# A New Outlook for



OUR GOAL: To examine the relationship between potential barriers & addiction treatment motivation for new residential patients

NUWAY Alliance is a nonprofit organization that oversees a collection of recovery treatment centers and services around the Twin Cities area. They operate with a focus on using research to better their leadership, innovation, and recovery access methods.

#### **NUUAY** Alliance

NUWAY<sup>®</sup>, Cochran, The Gables, NUWAY Recovery Foundation

One of NUWAY's residential inpatient treatment centers where we conducted our surveys at.



#### Meet the Researchers



Sarah Feng

Sarah Feng ('23) and Vivian O'Brien ('23) are part of Breck School's Advanced Math Research program. Their passion for applying a math lens to issues and injustices by working with a local nonprofit community organization has motivated them to make a positive impact on NUWAY by leveraging their mathematical skills to support its outreach to the community.



Vivian O'Brien

# METHODS

#### Survey Development

NUWAY provided key factors for us to highlight and integrate into the survey. Such factors included: **motivation**, **roots of motivation**, **acuity**, **trauma**, **environmental barriers**, **and demographic data**.

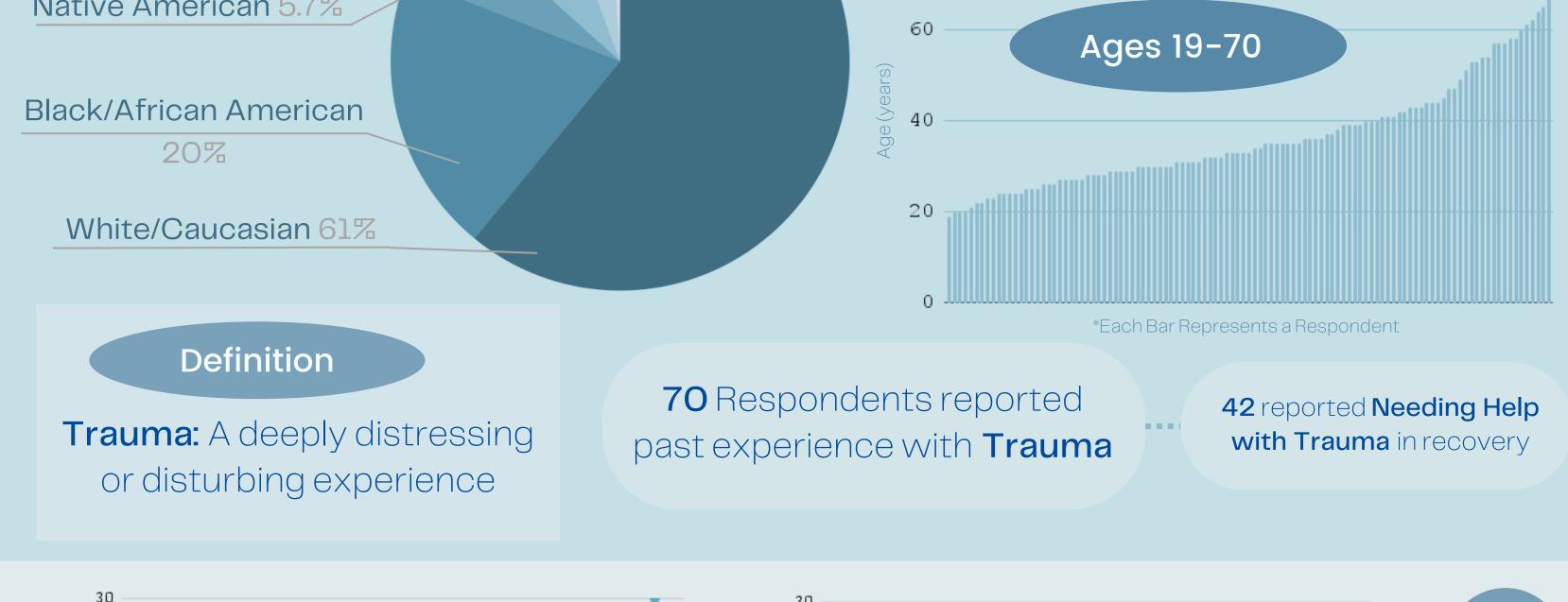
#### Survey Administration

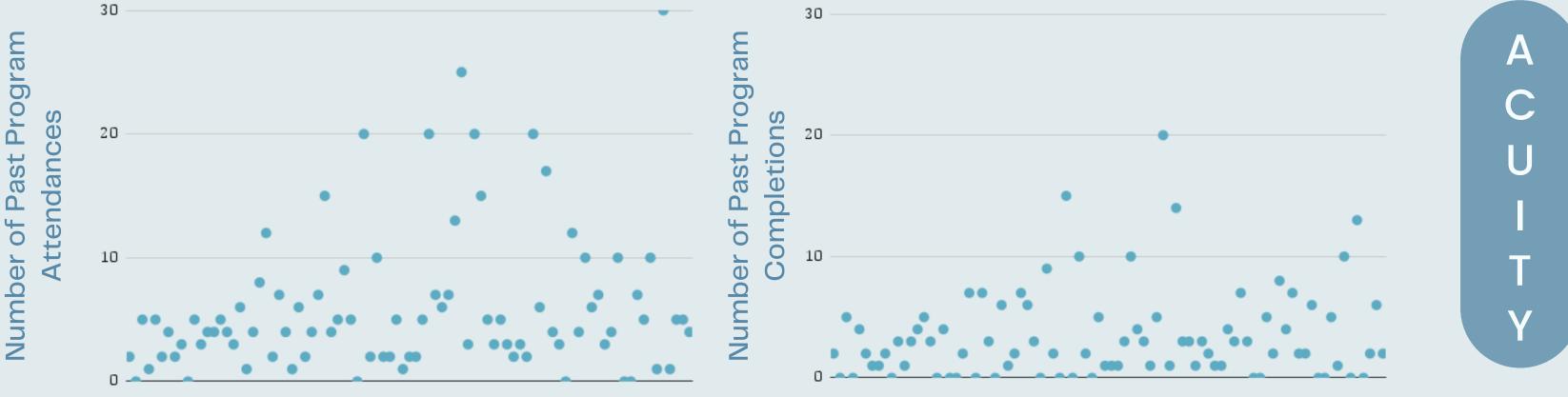
The survey was administered in three Minneapolis facilities; two of which were men's facilities and one of which was a women's facility. The survey was voluntary and required staff supervision.

#### THE SURVEY

24 Questions Total3 DemographicsQuestions13 Likert Scale4 Short Answer

Sample Question			this Treatment Agree Strongly Agree
DEMOGRAPHICS Asian 178		112 Total Respondents	40% Female Identifying 58% Male Identifying
Hispanic/Latino 4.8% Multi–Ethnic 7.6%		80	27 Non-Binary Identifying





\*Each point represents a respondent

