Brief Assessment of Recovery Capital Linked to Treatment Completion Among Hispanics

Brandeis | THE HELLER SCHOOL FOR SOCIAL POLICY AND MANAGEMENT Institute for Behavioral Health

RCADE Tools — Recovery Capital Assessment, Development, & Engagement Tools

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BACKGROUND

Substance Use Disorder (SUD) interventions targeting recovery capital (RC), including strengths and barriers to recovery, remain underdeveloped.[1]

- RC are the internal and external resources necessary to initiate and sustain recovery from SUD and enable human flourishing.[1,2]
- Higher RC predicts sustained recovery[5] and retention in MOUD treatment programs.[6]
- RC of socially, culturally, and economically diverse (SCED) populations is poorly understood.[7]

Ten-item Brief Assessment of Recovery Capital (BARC-10)[3]

- Developed to assess RC for research and clinical purposes.
- Lower respondent burden than 50-item Assessment of Recovery Capital (ARC).
- BARC-10 statements:
  1. There are more important things to me in life than using substances
  2. In general, I am happy with my life
  3. I have enough energy to complete the tasks I set myself
  4. I am proud of the community I live in and feel part of it
  5. I get lots of support from friends
  6. I regard my life as challenging and fulfilling without the need for using drugs or alcohol
  7. My living space has helped to drive my recovery journey
  8. I take full responsibility for my actions
  9. I am happy dealing with a range of professional people
  10. I am making good progress on my recovery journey
- 6-point Likert scale.
- Invariant across locality and gender.
- High internal consistency and concurrent and predictive validity with ARC.
- ARC subjects were majority White and from Scotland and Australia.
- Positive association between higher ARC scores and treatment completion.[4]

OBJECTIVES

- Determine if the BARC-10 retains construct and predictive validity among SCED people in treatment for SUD, especially Hispanics.
- Identify individual-level factors driving BARC-10 scores.
- Explore the clinical utility of the BARC-10.

METHODS

BARC-10 scores, age, gender, race/ethnicity (R/E),* primary and secondary diagnoses, housing status, payor, and sexual orientation were collected from 437 adult patients at admission to an inpatient SUD treatment facility in the Southwestern US. Completion type was collected at discharge.

- Successful completion = completion of the treatment plan.
- Unsuccessful = discharged against medical advice.

- Tobit** regression determined if individual factors predicted BARC-10 scores.
- Binary logistic regression determined the association between successful completion and individual factors.
- Calculated average marginal effects (AME).

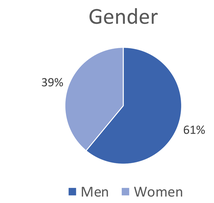
*Due to low frequencies and the local custom to describe one's race as Hispanic, R/E were combined into five categories: Hispanic, Non-Hispanic White (NH-White), American Indian and Alaska Native (AI/AN), African American or Black (Black), and Other.
** Tobit regression is used when the dependent variable is censored.

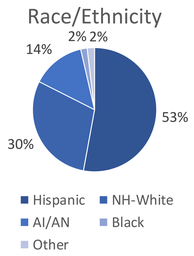
RESULTS

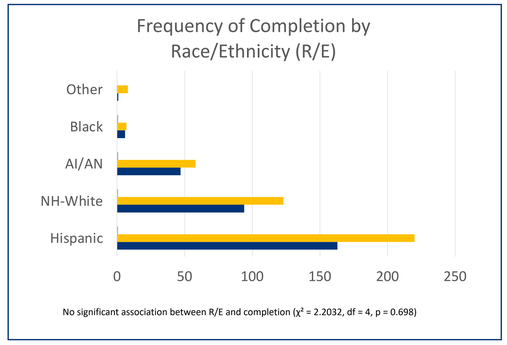
Sample Characteristics (n =437)

Age		
Mean	Median	SD
38.33	36	11.26

Living Situation		
Housed	240	64%
Unhoused	151	36%







Tobit Regression Analysis: Effect of Individual Factors on Average BARC-10 Score

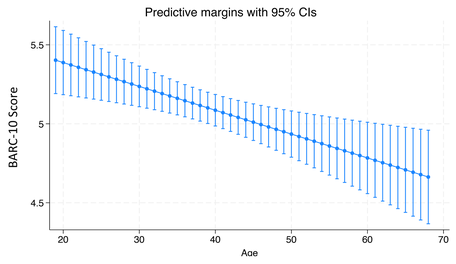
Older, NH-White, female, and homelessness were significantly and independently associated with lower BARC-10 scores (p≤ 0.05) when controlling for individual factors.

