# Identifying subgroups in the homeless population: a cluster analysis of individuals in transitional housing in Valencia

SJD San Juan de Dios Valencia



19th European Research Conference Utrecht, the Netherlands

September 2025



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## Intro





**Homelessness** 

## **Homelessness response:**

- The structure of current responses often reflects an oversimplification of homelessness.
- However, research shows that homelessness cannot be understood as a homogeneous social phenomenon (Watson et al., 2024; Pleace, 2016; Fitzpatrick, 2005).

## "One-size-fits-all" approaches are inadequate (Fowler, 2019)

• Interventions need to be **tailored to different subgroups**, reflecting the diversity of pathways into and out of homelessness.

## Why identify subgroups?

- It is essential to avoid treating all individuals classified as "homeless" in the same way.
- We need **empirical evidence** to identify **homogeneous subgroups** within this diverse population to design **more specialized and effective interventions.**

# Intro



## Research gap in Spanish context:

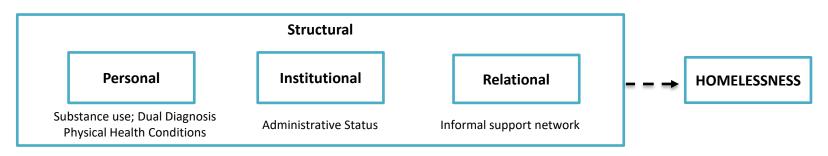
- Most intragroup studies use point-in-time data (street counts, INE surveys)
- Lack of longitudinal data limits understanding of homelessness trajectories and intervention outcomes

## **Objective:**

- To identify profiles or groups of individuals with similar characteristics through a cluster analysis based on relevant variables related to homelessness,
- and to validate whether distinct patterns of exits from homelessness can be observed for each identified subgroup.

## Research question:

What are the most significant risk factors influencing access to housing after exiting a transitional support service for homelessness?



# Method



## **Sample Description:**

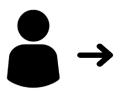
- Total sample size: n = 451
- Population: single adult experiencing homelessness
- Accommodation type: transitional center and transitional housing
- Period of stay: between 2018 and 2022
- Average length of stay: 6.4 months

Category	Subcategory	Percentage		
Sex	Men	96%		
	Women	4%		
Nationality	National	65%		
ivationality	Foreign	35%		
	18–34 years	21%		
Age Group	35–49 years	31 %		
<b>5</b> .	50–64 years	43 %		
	65 years and older	5 %		

# Method

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#### Source: service-based method

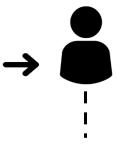




Stay in temporary accommodation services for homelessness

#### **Variables**

□ Administrative Status
 □ Substance use issues
 □ Dual Diagnosis (Co-occurring Disorders)
 □ Physical Health problems
 □ Informal support network



## **Exit questionnaire**

☐ Housing situation after existing (ETHOS)

		OPERATIONAL CATEGORY				
Conceptual Category	ROOFLESS	1	People Living Rough			
	2	2	People in emergency accommodation			
	HOUSELESS	3	People in accommodation for the homeless			
		4	People in Women's Shelter			
		5	People in accommodation for immigrants			
		6	People due to be released from institutions			
	INSECURE	7	People receiving longer-term support (due to homelessness)			
		8	People living in insecure accommodation			
		9	People living under threat of eviction			
		10	People living under threat of violence			
	INADEQUATE	11	People living in temporary/ non-conventional structures			
		12	People living in unfit housing			
		13	People living in extreme			

over-crowding

# **Analysis**

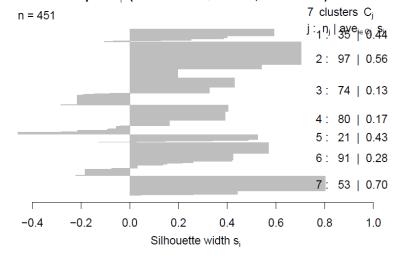


## Cluster analysis using k-modes: 7 clusters

Some clusters (e.g., 2, 7and 1) are well defined, while others may require re-evaluation or regrouping for better segmentation:

- Cluster 7 shows the best cohesion and separation (average silhouette: 0.70).
- Clusters 3 and 4 have the lowest silhouette scores (0.13 and 0.17), suggesting weak internal consistency and possible overlap.

