

The acceptability and feasibility of smartphone-based recovery coaching and contingency management to reduce substance use among young adults.



Background and Significance

- High rates of substance use and low treatment engagement for young adults (18-24 years old) is a major healthcare problem.
- Contingency management (CM) is a highly effective but rarely used method to reduce substance use.
- Young adults are known to be specially focused and fluent in online applications and may be more interested in a technology based CM approach for reducing their substance use.

Methods

- Through a college health center's SBIRT efforts, students identified with risky substance misuse (alcohol, nicotine, marijuana, other drugs) were offered the opportunity to sign up for smartphone-based contingency management (CM) offering a) facetime recovery coaching, b) remote biometric substance monitoring, c) wellness-based activity scheduling, d) CBT modules and e) "smart bank" incentives.
- This CM approach accepted student-chosen substance goals as targets for enhancing engagement and internal motivation.

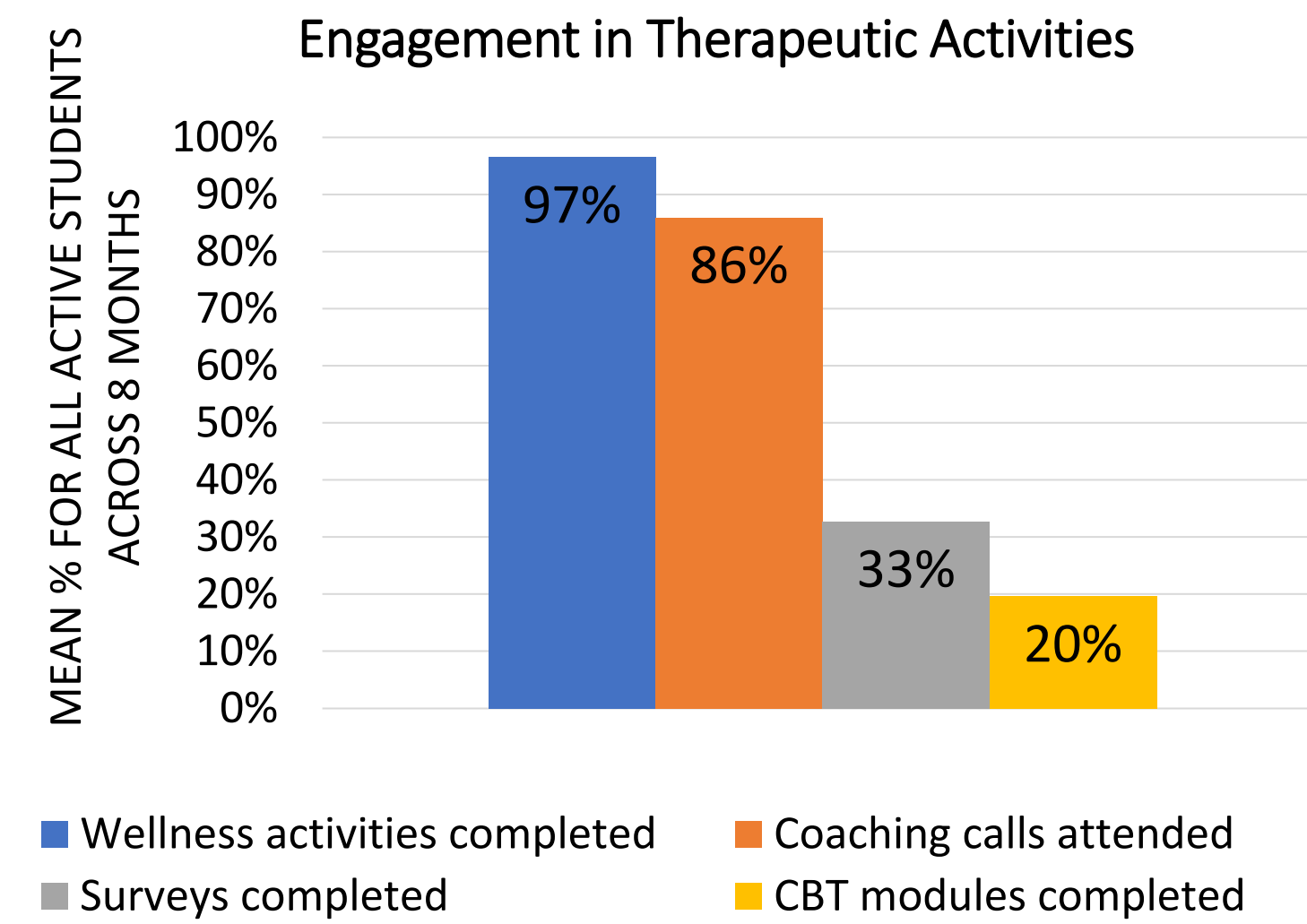
Research Purpose

- To analyze acceptance and feasibility of this unique smartphone based CM approach.
- To understand factors influencing engagement and success reducing substance use risk.

Sample

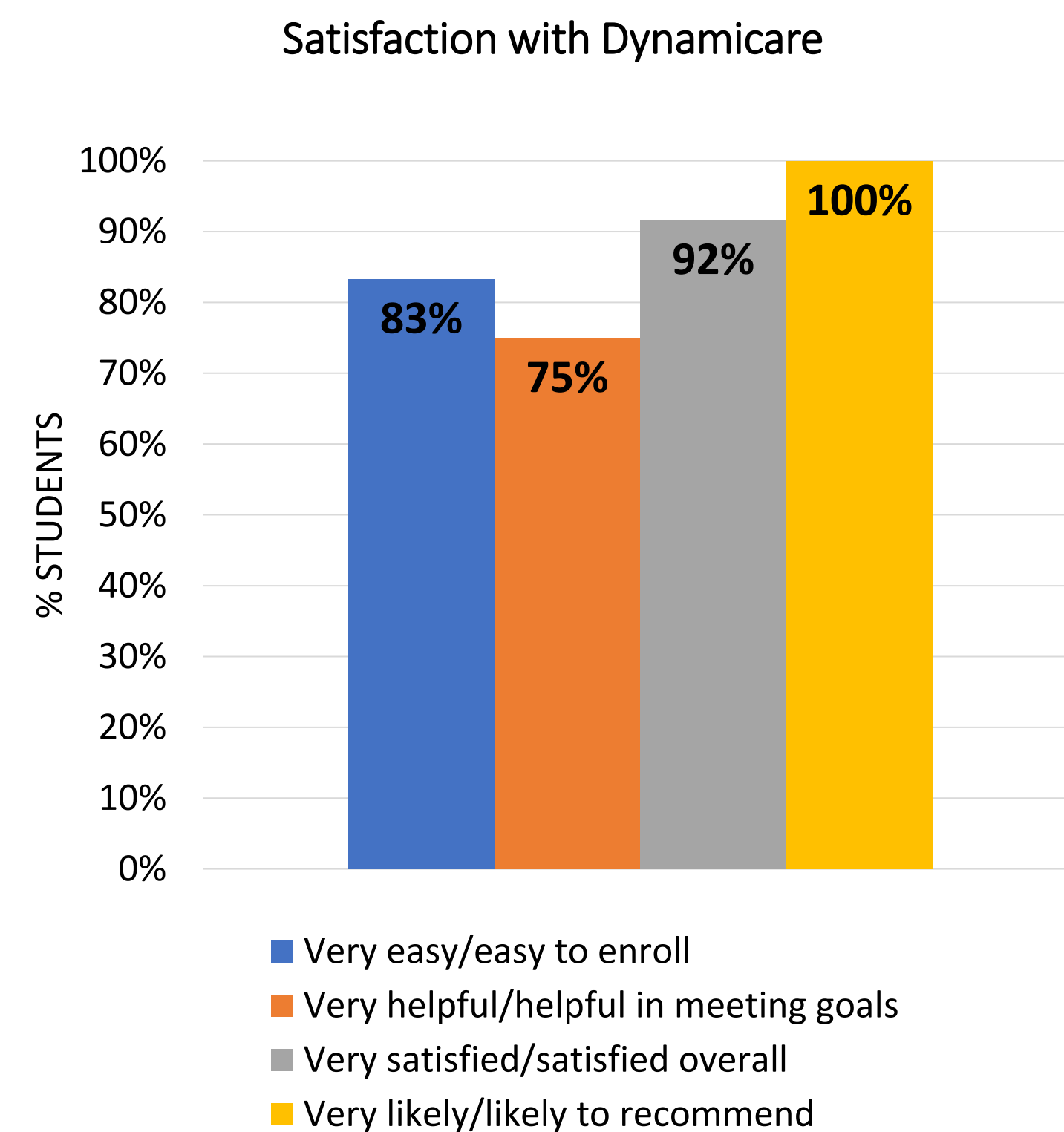
- 15 students enrolled; 33% female, 25% nonbinary; 33% BIPOC*; Mean age = 20.5. Active an average of 5.3 months. 12 and 10 students completed the 3- and 6-month follow ups.

