

Personalized Social Services and Socioeconomic Inclusion: Experimental Evidence from Spain

María Calle García, Maria Hernandez-de-Benito and Teresa Molina-Millan*

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Abstract

This paper presents experimental evidence on the effectiveness of personalized social services in promoting the socio-economic inclusion of vulnerable populations in Spain. We evaluate two randomized controlled trials implemented under the national Inclusion Policy Lab, which complements Spain's Minimum Income Scheme (IMV). The first trial, conducted in Barcelona, offered individualized inclusion plans and coordinated follow-up through a one-stop service model for a heterogeneous population. The second, in Castilla-La Mancha, targeted vulnerable women and combined personalized case management with integrated social and employment services. Using administrative records and survey data, we find that the Barcelona program had no significant impacts on employment, subjective well-being, or social inclusion. In contrast, the Castilla-La Mancha intervention led to meaningful improvements in perceived employability, mental health, and social inclusion, but no effects on actual employment. Heterogeneous treatment effects reveal more positive impacts for participants previously using municipal social services and those with Spanish nationality in Barcelona, and for rural residents and previously employed in Castilla-La Mancha. Our results suggest that personalization can enhance subjective dimensions of inclusion and engagement but may be insufficient on its own to overcome structural barriers to labor market entry—at least when program duration is limited.

JEL Codes: J18, I38, I31, J08

Keywords: socioeconomic inclusion, social services, minimum income schemes, case management, impact evaluation

*Calle: Ministerio de Inclusión, Seguridad Social y Migraciones (maria.calle@inclusion.gob.es); Hernandez-de-Benito: CUNEF Universidad (m.hernandezdebenito@cunef.edu); Molina-Millan: Universidad de Alicante (teresa.molina@ua.es). This project was promoted by the General Secretariat for Inclusion (SGI) of the Ministry of Inclusion, Social Security, and Migration as part of the Recovery, Transformation, and Resilience Plan (PRTR), with funding from Next Generation EU. It was implemented by the Barcelona City Council and the regional government of Castilla-La Mancha. The implementing partners collaborated with the SGI and the research team, coordinated by CEMFI and J-PAL Europe, in designing the RCT methodology and actively contributed by providing the necessary information for the design, monitoring, and evaluation of the interventions. We are grateful to them, especially to Jesús Prado and María Henar López (SGI); Lluís Torrens, Eladi Torres, Sebastià Riutort, Ramón Sabes, Marta Juan (Barcelona intervention), and Guadalupe Martín, Sara Pinilla, María Jesús Real, Irene Beatriz Jiménez (Castilla-La Mancha intervention). The views expressed in this paper are those of the authors and do not necessarily reflect the position of the SGI or the implementing organizations.

1 Introduction

A growing challenge for social assistance systems is how to promote the socio-economic inclusion of individuals facing multiple, overlapping disadvantages. While income support remains a core element of social protection, it often falls short of addressing the complex barriers many recipients face in securing employment, accessing services, or participating fully in society. In response, governments have long implemented complementary “activation” policies—such as active labor market programs (ALMPs) and employment subsidies—to improve labor outcomes and foster inclusion (Crépon and Van Den Berg 2016). Yet despite substantial investment, evidence on what works, for whom, and under what conditions remains mixed (Card et al. 2017).

The literature on ALMPs documents substantial heterogeneity in impacts: average treatment effects often conceal large positive effects for some, negligible or even adverse effects for others, and null effects for many (Michalopoulos 2004; Bitler et al. 2006; Card et al. 2017). Much of this variation may reflect the standardized design of interventions, which are typically delivered to broad groups without accounting for individual needs or constraints. In response, personalized approaches have been proposed to increase the effectiveness and cost-efficiency of ALMPs by tailoring services to individual profiles (Eberts et al. 2002; Frölich et al. 2003; Frölich 2008; Crépon and Van Den Berg 2016).

