EVALUATING THE IMPACT OF A SHARED HOUSING PROGRAM ON HOMELESSNESS

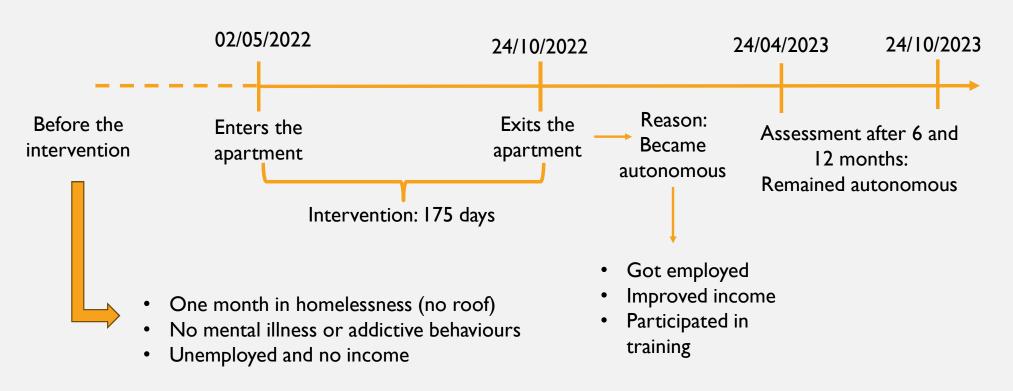
Henrique Joaquim, Pedro Martins, Fábio Simão, João Gerardo September 2025

THE "SHARED APARTMENTS" PROGRAM

- Shared housing intervention for People Experiencing Homelessness (PEH) in the Algarve, 2021-2025
 - 2 to 5 people per apartment, including psychosocial support
- Person-centered approach
- Does not require substance abuse abstinence or commitment to psychiatric treatment
- Shared apartments dispersed across neighborhoods
- **Selection criteria**: prioritizing those easier to reintegrate (shorter homelessness duration)

TIMELINE FOR ONE TREATED INDIVIDUAL

Characteristics: 42-year old male from Faro



TIMELINE FOR ONE CONTROL INDIVIDUAL

Characteristics: 25-year old male from Portimão

30/03/2021

At a comparable moment to treatment after 6 months

At a comparable moment to treatment after 12 months

Does not enter the apartment, but is accompanied as usual by the MAPS Algarve team

Assessment after 6 and 12 months:

- Did not become autonomous
- Remained with mental illness and addictive behviors
 - Remained unemployed and with no income

- 12 months in homelessness (no roof)
- Had mental illness and addictive behaviors
- Unemployed and no income

THEORY OF CHANGE

- Stable housing → improved autonomy and employment after the intervention
- **Shared living** → social support, reduced isolation
- Psychosocial case management

 better health and integration

STUDY DESIGN

Location: Algarve

224 in the treatment group

Total of 388 PEH

Approach:

164 in the control group

$$Y_i = \beta_0 + \beta_1 SharedApartment + \gamma X_i + \varepsilon_i$$

- Controlling for variables regarding selection criteria (Xi) to try to isolate the treatment effect (addressing selection concerns – interpret as association, though causality is likely due to robustness checks)
- Outcome variables (Yi): autonomy, housing stability after 6 and 12 months, employment, income improvements, mental illness, addictive behaviors, and training

BASELINE CHARACTERISTICS

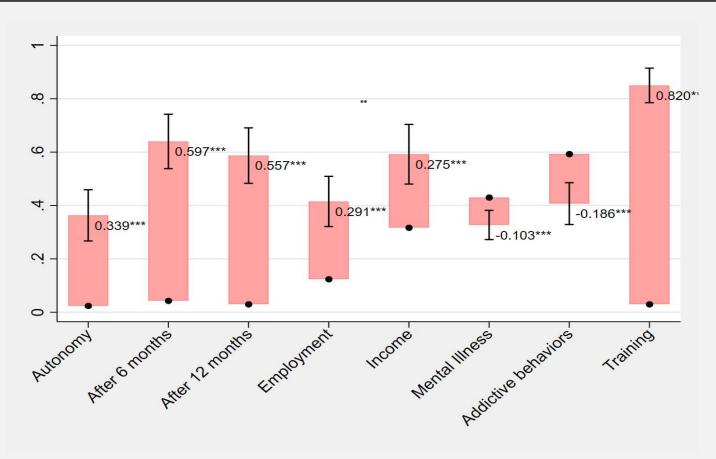
Characteristic	Mean difference (Treatment – Control)
Age	3.43***
Male	0.054
Length of homelessness (months)	2,628
Employment (before)	0.079**
Income (before)	0.074***
Mental Illness (before)	-0.095
Addiction (before)	0.006
No Roof	-0.219***