Win C Turner, PhD, LADC & Jody L Kamon, PhD
Center for Behavioral Health Integration, LLC

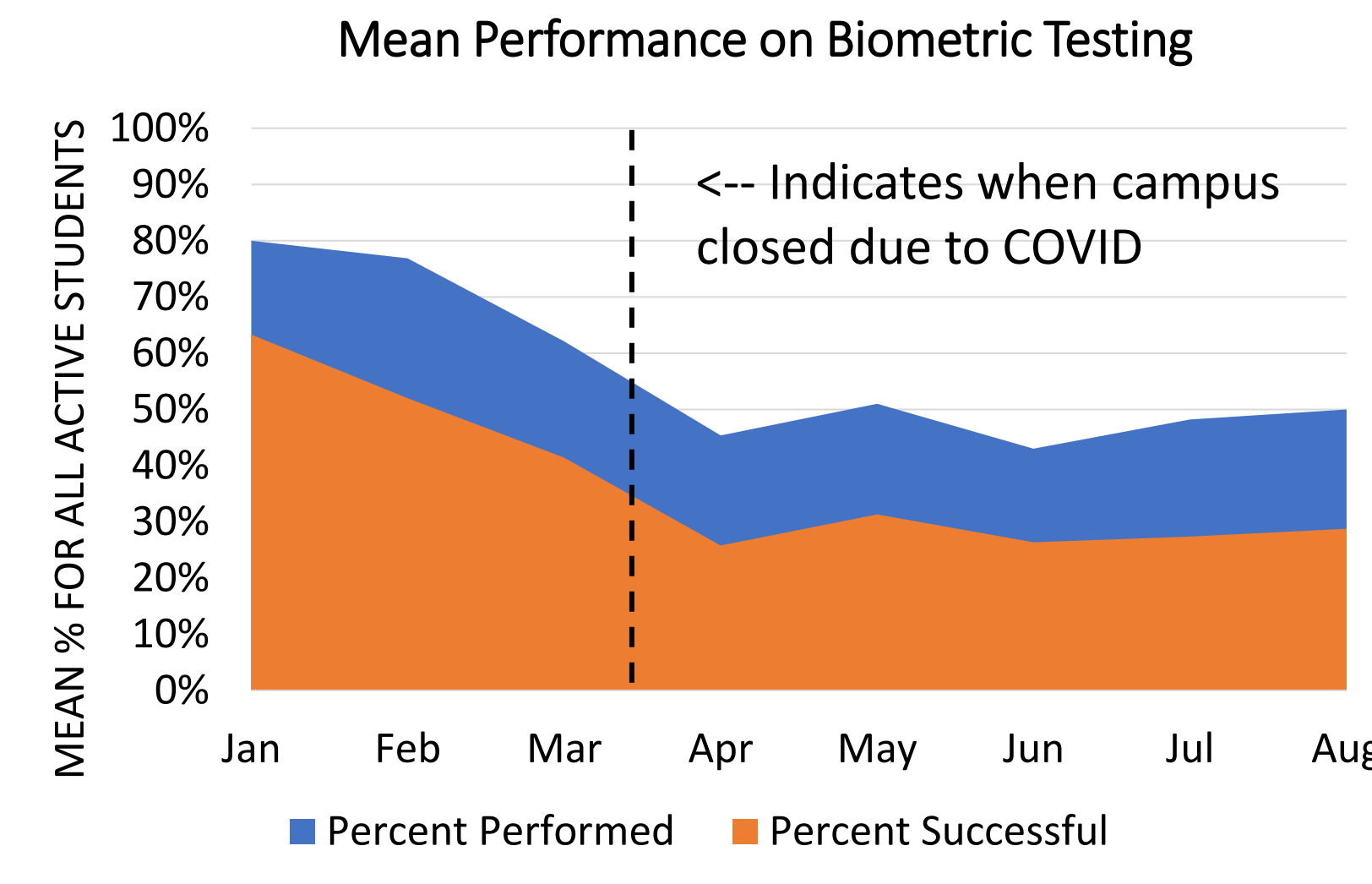


Note: A total of 90 CBT modules to choose from; students completed an avg of 18.