Personalized strategies typically include a needs assessment, a co-developed action plan, and ongoing follow-up by a caseworker. By aligning support with individuals’ preferences and barriers—such as low skills, poor health, caregiving responsibilities, or weak social networks—these approaches may enhance motivation, improve take-up, and address complex constraints (Frölich 2008; Wunsch and Lechner 2008; Immervoll and Scarpetta 2012). One operational model is the integrated “one-stop shop” which simplifies access by consolidating services under one roof or caseworker and is particularly appealing in decentralized systems (OECD 2015; Askim et al. 2011). However, rigorous evidence on its effectiveness remains limited.

This paper presents new experimental evidence on the effectiveness of personalized inclusion strategies and one-stop service delivery within the framework of Spain’s national

Minimum Income Scheme (Ingreso Mínimo Vital, or IMV). We evaluate two randomized controlled trials (RCTs) designed to complement the introduction of the IMV. The first, implemented by the Barcelona City Council, assessed a one-stop profiling and referral model that delivered tailored inclusion plans and active follow-up for a heterogeneous group of vulnerable individuals. The second, implemented by the regional government of Castilla–La Mancha, tested a program combining individualized case management, personal accompaniment with tailored training and workshops, and complementary support for transport, attendance, and caregiving costs across rural and urban municipalities, targeting vulnerable women.

Using administrative data and detailed follow-up surveys, we find that personalized inclusion strategies had limited short-term impacts in the Barcelona trial, with no significant effects on employability, well-being, or social inclusion. In contrast, the Castilla–La Mancha program—targeting vulnerable women—led to meaningful improvements in perceived employability, subjective well-being, and social inclusion, though not in actual employment outcomes.

While average treatment effects were modest or null, subgroup analyses across the two interventions reveal heterogeneity in program impacts. In Barcelona, treatment effects were more favorable among individuals previously engaged with municipal social services and Spanish nationals, who experienced modest gains in perceived employability and service take-up. In contrast, foreign nationals benefited less, highlighting potential barriers to program effectiveness. In Castilla–La Mancha, the personalized intervention strategy yielded substantially larger effects, particularly for women in depopulated rural areas and participants employed at baseline. These groups experienced notable improvements in job-related skills, mental health, and reductions in social exclusion.

These findings highlight both the promise and limits of personalized inclusion strategies. While such interventions appear effective in mobilizing beneficiaries to engage with services and improving subjective dimensions of inclusion, they may be insufficient on their own to overcome structural barriers to employment in the short term ([Crépon and Van Den Berg 2016](#); [Aizer et al. 2024](#); [Humlum and Plato 2025](#)). Our results suggest that personalization may be a necessary but not sufficient condition for successful inclusion policy, and that

longer-term support, coordination with employers, and attending context-specific labor market dynamics also plays a critical role (Katz et al. 2022; Le Barbanchon et al. 2024).

The structure of the paper is as follows. Section 2 outlines the institutional context and the two interventions under study. Section 3 details the experimental design. Section 4 describes the data sources and presents descriptive statistics. Section 5 explains the empirical strategy. Section 6 reports the results. Finally, Section 7 concludes.

2 Background

2.1 Institutional Context

In Spain, the provision of social services is highly decentralized, with primary responsibility falling to the country’s 17 autonomous communities (*comunidades autónomas*) and, within them, local entities such as city councils (*ayuntamientos*). While the central government sets broad legislative frameworks and minimum standards, autonomous communities are in charge of planning, managing, and funding most social programs, including those related to social inclusion and dependency care (Moreno 2016; Colino 2020). This governance structure results in substantial regional variation in the organization, content, and delivery of services. Within each autonomous community, city councils typically oversee the delivery of frontline social services.

Moreover, the provision of active labour market policies is also decentralized, with primary responsibility falling to the autonomous communities’ public employment services. Those organizations are usually separated from the departments in charge of delivering social services, so that there is of the a lack of communication and coordination between both. There are some Autonomous Communities where Social Services and Public Employment Services are integrated (i.e. País Vasco) or coordinated (i.e. Asturias), but they are the exception.

