Undergraduate student researchers

Logan Reeves
Aniela Creek
Leyla Sharples
James Mccarson

Akiko Kamimura, PhD Max Coleman, PhD

Department of Sociology & Criminology

Kathy Franchek-Roa, MD

Department of Pediatrics

Jeff Rose, PhD

Department of Park, Recreation & Tourism

Tim Brusseau, PhD

Department of Health & Kinesiology

Xiaoming Sheng, PhD

College of Nursing

1U4U Innovation Funding

Funded Project Amount: \$30,000

Introduction

College students & mental health: College students report alarmingly high rates of perceived loneliness, anxiety, depression, and sadness, and recent studies indicate that these rates have been rising. In an attempt to combat this crisis, interventions that potentially promote mental health may provide significant benefits for college aged students.

Indoor climbing & health: Climbing has been suggested as one such possible intervention. The state of Utah boasts unrivaled access to world-class climbing that everyone – from hobby climbers to first-rate athletes – may benefit from.

Purpose

To evaluate whether indoor climbing promotes mental and social health among young adults.

Hypothesis

The collaborative and trust intensive relationship of top roping will yield positive effects in fields of perceived social and mental health.

Results

Participant characteristics

Age – mean 20.45 (SD=1.76)

<u>Gender</u> – male (43.3%), female (46.7%), other (10%) <u>Race</u> – white (73.3%), Asian (10%), Hispanic (6.7%) <u>US born</u> – 100% <u>In state</u> – 90%

<u>Living arrangement</u> – with family/relative (53.3%), with friend/roommate (20%)

<u>Year in school</u> – junior (40%), sophomore (20%), first-year (16.7%), senior (16.7%)

Results of pre- & post-tests (perceived changes) IMPROVED

Self-rated general health p = <.001

Self-esteem p = <.001

Life satisfaction p = 0.012

Social connection p = 0.026

Sense of belonging p = <.001

REDUCED

Pre and Post Survey Results Adjusted for Comparison

Stress level p = <.001

Anxiety level p = <.001

Conclusions

Indoor climbing may be an effective intervention to improve mental and social health among college students.



Recommendations & Future Research

Recommendations

- Make indoor climbing more accessible for college students.
- Offer University-based indoor climbing programs.

Future research

- Larger number of participants in multiple locations.
- Long-term follow-up.

Methodology Participants College students ages 18-25. 30 participants completed all requirements for this study. Data collection

Fall 2023 & Spring 2024 Intervention

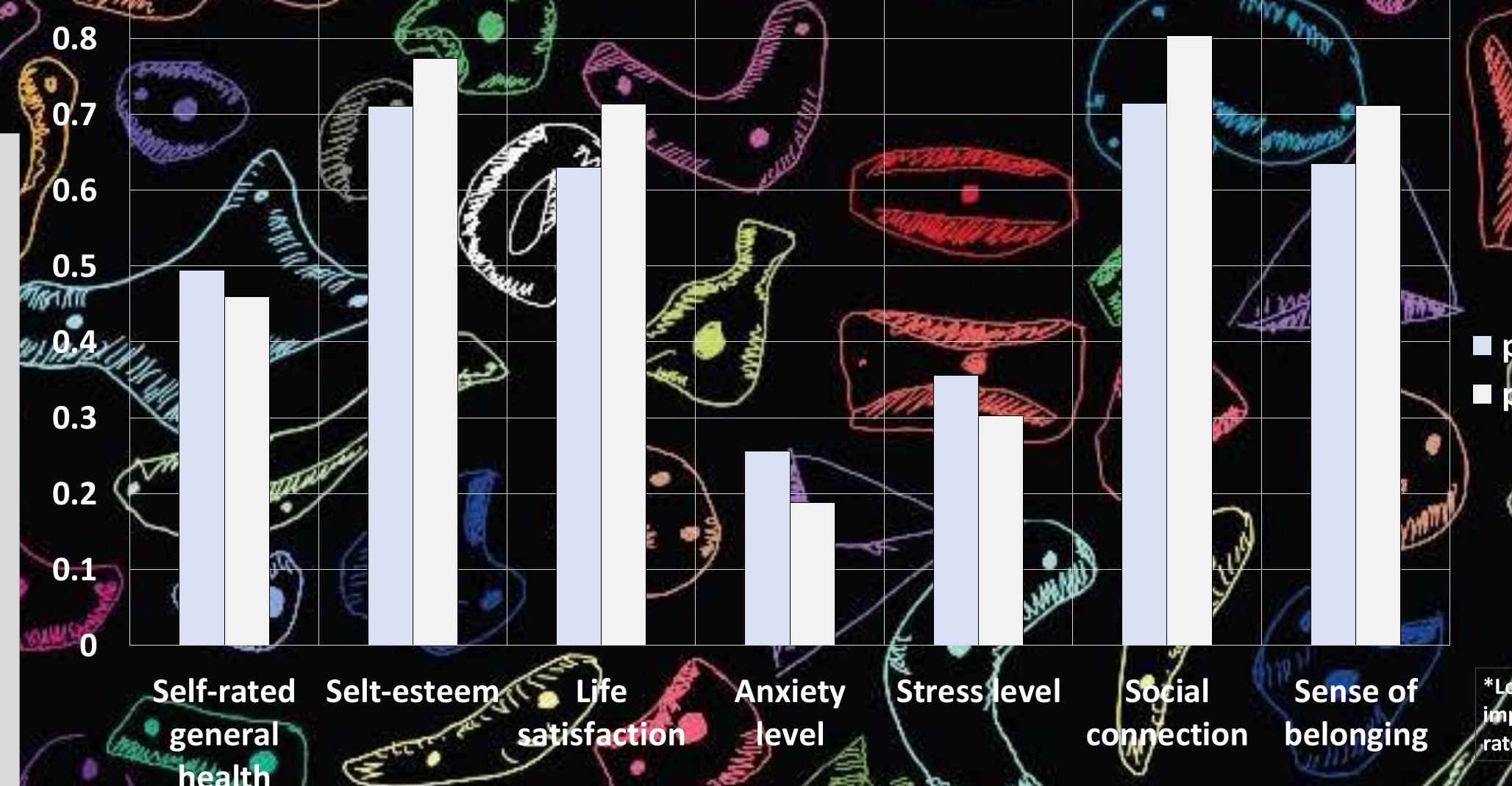
Indoor climbing program offered weekly for 12 weeks. Participants were asked to attend 10 or more sessions. 2 hours per session.

Pre- & post-tests

Perceived general health, self-esteem, life satisfaction, social connection, sense of belonging, anxiety, and stress were measured using standardized scales. ANCOVA was used for statistical analysis.

Post-intervention focus groups

Held after the last climbing session (week 12).



Results from qualitative data (participants' voices)

"I think that's been the biggest thing I've noticed mental health wise is having an outlet and a social setting and a really supportive environment to go and like challenge yourself and sometimes fail"

"When I'm climbing, I'm not as focused on other things that are bothering me"



Acknowledgements

This project was supported by 1U4U Innovation Funding & Undergraduate Research Opportunities Program (UROP).

Background Art by Savann