## Silhouette plot of (x = clusters cluster, dist = dist)



Average silhouette width: 0.37

# Results



## **Cluster profiles:**

		Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6	Cluster 7
Administrative status	Regular	6%	100%	95%	91%	10%	87%	100%
	Irregular	94%	0%	5%	9%	91%	13%	0%
Substance use	No	83%	100%	76%	0%	67%	0%	79%
	Yes	17%	0%	24%	100%	33%	100%	21%
Dual diagnosis	No	100%	100%	100%	86%	100%	20%	98%
	Yes	0%	0%	0%	14%	0%	80%	2%
Physical Health conditions	No	69%	63%	0%	54%	86%	12%	96%
	Temporary	11%	13%	3%	26%	10%	8%	4%
	Chronic	20%	24%	97%	20%	5%	80%	0%
Informal support networks	No	100%	100%	37%	86%	0%	73%	0%
	Yes	0%	0%	64%	14%	100%	28%	100%



- C1. Young individuals with irregular administrative status and no informal support networks.
- C2. Individuals with no informal support networks.
- C3. Individuals with chronic physical health conditions.
- C4. Individuals with substance use issues and lacking support networks.
- C5. Individuals with irregular administrative status, but with support networks in their current place of residence.
- C6. Individuals facing both chronic physical health issues and substance use issues.
- C7. Individuals with no identifiable risk factors.

# **Findings**

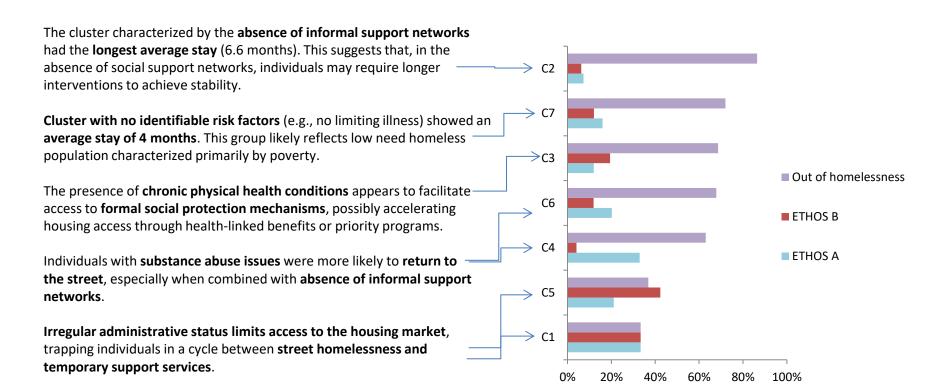


## **Housing situation after existing (ETHOS)**

	Housing Situation after service use				C6			C2
Homelessness	People living rough	33%	21%	33%	20%	12%	16%	7%
	People living in accommodation for the homeless	20%	16%	3%	8%	13%	10%	2%
	People in accommodation for immigrants	0%	16%	0%	0%	0%	0%	0%
	People due to be released from institutions	3%	11%	1%	4%	4%	2%	0%
	People receiving longer-term support (due to homelessness)	10%	0%	0%	0%	1%	0%	4%
Out of homelessness	Rental housing or room	23%	11%	58%	58%	48%	60%	67%
	Permanent family housing	7%	26%	4%	7%	13%	12%	14%
	Permanent residential care home	3%	0%	1%	2%	7%	0%	6%

# **Discussion**





# **Conclusion**



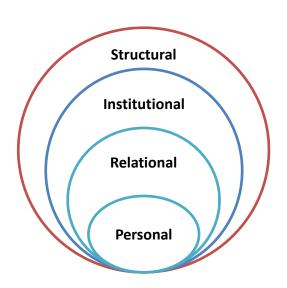
### Research question:

What are the most significant risk factors influencing access to housing after exiting a transitional support service for homelessness?

- **Structural barriers** (e.g., irregular administrative status) are the most relevant factor limiting access to the housing market and sustaining homelessness.
- Informal support networks as protection factor:
   When personal capacity is limited (e.g., due to substance use or co-occurring disorders), social ties can prevent street homelessness by offering alternative support.

## Implications:

- Need for integrated approaches that address both substance use and social isolation.
- Need for coordination between housing and social protection policies.
- Longer stays for individuals lacking social support may improve housing stability.



# **THANKS**









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# **Conclusions**



Personal capacity

Informal support

**Formal support** 



- Personal capacity: limiting illness, mental illness or substance abuse.
  Anything that limited someone's innate capacity to selfcare in a free market economy.
- Informal support: partner, family or friends if they were able to offer informal support.
- Formal support, from health welfare social housing systems and homelessness services. Access to formal support (homelessness services)not blocked but, access to housing market and labour market is blocked.