The two randomized controlled trials evaluated in this study were implemented within this institutional framework: one was led by the city council of Barcelona, which administers its social welfare programs, while the other was led by the regional government of Castilla-La

Mancha across multiple municipalities.

Both interventions were part of the Inclusion Policy Lab, an ambitious national initiative launched by Spain’s Ministry of Inclusion, Social Security and Migration (MISSM) to rigorously test and improve social inclusion policies. Funded through the European Union’s Recovery and Resilience Facility, the Lab supported 32 pilot projects across Spain, each designed to complement the national Minimum Income Scheme (IMV) with tailored inclusion pathways. A central goal of the Lab was to generate causal evidence on what works to promote the socio-labor inclusion of vulnerable populations, particularly IMV beneficiaries. All projects were designed and evaluated using randomized controlled trials (RCTs), following a common framework developed in collaboration with academic partners, including CEMFI and J-PAL Europe.

For both projects, the short-term effects were previously summarized in two policy briefs within the Inclusion Policy Lab framework¹. In this paper, we confirm those short-term findings and extend the analysis by examining impacts over a longer horizon 15 months following the intervention, as well as by expanding the set of relevant outcome variables.

2.2 The Barcelona Intervention

The program evaluated in Barcelona is the *Amunt!* pilot, a multidimensional socio-labor inclusion intervention targeted at recipients of Spain’s national Minimum Income Scheme (IMV). The program provided individualized inclusion itineraries, built upon a comprehensive diagnostic of each participant’s social, employment, and training needs. This diagnosis was operationalized through a one-stop entry mechanism—an integrated service hub—designed to streamline access and provide coordinated, person-centered support.

At the core of the intervention was the collaboration between social workers and employment counselors, who jointly crafted and implemented inclusion pathways for each participant. These itineraries were highly personalized, drawing from a broad catalogue of modular activities across three key domains: training, labor market integration, and social inclusion.

¹Laboratorio de Políticas de Inclusión, Ministerio de Inclusión, Seguridad Social y Migraciones (MISSM): <https://www.inclusion.gob.es/web/policy-lab/laboratorio>

Specifically, the *Amunt!* itineraries included modules such as digital literacy, language courses, economic education, access to certifications, preparatory courses for further education, and occupational training. For those closer to the labor market, the program offered employability workshops, support for entrepreneurship and direct job placements via municipal employment plans. To promote relational well-being and social integration, participants also took part in community activities aimed at reducing social isolation and reinforcing neighborhood ties.

Each participant in the treatment group was assigned a dual reference team—typically a social worker and a labor counselor—who jointly ensured continuous support and coordinated follow-up. Weekly group sessions further reinforced engagement and helped connect participants to local resources and services.

In contrast, individuals in the control group maintained access to the standard suite of municipal services available in Barcelona but did not benefit from the coordinated, personalized care structure or the intensified follow-up embedded in the *Amunt!* model.

2.3 The Castilla-La-Mancha Intervention

The program evaluated in Castilla-La Mancha is the *Construir para volver a ser* pilot, a multidimensional social inclusion initiative targeted at women at risk of exclusion in rural and urban settings. It aimed to support female recipients of Spain’s national Minimum Income Scheme (IMV) and other vulnerable women through personalized inclusion itineraries addressing a broad spectrum of needs.

At the heart of the intervention was a newly created “Support Office” (*Oficina de Apoyo*), designed as a single-entry point where participants could access an integrated suite of services. Upon entry, participants in the treatment group underwent an initial needs assessment conducted by a multidisciplinary team composed of a labor counselor, social worker, and psychologist. Based on this comprehensive diagnosis, the team co-designed an individualized action plan, laying out a tailored sequence of services across seven key domains: labor market insertion, training, housing, health, economic well-being, social relations, and personal development.

