

# Addressing Mental Health and Neurocognitive Dysfunction in Chronic Homelessness

UC Center Sacramento Winter Symposium on Chronic Homelessness

1/18/23

**Elizabeth W Twamley, PhD**

Professor of Psychiatry, UC San Diego

Director, Clinical Research Unit, Center of Excellence for Stress and Mental Health, VA San Diego Healthcare System

VA Rehabilitation Research and Development Research Career Scientist

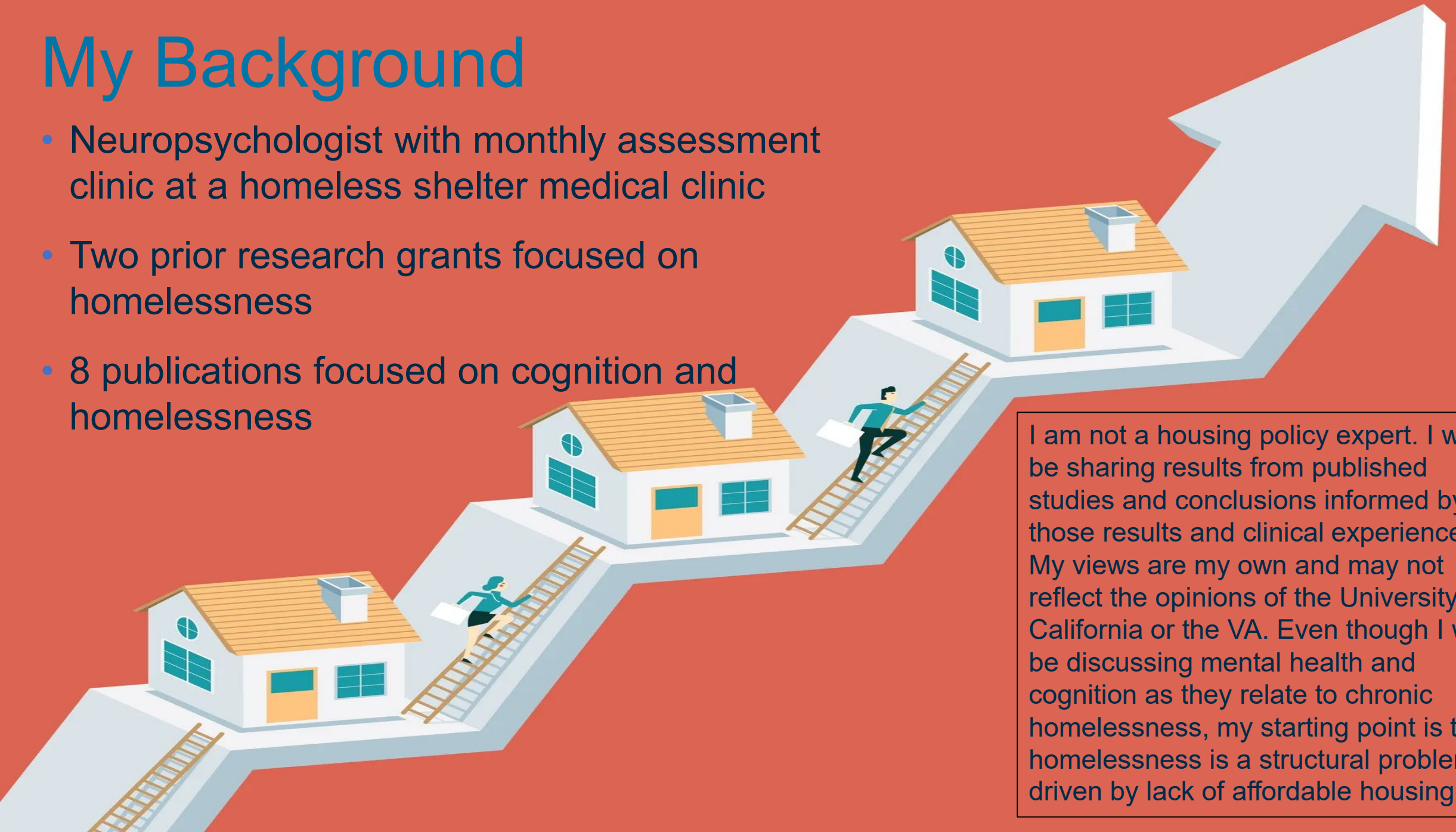
[etwamley@health.ucsd.edu](mailto:etwamley@health.ucsd.edu)

# Disclosures

- None

# My Background

- Neuropsychologist with monthly assessment clinic at a homeless shelter medical clinic
- Two prior research grants focused on homelessness
- 8 publications focused on cognition and homelessness



I am not a housing policy expert. I will be sharing results from published studies and conclusions informed by those results and clinical experience. My views are my own and may not reflect the opinions of the University of California or the VA. Even though I will be discussing mental health and cognition as they relate to chronic homelessness, my starting point is that homelessness is a structural problem driven by lack of affordable housing.

# Outline

- Homelessness and disability facts and figures
- Types, rates, and implications of cognitive and psychiatric impairment in adults who are chronically homeless
- Recommendations for identifying cognitive and psychiatric impairment in homeless services to secure income and reduce homelessness

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# California Comeback Plan (July 2021): “California’s Homelessness Crisis Has Reached A Breaking Point.”

