



Work and people with opioid use disorder:

Psychosocial barriers to work predict lower odds of seeking employment

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Background

Participation in **work-related activities** is associated with **better quality of life**, treatment engagement, and longer periods of substance abstinence for people with substance use disorders.¹ Similarly, gains in employment are **predictive of substance use treatment recovery**.²

However, people with substance use disorder face multiple challenges in obtaining and maintaining employment, ranging from **restrictive treatment structures**, **disordered substance use**, to **socioeconomic barriers**.

Additionally, experiences of disordered substance use, stigma, and gaps in employment cultivate psychosocial barriers to work that can dissuade people with opioid use disorder from seeking work, such as **pain catastrophizing**,³ **perceived injustice**,⁴ and **perceived disability**.⁵

Objective: In this small, mixed-methods study, we aimed to explore work experience and **barriers to work among people engaged in opioid use disorder treatment**.

Methods

Participants engaged in opioid use disorder treatment in University of Maryland addiction treatment sites for **at least six weeks, interested in working, and not receiving income for permanent disability** were interviewed using a structured survey. Both **qualitative and quantitative data** were collected on **work history, demographics, perceived barriers to work, psychosocial measures** (Perceived Disability Index, Symptom Catastrophizing Scale, and Injustice Experiences Questionnaire), and **socioeconomic determinants**.

A **correlation matrix** and **univariate analyses** were calculated to test multicollinearity and independent correlations with the outcome variable, **searching for work in the past six months (Table 1)**. **Multivariate logistic regression** was used to assess the relationship between **demographics, a composite of psychosocial risk** from the three tested psychosocial measures, **socioeconomic factors** and **searching for work in the past six months** using STATA 17.0.

Thematic coding of responses to barriers to searching for work and problems encountered while searching for work was also performed.

The Institutional Review Board at University of Maryland Baltimore approved this study.

Table 1. Correlation matrix of tested variables associated with outcome of searching for work in the past 6 months.

Variable	Composite psychosocial risk	Legal barriers to work	Age	PDI	IEQ	SCS	Race	High school education	Gender
Composite psychosocial risk	1.0000								
Legal barriers to work	0.1491	1.0000							
Age	-0.0123	0.0490	1.0000						
PDI	0.9133*	0.1231	0.0231	1.0000					
IEQ	0.8746*	0.2582	-0.1071	0.8328*	1.0000				
SCS	0.8659*	0.2857	-0.0289	0.7304*	0.7549*	1.0000			
Race	0.1551	-0.3255	0.4211*	0.1943	0.0396	0.1918	1.0000		
High school education	0.0231	0.1825	0.3229*	0.0755	0.0829	-0.0220	-0.1443	1.0000	
Gender	-0.1520	0.1417	-0.3186	-0.1534	-0.1323	-0.0949	-0.2921	-0.0539	1.0000

*Statistically significant association (p<0.05). Bold lettering indicates high correlation between tested factors. PDI=Perceived Disability Index. IEQ=Injustices Experiences Questionnaire. SCS=Symptom Catastrophizing Scale.

Results

A total of **38 subjects** participated in the study. Most participants identified as **male (71%)** and **non-Hispanic Black (53%)**, had a **median age of 49 years**, and were treated with **methadone (83%)**. Most participants had **previous work experience (92%)** with a median duration of **2.58 years**.

The most common job categories worked in the past six months were **service worker (44%)** and **professional technical work (18%)**. Only **one-third of participants did not search for work in the past six months**.

Over 60% (n=23) of the sample scored high in **at least one psychosocial barrier to work**, and **over 20% (n=8)** of the sample **scored high in all three assessed psychosocial barriers**.

Multivariate Logistic Regression

When adjusting for legal barriers and age, the **odds ratio of looking for work decreased by 50.6%** with increasing **psychosocial risk score**, which was statistically significant (p=0.042, **Table 2**).

With each additional year of **age, the odds ratio of looking for work in the past six months decreased by 5.0%** when adjusting for tested factors, though this relationship was not statistically significant (p=0.205). When adjusted for other factors, people who had **legal barriers were 2.357 times more likely** to search for work in the past six months, though this relationship was not statistically significant (p=0.219).

Due to collinearity between age and race as well as age and education level, race and education were not tested in the multivariate logistic regression.

