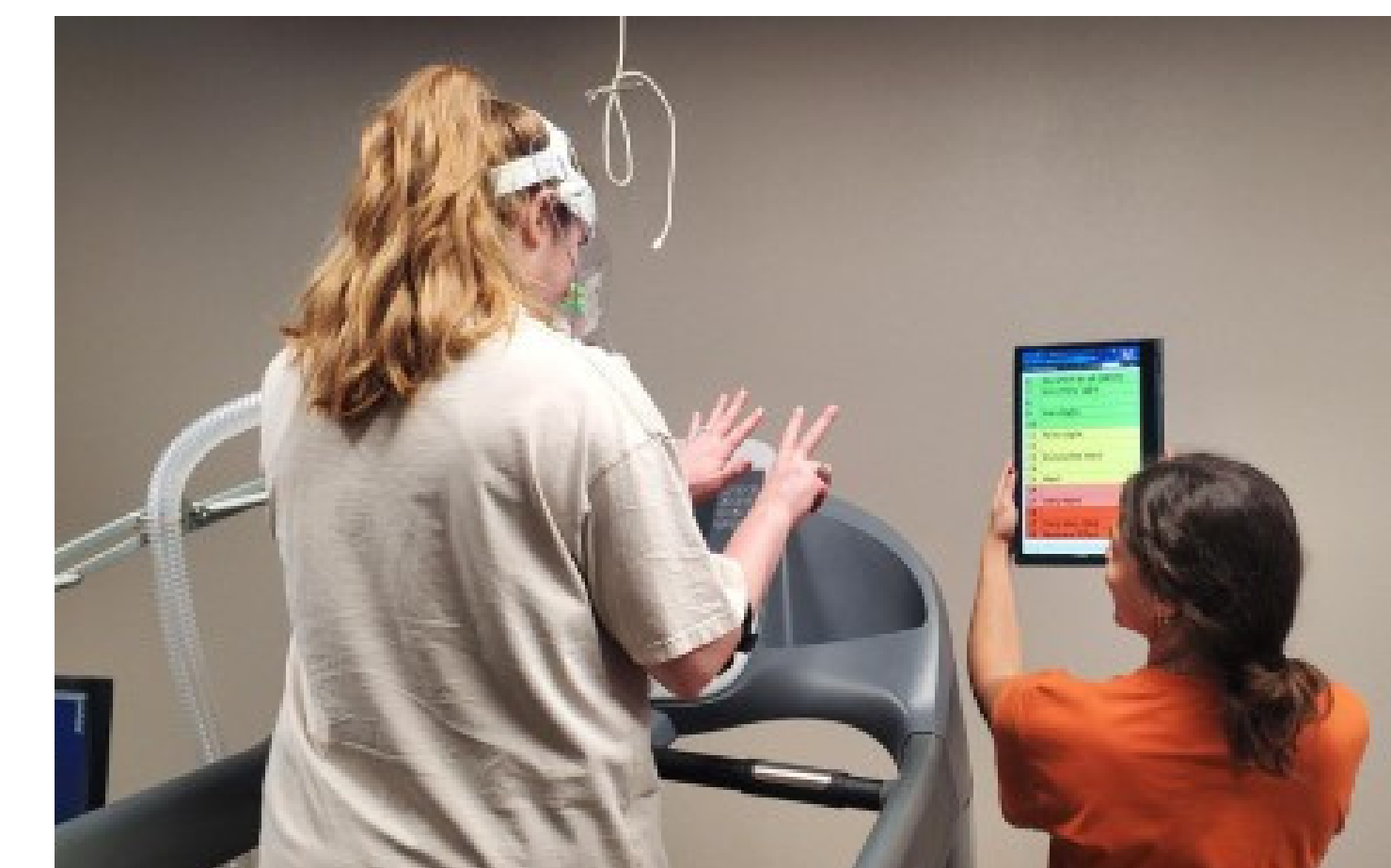
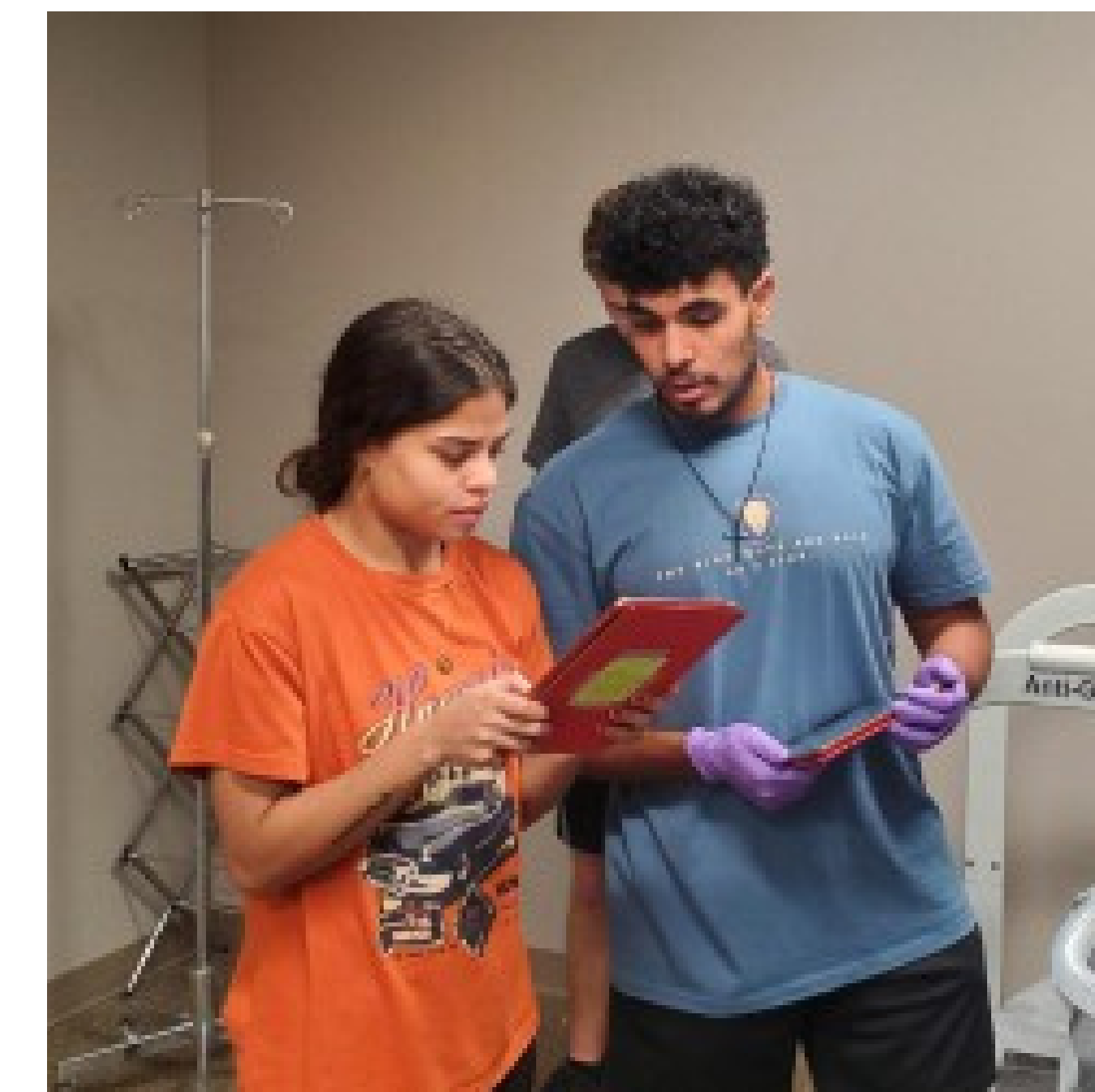
## Student Voice