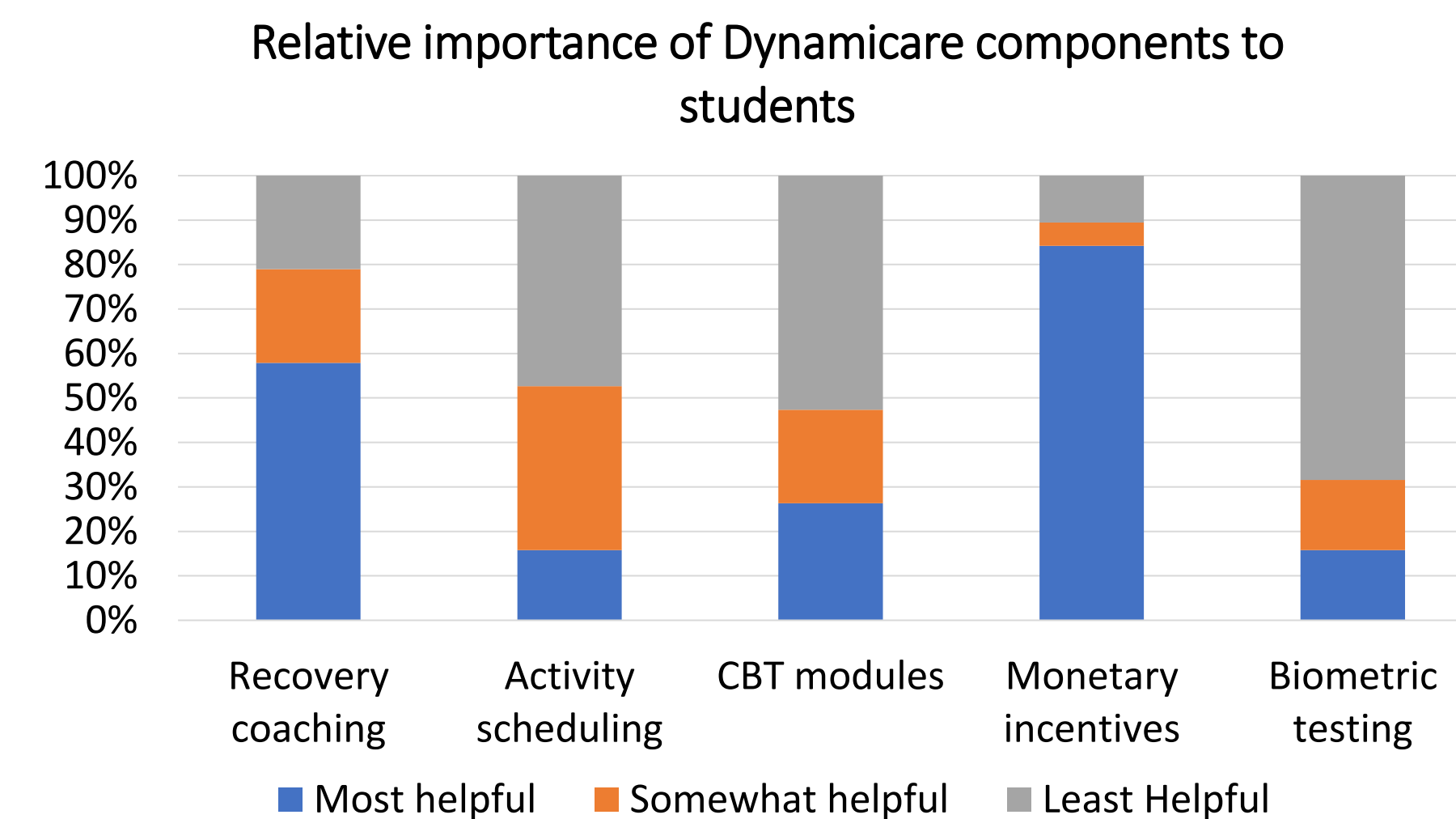
"They meet you where you're at - they just keep working with you. Its really cool - the monetary compensation gives you motivation to work the program." -student