California has about 172,000  
people who are homeless  
(about 30% of the country’s  
homeless population).

70% of Californians who are  
homeless are unsheltered.

51% of the unsheltered people  
in the country are in California.

## \$12 billion over two years

### Housing \$5.75 billion



#### Homekey - Housing

Acquire & rehab  
**tens of thousands**  
of homeless units



#### Affordable Housing

**7,000** new homes



#### Family Homelessness Prevention

**\$565 million**  
to stabilize homeless families

### Mental Health \$3.9 billion



#### Homekey - Health

**Largest expansion  
in California history**  
of service-enhanced mental health  
housing



#### Behavioral Health Housing

for people needing conservatorship  
or intensive behavioral health services



#### Veterans Services

Support services for formerly  
homeless vets

### Safe and Clean Streets \$2.2 billion



#### Local Aid

Unprecedented commitment of  
**\$2 billion** to help local  
governments address homelessness



#### Hazardous Materials Removal



#### Encampment Resolution



#### Data & Accountability Systems

Track progress and provide  
accountability and transparency

# Disability and homelessness

- Disability is over-represented among people who are homeless
- People with disabilities experience discrimination in housing, health care, and employment/wages, resulting in barriers to sustainable housing and income necessary for basic needs
- Disability income is often insufficient to pay for rent
- Rates of disability are highest among those who are chronically homeless – some say that chronic homelessness itself is a disability (US Interagency Council on Homelessness, 2018)
  - Rates range from 45% in unsheltered homeless counts to 100% in chronic homelessness

# Available Resources

Housing and Disability Advocacy Program (HDAP) under California Department of Social Services (January 2021 report)

- \$25M/year appropriation spread across 44 grantees
- Includes SOAR program (SSI/SSDI Outreach, Access and Recovery) with trained case managers to help with disability applications
- Denominator: ~172,000



HDAP GRANTEES



CONNECTED TO  
TEMPORARY AND/OR  
PERMANENT HOUSING



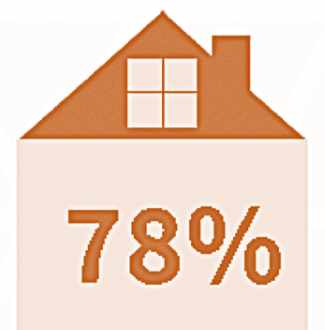
DISABILITY APPLICATIONS  
SUBMITTED



INDIVIDUALS ENROLLED  
IN HDAP



CONNECTED TO  
PERMANENT HOUSING



\*DISABILITY BENEFIT  
APPLICATION DISPOSITIONS  
APPROVED





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# Mental Health

- Homeless individuals have higher rates of serious mental illness and substance use than do those who are stably housed (Fazel et al., 2014)
  - Stanford Institute for Economic Policy Research May 2022 report (2020 data from Los Angeles)
    - 25% of homeless adults had severe mental illnesses (e.g., psychotic disorder or schizophrenia)
    - 27% had a “long-term substance use disorder”
    - >75% of chronically homeless individuals had substance abuse or a severe mental illness
- Serious mental illness and substance use disorders can include cognitive impairments that impair occupational and social functioning (Harvey, 2010; Kalechstein and Van Gorp, 2011)
- Cognitive impairments are key determinants of functional outcomes in people with psychiatric illnesses and substance use disorders (Harvey, 2010; Kalechstein and Van Gorp, 2011)