"I joined this project to explore the kinesiology aspect of my future career as a Sports Psychologist. Research in both fields taught me how presenting findings can impact society, which will benefit my career and future clients."

-- Cyerra Jones

"I'm excited to explore research, connect with new people, and collaborate. Dr. Levitt's class has been transformative, and I look forward to expanding my knowledge in kinesiology through active participation in research initiatives."

-- Ernan Carrasco



Students developed hypotheses on alcohol use, stress, and physical activity based on survey data.

Lab immersion: participant recruitment, metabolic cart use, and SOP development with student teams.

Undergraduate scholars now lead lab-based work, receiving mentorship and support as they progress.

Transformative Experiences

## Faculty Voice

"This project has been transformative. We exceeded our data collection goals and discovered intriguing age-related differences in substance misuse and physical activity. Importantly, students like Ernan and Cyerra from under-represented backgrounds have grown as researchers, with Ernan pursuing an MS and Cyerra exploring a clinical psychology career."

-- Marc Lochbaum



## Impacts/Results/Products/To Date Progress

We successfully completed data collection for part 1 of our survey-based study with over 1,000 participants, and the team, including Ernan and Cyerra, is now analyzing the results. A key finding so far is that the relationship between substance misuse and physical activity varies by age group. We're on track to begin recruitment for the laboratory-based portion by the end of September. Additionally, we aimed to engage students from under-represented backgrounds, and both Ernan and Cyerra have grown significantly as researchers. Ernan plans to pursue an MS degree, while Cyerra is exploring clinical psychology opportunities.

**TrUE**  
**Transformers**

## Team

**Faculty:** Marc Lochbaum, Danielle Levitt

**Students:** Cyerra Jones, Ernan Carrasco

My Top 3 Transformative Priorities

Support more than one undergraduate student

Recruit students from underrepresented

Have strong potential for continuation post-grant;