Qualitative coding

The **most prevalent barriers** to searching for work were:

- **Drug use (39%),**
- **Health (39%)**
- **Transportation (37%).**

Among those searching for work in the past six months, the most common **themes of difficulties encountered** were:

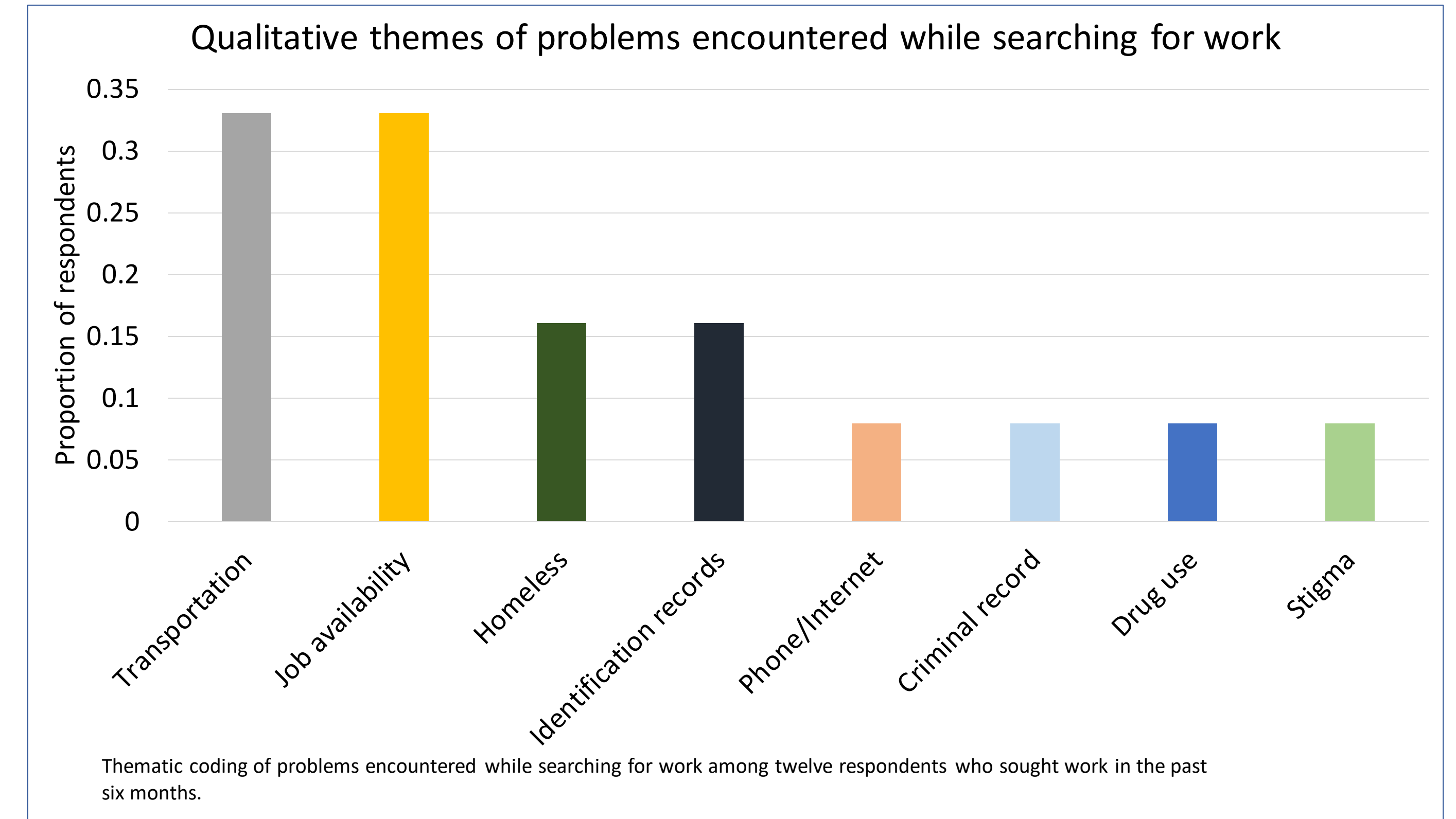
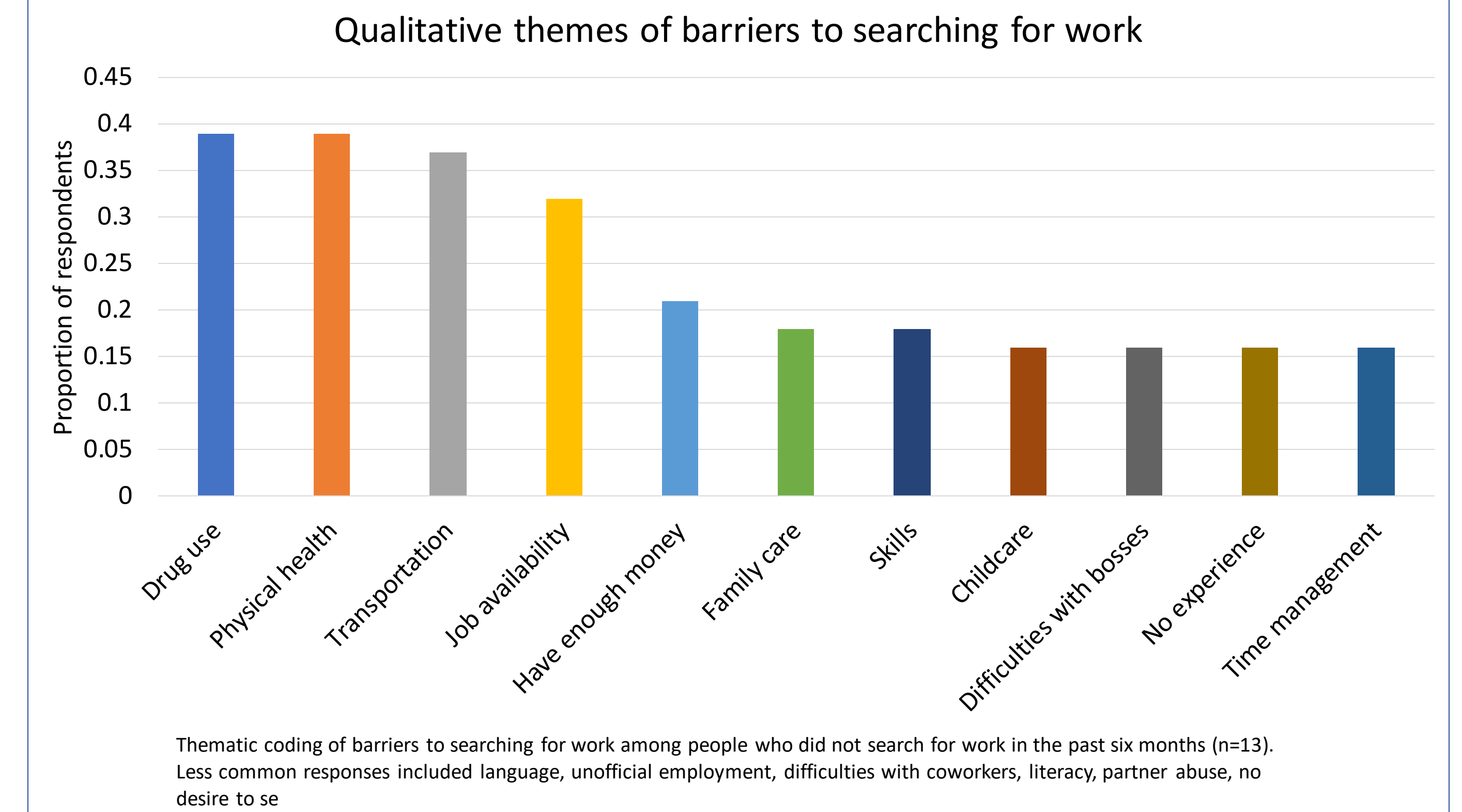
- **Transportation (33%)**
- **Job availability (33%)**
- **Homelessness (16%)**
- **Personal identification records (16%).**