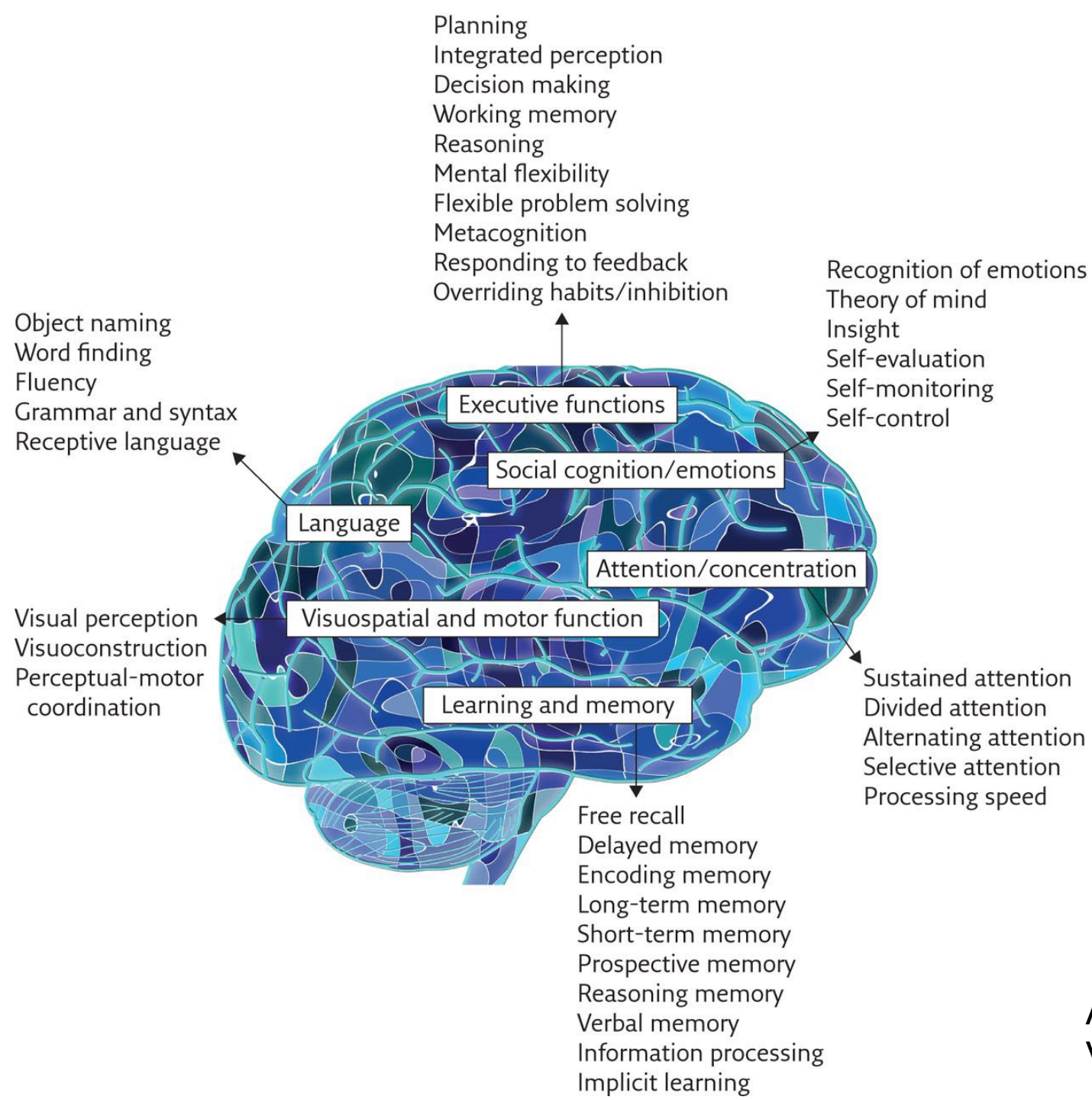
# Mental Health and Veterans

(8% of California's homeless population)

- Well studied in Veterans due to nationalized VA healthcare and large national databases
- About 50% of US Veterans who are homeless have a psychiatric disorder and 76% have substance use disorders (Kuhn & Nakashima, 2011)
- Among Iraq/Afghanistan Veterans who were homeless (Tsai et al., 2013)
  - 67% had posttraumatic stress disorder (PTSD)
  - 57% had a mood disorder
  - 38% had a substance use disorder
- 20% of Iraq/Afghanistan Veterans have a history of combat-related TBI (Tanielian & Jaycox, 2008)
  - History of TBI is associated with three times higher rate of homelessness (Metraux et al., 2013)
- Veteran homelessness is associated with suicidal behaviors (Culhane et al., 2019; Metraux et al., 2013; Tsai et al., 2018; Tsai & Cao, 2019)
  - 2.5x higher rate of suicidal ideation and 5x higher rate of suicide attempts (Tsai et al., 2018)