The itineraries combined traditional primary care social services support with a new layer of intensive accompaniment delivered by the Support Office team. Specific components included vocational training, job search support, mental health and psychosocial counseling, workshops on digital and social skills, support with housing search and energy efficiency, and access to financial assistance to overcome participation barriers (e.g., transportation, childcare).

A defining feature of the intervention was its one-stop, team-based model of support, overcoming the fragmentation often observed in standard service delivery. Participants received regular follow-up and coordinated case management throughout their inclusion pathway. Importantly, activities were delivered both individually and in small groups, fostering peer support and reducing social isolation.

In contrast, participants assigned to the control group continued to receive the standard suite of municipal social services, which lacked the highly individualized design, interdisciplinary team, and intensified accompaniment that characterized the treatment condition.

3 Experimental Design

This section provides details on the experimental design of the two RCTs implemented separately in Barcelona and Castilla–La Mancha. Both experiments were preregistered in the AEA RCT Registry.²³

3.1 BCN Experimental Design

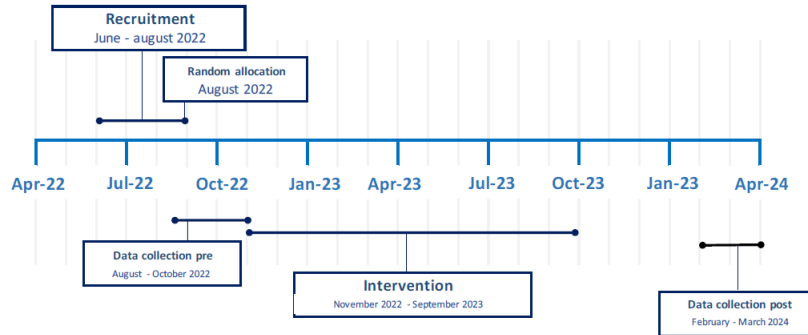
The Barcelona City Council’s intervention (BCN hereafter) targeted all individuals over 18 and under 65 years of age registered in the city whose households included at least one recipient of the Minimum Income Scheme (MIS). Exclusions applied to individuals with

²Hernández-de-Benito, María and Teresa Molina-Millán. 2023. "Social-labor inclusion for beneficiaries of the Spanish Minimum Income Scheme in the city of Barcelona - AMUNT." AEA RCT Registry. January 11. <https://doi.org/10.1257/rct.10708-1.1>

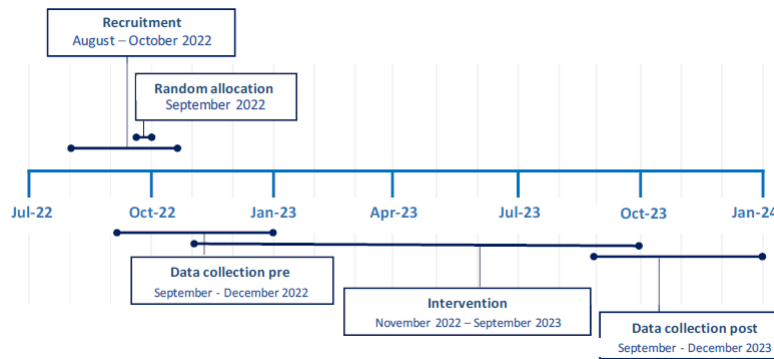
³Hernández-de-Benito, María and Teresa Molina-Millán. 2023. "Pre-Analysis Plan: Evaluation of a socio-labour inclusion program of women in vulnerable situations in Castilla La Mancha." AEA RCT Registry. July 28. <https://doi.org/10.1257/rct.11837-1.0>

Figure 1: Evaluation Timeline

(a) Barcelona



(b) Castilla-La Mancha



Source: Laboratorio de Políticas de Inclusión, Ministerio de Inclusión, Seguridad Social y Migraciones (MISSM): <https://www.inclusion.gob.es/web/policy-lab/laboratorio>

disabilities exceeding 65%, those involved in municipal projects with similar objectives shortly before the program's initiation, and cases related to active child violence. By May 2022, the eligible population consisted of 5,198 individuals.