Table 2. Univariate, unadjusted logistic regression of tested factors and multivariate logistic regression of searching for work in the past six months.

Variable	Unadjusted odds ratio (SE)	p-value	Adjusted odds ratio ¹ (SE)	p-value
Composite psychosocial risk score (0-3)	0.619 (0.306)	0.116	0.494 (0.171)	0.042*
Race (Black race vs non-Black race)	0.444 (0.737)	0.271	--	--
Education (GED/high school graduate vs <high school graduate)	1.778 (0.782)	0.462	--	--
Legal barriers (yes vs no)	2.357 (0.779)	0.271	2.883 (2.485)	0.219
Age (years)	0.965 (0.035)	0.302	0.950 (0.038)	0.205
Constant	--	--	40.413 (84.433)	0.077

¹Due to collinearity of education and age as well as race and age, race and education were dropped in multivariate logistic regression model.

*Statistically significant association (p<0.05).



Conclusions

In this small sample of people engaged in opioid use disorder treatment, with **increasing psychosocial risk (perceived disability, symptom catastrophizing, injustice experiences)**, **people were about half as likely to search for work** than those with less psychosocial risk, when adjusting for age and legal barriers.

Interestingly, people who reported **legal barriers to work were more than twice as likely to search for work**, though this relationship was not statistically significant and warrants future exploration.

Most participants evidenced **high scores for psychosocial barriers to work**, while the most common **barriers to and problems encountered** while searching for work were related to their **opioid use disorder and social determinants of health**.

Further exploration of how psychosocial barriers, opioid use disorder, and social determinants of health interact is warranted to **understand how people with opioid use disorder reengage and maintain engagement in the workforce**.

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