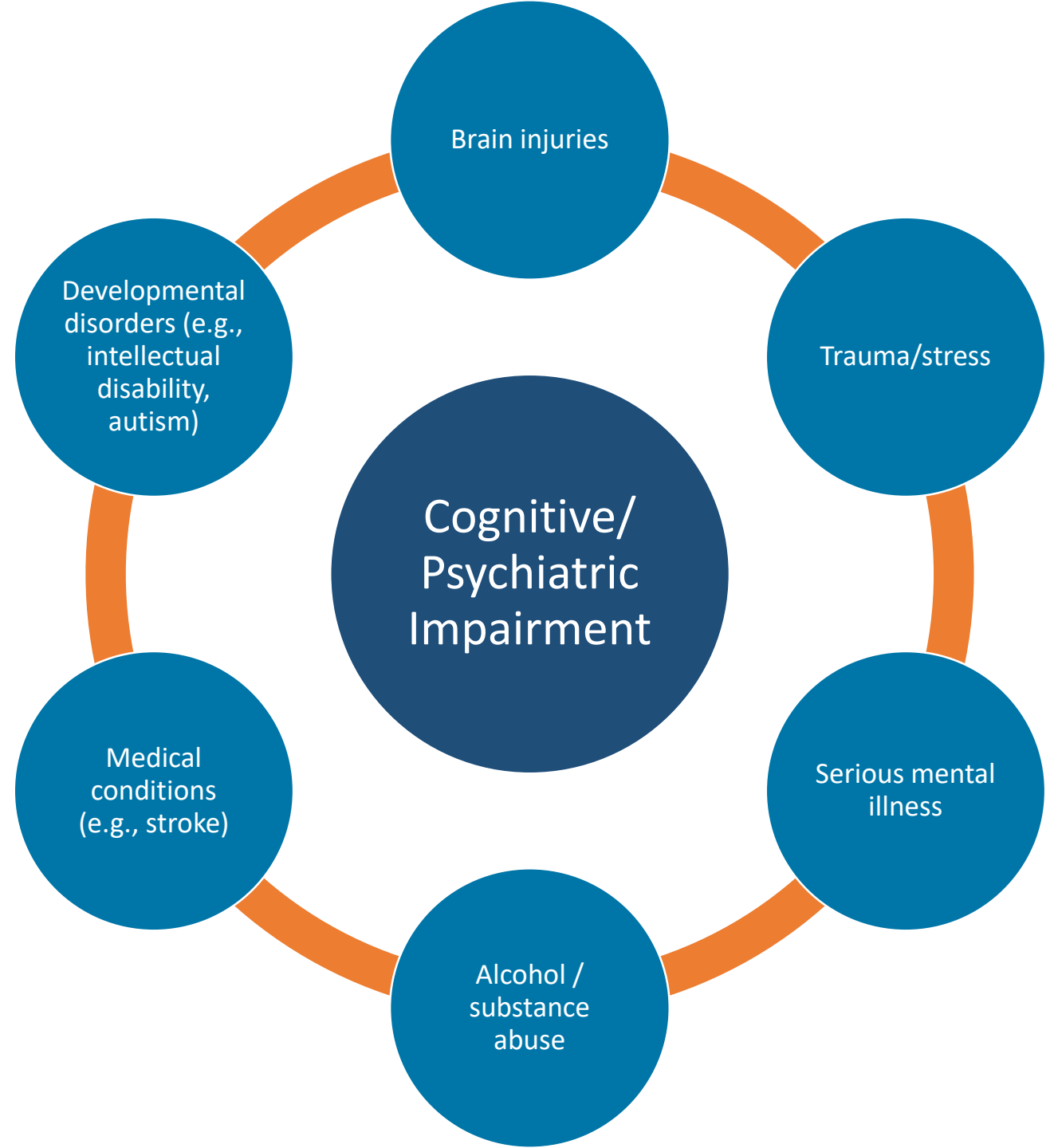
# Cognitive Impairment in Adults Who Are Homeless

- Cognitive impairment is highly prevalent among adults experiencing homelessness (Backer and Howard, 2007; Burra et al., 2009; Seidman et al., 1997; Spence et al., 2004)
- Up to 80% have lower than average neurocognitive functioning (Spence et al., 2004; Burra et al., 2009; Depp et al., 2015; Stergiopoulos et al., 2015)
- Intellectual disability is overrepresented in homeless adults (Oakes and Davies, 2018)



Andrianopoulos, Gloeckl,  
Vogiatzis, & Kenn, 2017

# Interacting **Risk Factors** for Cognitive and Psychiatric Impairment



# Risk Factors for Cognitive Impairment

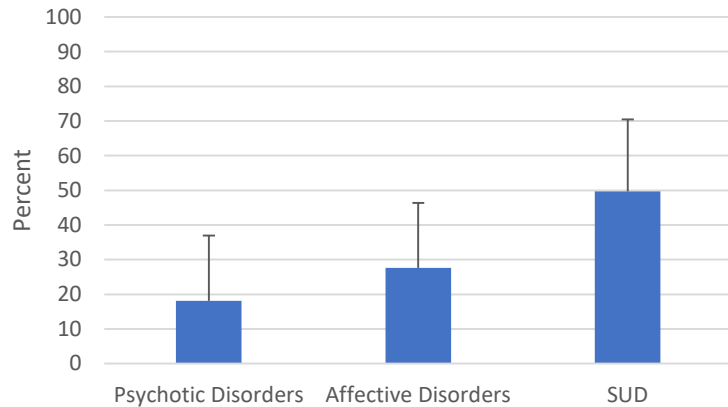
(Depp et al., 2015)

- Neurodevelopmental disorders (intellectual disabilities, learning disabilities, ADHD, autism)
- Psychiatric disorders
- Substance use disorders
- Traumatic brain injury
- Other neurological conditions (e.g., epilepsy, stroke, dementia)
- Aspects of homelessness such as stress, malnutrition, and environmental exposures may directly impair brain function
- Impaired cognition may precede and contribute to homelessness or may be a consequence of homelessness
  - One study in Veterans who were homeless found that improvements in housing were associated with improved executive functioning (Caplan et al., 2006)
  - Cognitive remediation may also improve cognitive functioning in people with a history of chronic mental illness or substance abuse, along with history of homelessness (Medalia et al., 2003)

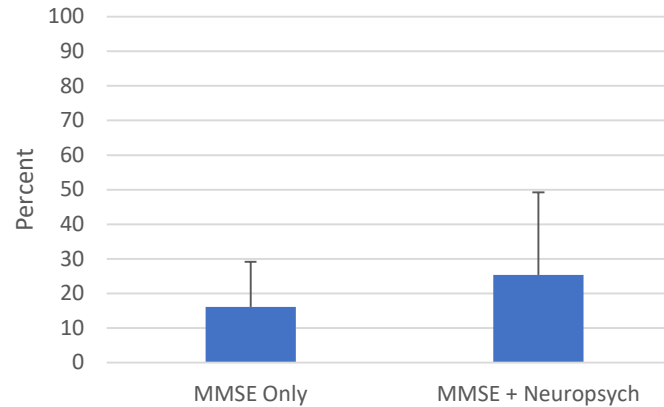


Depp, C., Vella, L., Orff, H.J., & Twamley, E.W. (2015). A quantitative review of cognitive functioning in homeless adults. *Journal of Nervous and Mental Disease*, 203, 126-131.