- Groups comparable on gender and prevalence of mental illness and addictive behaviors
- Treatment group slightly older
- Treatment group more likely to be employed and have income at baseline
- While the mean difference is not significant, the treatment group has a smaller median length of homelessness (3 months vs 9.5 months)

Reflects selection strategy

^{**} Significant at 99% confidence level; *** Significant at 99.9% confidence level

MAIN RESULTS: POSITIVE EFFECTS ON ALL OUTCOME VARIABLES



*** Significant at 99.9% confidence level

MAIN RESULTS: POSITIVE EFFECTS ON ALL OUTCOME VARIABLES

Treated individuals (compared to the control):

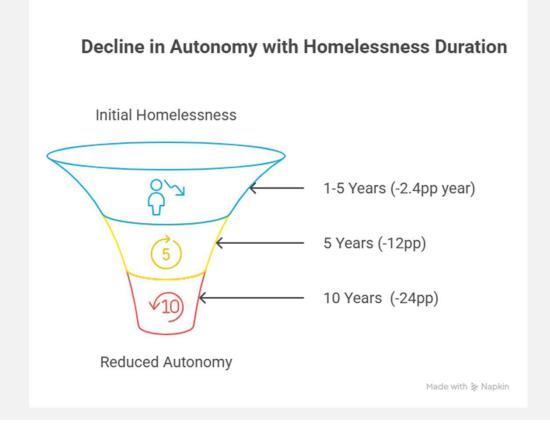
- Are almost 35 pp more likely to achieve autonomy / 6pp (control group)
 - participants were almost 6 times more likely to achieve housing autonomy
 - One more month in homelessness before actual or potential intervention → decrease of 0.2 pp in this probability (decrease of 2.4 pp for an extra year)
 - One year older → reduction of 0.4 pp
- Are almost 60 pp and 58 pp more likely to have housing stability after 6 and 12 months, respectively
- Are about 29 and 27.5 pp more likely to be employed and to experience income improvements after the program (controlling for previous employment and income status)
- Are 10.3 and 18.6 pp less likely to have mental illness and addictive behaviors after (controlling for previous status)
- Are 82 pp more likely to have participated in training activities

HETEROGENEOUS EFFECTS

- Program benefits are broad-based, but effects vary across subgroups:
 - **Gender:** Women benefited in autonomy gains compared to man (20pp)
 - **Mental illness at baseline:** Lower gains in autonomy, employment, and income improvements; highlights need for tailored mental health support
 - Addictions at baseline: Lower housing stability at 12 months, but higher training participation once housed
 - Length of homelessness: Longer prior homelessness linked to lower training participation and slower autonomy gains
- Policy takeaway: Complement shared housing with targeted services for high-need subgroups, especially for PEH suffering from mental illness, which appear to have more complex needs.

HOMELESSNESS DURATION / AUTONOMY

- Gender does not have a significant effect on autonomy (control group)
- Being one year older decreases this probability by 0.4 pp.
- One more month in a homelessness situation before the program is associated with a decrease of 0.2 pp in the probability of achieving autonomy.
- in Portugal PEH between 1 and 5 years.
 Each year 2.4pp less to gain autonomy
 5 years 12 pp less
 10 years 24 pp less



ROBUSTNESS CHECKS

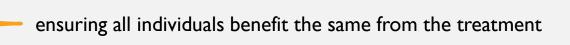
- Propensity Score Matching: Matched treated and control participants with similar baseline characteristics → results remained similar and statistically significant across all outcomes
- **Subsample analysis:** Restricting to those homeless for <3, <6, <9, and <12 months → consistent and significant effects across durations
- Key insights: Effects are not driven by a single subgroup
 Results remain robust despite non-random selection into treatment (Non-random assignment appears not to be driving results)
- Implication for policy: Findings are reliable and replicable; model suitable for scale-up with confidence in impact estimates

COST-BENEFIT CONSIDERATIONS

- **Cost**: €483/person/month →~€3,864 per person over average stay (8 months)
- Potential offsets:
 - Reduced shelter usage (which cost €1.116 per person per month)
 - Lower health & justice system costs
 - Increased tax contributions via employment
- Conclusion: This model likely yields a favourable return on investment from a public expenditure standpoint, in addition to its humanitarian benefits
 - Even if it is not cost-effective economically, it might be worth it only for equity reasons

CONCLUSION

- Shared apartments = **effective complement** to Housing First (not substitutes; both can be included in a strategy to reduce homelessness)
- Scalable, resource-efficient option in housing-constrained contexts
- Shared housing models should include:
 - Sustained psychosocial support
 - Individualized pathways
 - Avoiding "one size fits all" approach



Potential for replication in other regions & countries