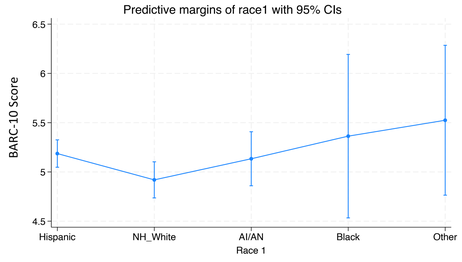
Logistic Regression: Effect of Individual Factors, Including BARC-10 Score on Completion

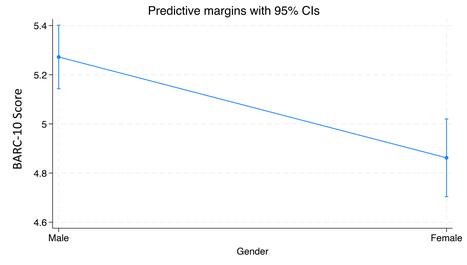
Higher BARC-10 score was uniquely associated with successful completion (OR=1.47, 95% CI = 1.11,1.94, p ≤ 0.01).

One-point increase in BARC-10 scores was associated with a 6.5% increase in the probability of successful completion (AME=0.065, 95% CI = 0.19,0.11, p ≤ 0.005).

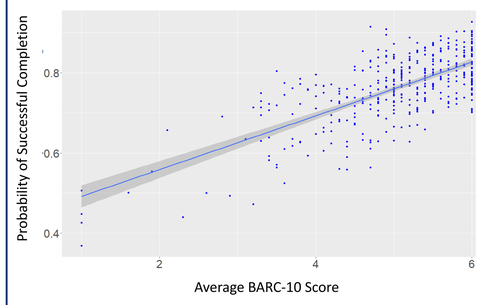
Association Between Average BARC-10 Score and Individual Factors, Tobit Model



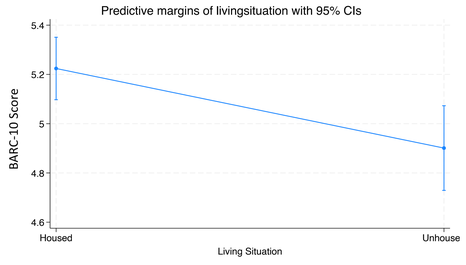




Probability of Completion as a Function of BARC-10 Score



Logistic regression reveals a significant positive correlation between BARC-10 scores and the probability of successful completion.



Note: The categorical independent variables Female, StimUD, NH-White, and Unhoused are significantly different than the comparator (p ≤ 0.05), OUD, Other SUD, AI/AN, Black, and the R/E category 'Other' are not.

CONCLUSION

BARC-10 significantly and independently predicts SUD treatment completion among a diverse population, including Hispanics.

Older, non-Hispanic Whites, Women, and unhoused people had lower recovery capital.

The clinical utility of the BARC-10 may be limited.

DISCUSSION

Recovery capital assessment may help clinicians identify strengths and barriers to recovery.

BARC-10 may be predictively valid among diverse people.

Low recovery capital among older, non-Hispanic Whites, Women, and those without stable housing suggests a need for tailoring treatment and support to meet intersectional needs.

Assessments that differentially determine recovery capital domains may have greater clinical utility.

LIMITATIONS

- BARC-10 skewness suggests ceiling effect, limiting clinical sensitivity and potentially underestimating the strength of associations between scores and other drivers.
- BARC-10 is not designed to discriminate between domains of RC, strengths, or deficits and identify barriers and facilitators to establishing or accruing RC. Without such discriminatory capacity, it may have limited clinical utility.
- Non-normal distribution of BARC-10 scores, missing data, and low frequencies of AI/AN, Black, and Other R/E categories reduced the reliability of our estimates.
- This study is limited to one treatment center and a majority Hispanic sample.

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