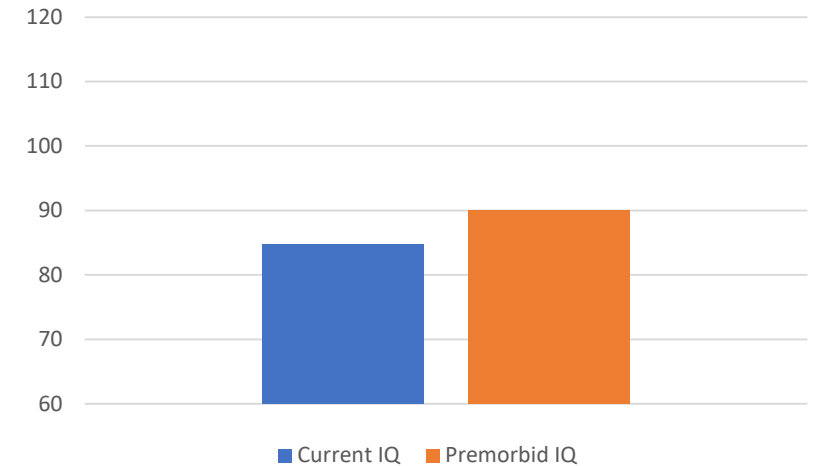
Frequency of Disorders Among Homeless Adults