# RELATED LITERATURE

#### **Motivation**

Intrinsic motivation is a major key to true behavioral change in substance use disorder.

#### **Barriers**

A huge disparity exists between the need for treatment and its actual accessibility and use. Three major domains of barriers: **attitudinal, subjective norms, and perceived controls.** 

### FINDINGS

Using Chi-Square Tests of independence, we found **Three Significant Associations** with Grouped Motivation Levels

Intrinsicality The motivation level was associated with whether or not the motivation was intrinsic *p-value=0.0002* 

#### Perceived Control:

Whether or not the client experienced any financial barriers to seeking treatment *p-value=0.0040* 

Barrier

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Subjective Norm: Whether or not the client experienced a positive environment that supported them seeking treatment *p-value=0.0082* 

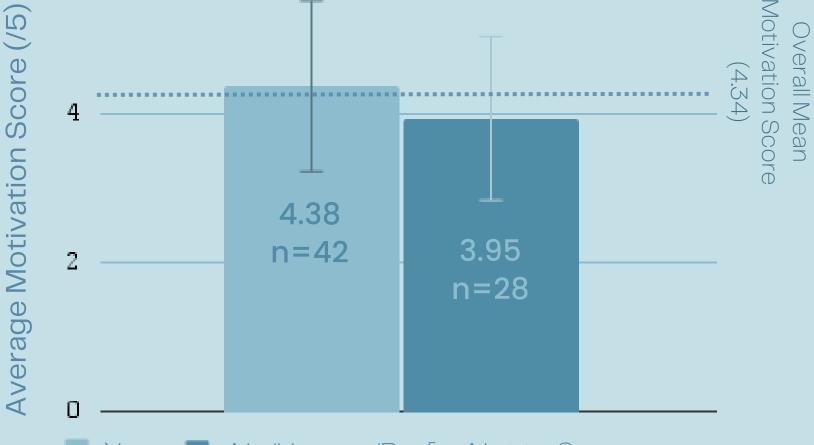
#### Barrier

#### **Roots of Motivation**

#### Impacts of Trauma

Although motivation score differences between people with Trauma and people without were minimal (Fig. 1), differences were more drastic regarding the need to trauma help. (Fig. 2) Do You Need Help with Trauma in your Recovery?





📕 Yes 📕 No/Unsure/Prefer Not to Say

**Figure 2.** Mean Motivation Score of Different Trauma Help Recognition Groups within Overall Trauma Group

## CONCLUSIONS

We found that the majority of onboarding patients had relatively high motivation levels with a mean motivation of 4.34 out of 5. Our preliminary data suggested that lack of positive environment and financial barriers have the most significant relationship with motivation (unable to be shown: we explored in our paper how different demographic factors effect the prevalence of these barriers). When it came to patients with trauma, the group that didn't report needing help with trauma during recovery had a below–average mean motivation score.