■ Very easy/easy to enroll
■ Very helpful/helpful in meeting goals
■ Very satisfied/satisfied overall
■ Very likely/likely to recommend



Note: Feb: 13 students active; by Aug: 10 students active



Students rank ordered the 5 Dynamicare components from "most helpful" to "least helpful." Most helpful ratings are stacked at the bottom, least helpful at the top.

The majority of students found monetary incentives most helpful followed by recovery coaching, activity scheduling, CBT modules, and biometric testing.

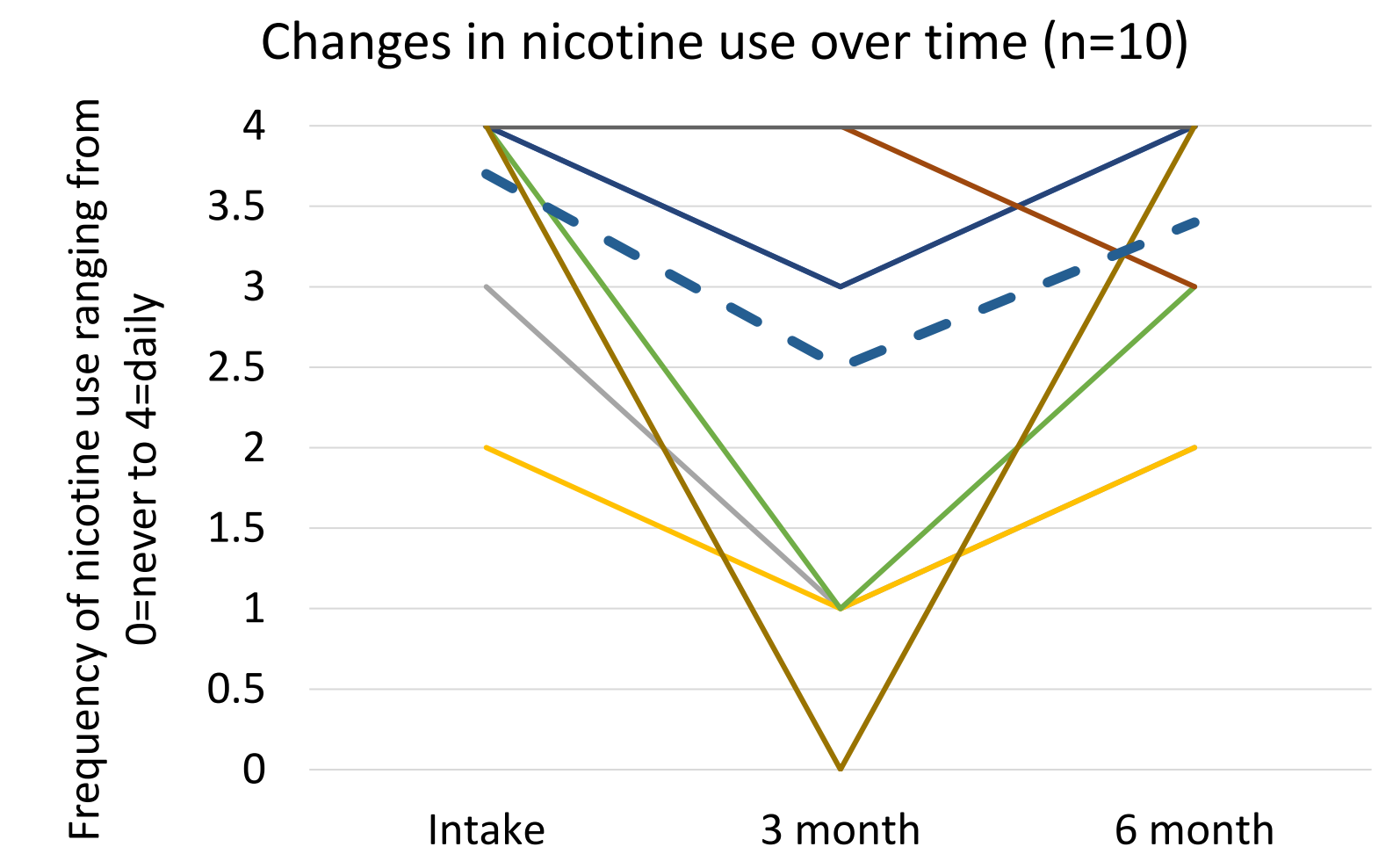
"When I started, I hit my goal right away but I found the tests were really helpful. It's easy to break a commitment to yourself so having the incentives is helpful. It's great at keeping the quitting going. I've quit for a week or two but then gone back to it before. Also not having to talk to a person was helpful. The app reminders were great. The app is really well designed."

-student

[Dynamicare] "gave me a lot more accountability in regards to the testing. I know the days I shouldn't be using. Reward system is helpful. Self-guided surveys were helpful. I liked a lot of the stuff in them. Coaching was helpful too especially because we weren't face-to-face but still had that accountability." -student

Outcomes

- Students earned an average of \$40 per month in incentives.
- Cost averaged \$220 per student per month
- Initially, students demonstrated strong decreases in nicotine use. Coincidentally, the 3 month data collection timepoint occurred in the early stages of COVID's emergence in the US.



Three students were consistent daily users over time; three students were daily users initially, decreased and increased back to daily use 6 months later. The dash line represents the mean across all students with 3 timepoints.

- Data demonstrated promising decreasing trends in alcohol use (USAUDIT), depression (PHQ9), and anxiety (GAD7).

Limitations

- Small pilot sample
- Emergence of COVID displaced students making it difficult for them to continue all aspects consistently.
- Design prioritized engagement vs. measuring effectiveness.

Conclusion

- Student engagement and satisfaction in Dynamicare is strong. Engagement in CBT modules can be enhanced.
- Results promising for nicotine use. Additional research needed to maximize ability to measure effectiveness in reducing nicotine, alcohol and other substance use.

*BIPOC stands for Black, indigenous, person of color