Frequency of Cognitive Impairment Among Homeless Adults



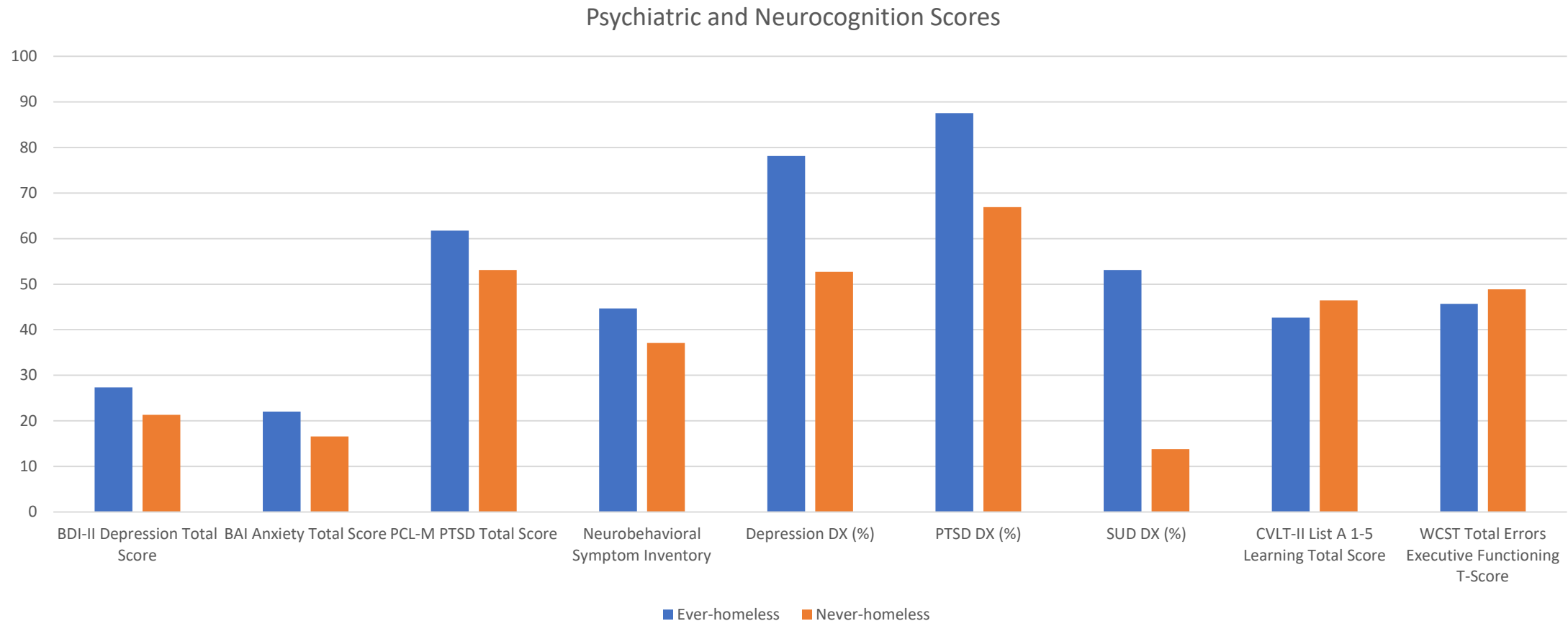
Mean IQ of Homeless Adults



Meta-analysis of 24 unique studies that included a total of 2969 individuals

- 18% psychotic disorder diagnosis
- 25% cognitive impairment
- Mean IQ = 85

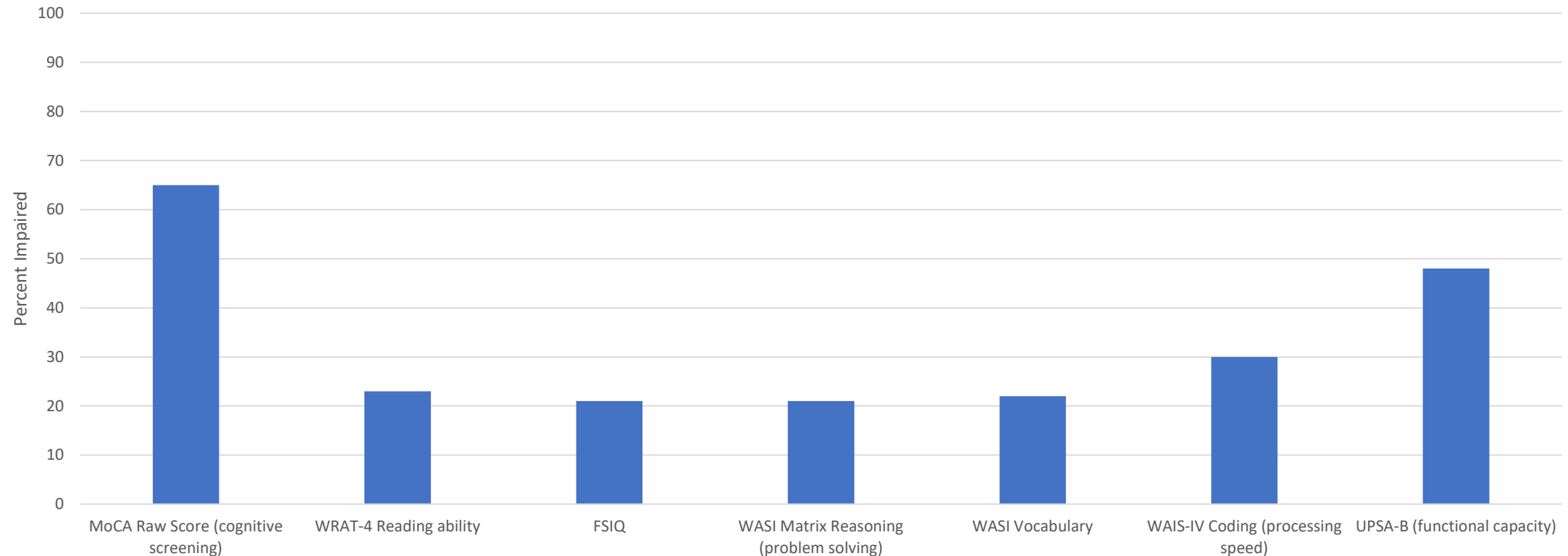
Twamley, E.W., Hays, C.C., Van Patten, R., Seewald, P.M., Orff, H.J., Depp, C.A., Olsen, D.C., & Jak, A.J. (2019). Neurocognition, psychiatric symptoms, and lifetime homelessness among veterans with a history of traumatic brain injury. *Psychiatry Research*, 271, 167-170.



Veterans with a history of homelessness had higher levels of psychiatric symptoms, mental health and substance use disorders, and more impairment on learning and executive functioning tests.

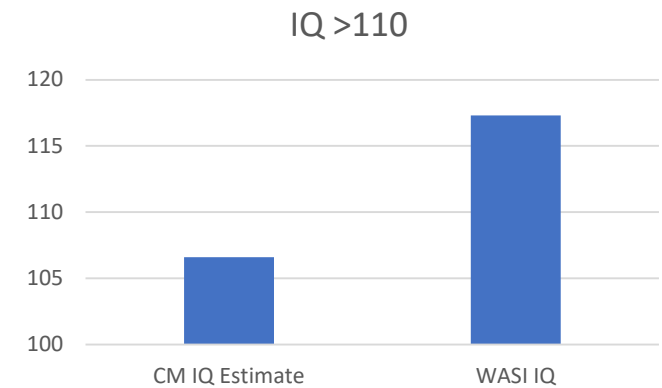
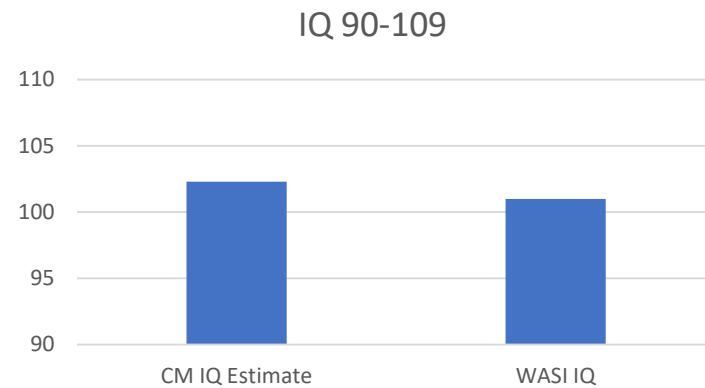
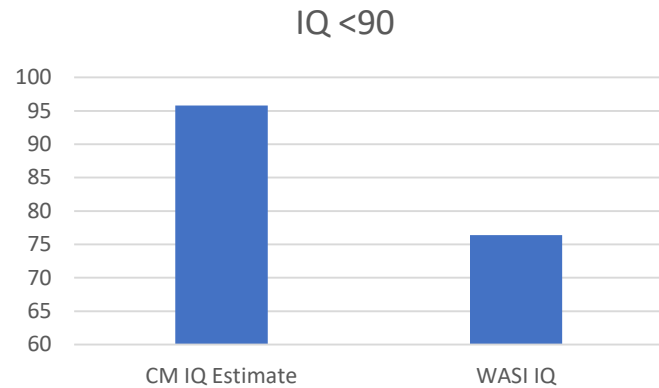
Mahmood, Z., Vella, L., Maye, J.E., Keller, A.V., Van Patten, R., Clark, J.M.R., & Twamley, E.W. (2021). Rates of cognitive and functional impairments in sheltered adults experiencing homelessness. *Psychiatric Services*, 72, 333-337.

Rates of Cognitive and Functional Capacity Impairment  
( $>1$  SD below normative mean) (n=100)

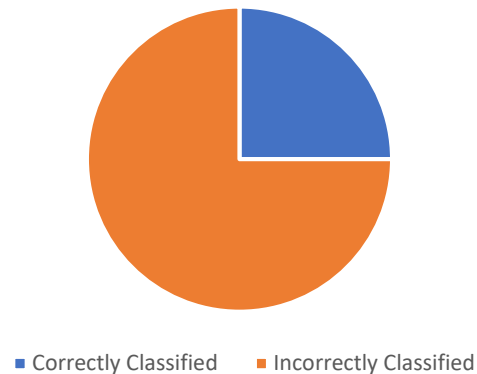


- Rates of cognitive impairment ranged from 20-65% depending on the test
- 11% met criteria for intellectual disability
- 48% were impaired on a test of functional capacity

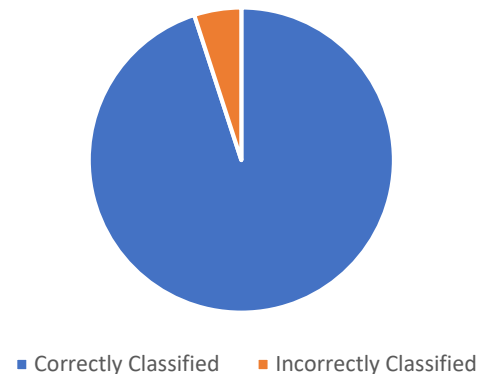
Van Patten, R., Vella, L., Mahmood, Z., Clark, J.M.R., Maye, J.E., & Twamley, E.W. (2020). Accuracy of case managers in estimating intelligence quotients and functional status of people experiencing homelessness. *American Journal of Orthopsychiatry*, 90, 586-589.



Case Manager Estimated Ability to Live Independently with an UPSA Score of < 60

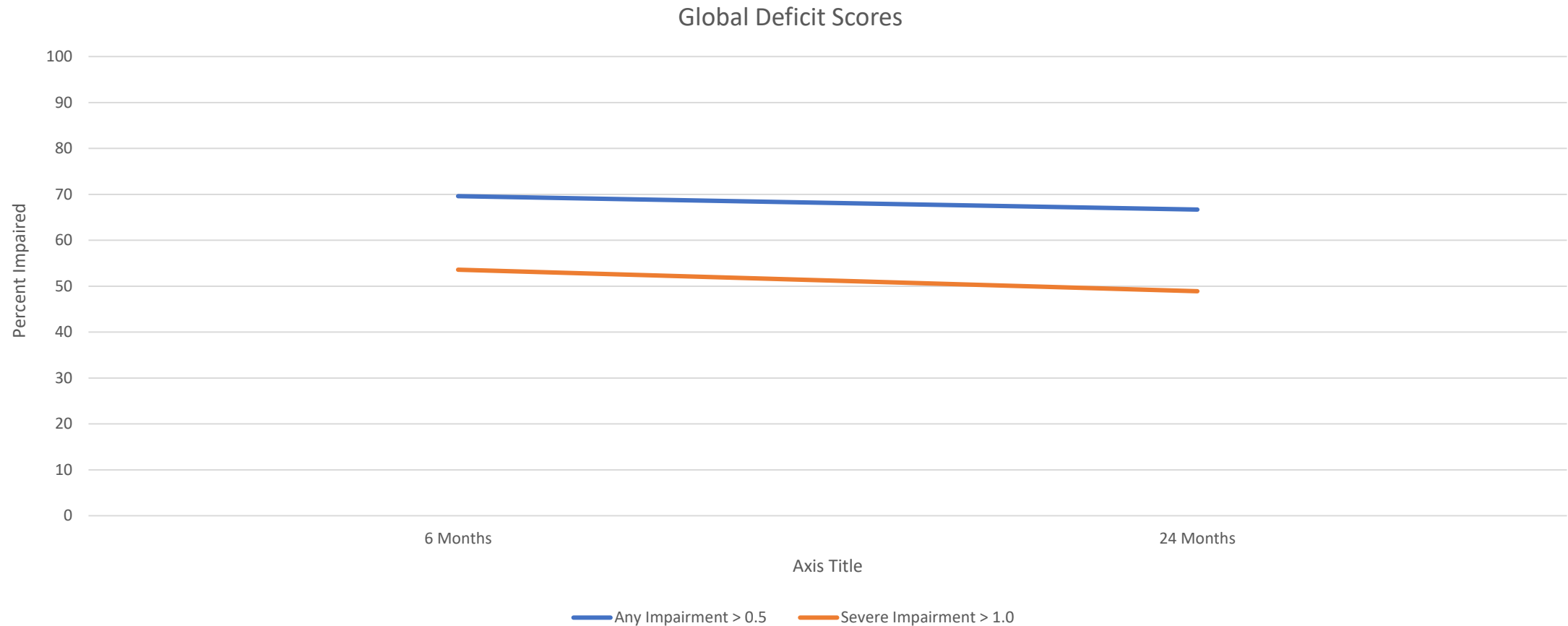


Case Manager Estimated Ability to Live Independently with an UPSA Score of > 60



- Case managers are not accurate raters of IQ or functional capacity when clients are impaired
- Only 2/8 individuals who met the criteria for intellectual disability were correctly identified

Stergiopoulos, V., Naidu, A., Schuler, A., Bekele, T., Nisenbaum, R., Jbilou, J., Latimer, E.A., Schütz, C.G., Twamley, E.W., & Rourke, S.B. (2019). Housing stability and neurocognitive functioning in homeless adults with mental illness: a subgroup analysis of the At Home/Chez Soi study. *Frontiers in Psychiatry, 10*, 865.



Stable housing does not appear to improve cognitive functioning significantly over 2 years.

# Consequences of Cognitive Impairment

- Cognitive impairment is associated with poorer functional capacity in individuals who are homeless (Stergiopoulos et al., 2011; Mahmood et al., 2021)
- Deficits in attention, learning, memory, planning, and organization (Depp et al., 2015) may interfere with:
  - Ability to work and sustain income to support housing
  - Ability to navigate the social service system to obtain disability income
  - Ability to participate in prevention and rehabilitation services

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- Homelessness and disability facts and figures
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# What we know so far

- Many individuals who are homeless have severe mental illness, substance use disorders, or other causes of cognitive and functional impairment, like intellectual disabilities
- Many such individuals are not receiving disability income even though people with conditions like schizophrenia and intellectual disability are likely to be approved
- Applying for state or federal disability benefits (SDI, SSI, SSDI) is challenging even for cognitively intact people
- Among people who are homeless/at risk and apply for disability without assistance, success rates are about 10-15% on initial application
- Only 30% of people who apply for disability are approved initially; appeals can take a year or more
- SOAR (SSDI Outreach, Access, and Recovery) offers a model for navigating these applications – 60% of initial SOAR-assisted applications approved in 155 days on average (<https://www.samhsa.gov/homelessness-programs-resources/grant-programs-services/soar>)
- Identifying individuals who should apply for benefits is not straightforward
- Case managers often fail to identify people with intellectual or functional disabilities



# What I've seen: the bad news

- A middle-aged woman with advanced Huntington's disease (dementia) living outside, no disability benefits
- A middle-aged man who had a documented history of 17 strokes, no disability benefits until neuropsychological testing was included in his appeal
- Many young to middle-aged people with schizophrenia, unmedicated, who had not told any previous clinicians about their psychotic symptoms and had no disability benefits
- Many people with stimulant-induced persisting psychosis, severe psychiatric and cognitive impairment, without disability benefits
- Many people with intellectual disabilities or autism or both, all ages, some previously diagnosed, some not, without disability benefits
- Many older people with moderate to severe dementia, unsheltered, without benefits
- These people are incredibly vulnerable, often need care or supervision along with housing, and would all qualify for disability benefits

# What I've seen: the good news

- Hundreds of individuals who received appropriate cognitive or psychiatric assessment, received assistance in navigating disability applications, received disability, and transitioned to housing



# Recommendations

- Broad screening for psychiatric conditions and cognitive impairments that are associated with high success rates for disability applications
  - Schizophrenia (~25%)
  - Intellectual disability (~11%)
- Psychiatric screening questions (e.g., Mini International Neuropsychiatric Interview; MINI) and intellectual disability screening (e.g., Wechsler Abbreviated Scale of Intelligence) could be done in ~15 minutes and identify a significant portion of individuals eligible for disability
- Disability navigators could help with applications
- Disability income could then be used to support permanent supportive housing or other housing options
- Could be part of an expansion of the CDSS Housing and Disability Advocacy Program or public mental health services

# A piece of the puzzle

- Housing first approach
  - Building more affordable housing
  - Funding more shelters
  - Rapid entry and rapid exit from shelters
  - Providing more mental health and addiction treatment
- 
- Let's not leave federal dollars on the table when we have unsheltered neighbors who would easily qualify for federal disability!

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