Potential participants were contacted through mailed invitations, phone calls and SMS to attend informational sessions on the *Amunt!* program. These sessions outlined the program's offerings, including personalized counseling, training courses, and tailored employment opportunities. At the time of the informational sessions, interested individuals were required to provide informed consent to enroll.

The initial design targeted 2,000 participants to be randomized evenly between treatment and control groups. However, limited attendance at the sessions resulted in 1,183 signed consents. Consequently, the randomization ratio was adjusted to assign 64% of consenting individuals to the treatment group, accommodating the municipality's logistical capacity

for 1,000 participants in treatment.⁴

Randomization occurred at the individual level, stratified by enrollment in Barcelona’s Social Care System (SIAS), long-term unemployment status, gender, age group, and educational attainment. The intervention comprised two groups: i) *Control Group* ($n = 433$), a non-pure control group where participants received standard labor and social inclusion services; and ii) *Treatment Group*: ($n = 750$), a treatment group where participants were exposed to the *Amunt!* intervention.

Figure 1a presents the timeline for the implementation and evaluation of the BCN program. Following the completion of the experimental evaluation design, the recruitment process was conducted between June and August 2022. Random allocation was performed in August 2022. Participants completed the baseline survey between August and October 2022, without knowing whether they were in the treatment or control group. The intervention was implemented from November 2022 to September 2023. Finally, the endline survey was carried out between February and March 2024.

3.2 CLM Experimental Design

In the Castilla-La-Mancha program (CLM hereafter), the target population for the intervention consisted of women aged 18 to 55 years residing in the Autonomous Community of Castilla–La Mancha, who had dependent children, and who were actively engaged with Primary Social Care Services (SSAPs). Women who were either recipients of the IMV or classified as socially excluded according to the SiSo Assessment Scale (see Section 4 for details) were given priority in the recruitment.

The dissemination of the project was carried out through a multi-channel campaign, including press releases, the creation and distribution of informational materials, and publication on social networks and the Government of Castilla–La Mancha’s website. The

⁴To complete the planned number of treatment slots, a second recruitment phase was carried out by the Barcelona City Council in November 2022. Participants enrolled during this phase were not included in the main impact evaluation. Instead, their enrollment was used to assess the effectiveness of the program’s outreach messages through a separate randomized evaluation: Inclusion Policy Lab: Evaluation Results. Barcelona City Council – Social Accompaniment and Adherence to Inclusion Itineraries Project. *Amunt!* Program.

project was formally introduced during an open day event attended by local entities, professionals, nonprofit social action organizations from, professional associations, and representatives from other areas of government.

The project was implemented in fifteen designated SSAP areas within the region, representative of the five provinces of the Castilla–La Mancha region. Social service areas are defined as individual municipalities for populations over 3,500 inhabitants or as clusters of multiple municipalities for smaller populations.

Participant selection was conducted by the local social workers from the Social Inclusion technical team within each of the SSAPs, with assistance from other professionals. All potential participants were required to undergo an updated assessment using the SiSo scale before engagement in the intervention. From the identified population of 2,004 eligible individuals, interviews were conducted to obtain informed consent from those selected to participate. Ultimately, 1,652 individuals provided consent, forming the evaluation sample.

Randomization was conducted at the municipal cluster level. In larger urban municipalities, neighborhoods or districts were treated as clusters, while smaller rural municipalities were grouped to form single clusters. Within each area, randomization occurred in paired clusters based on population size and average SiSo scale scores, with one cluster in each pair assigned to the treatment group and the other to the control group. The final randomized sample consisted of 92 clusters, evenly distributed between treatment (46) and control (46) groups. On average, each SSAP intervention area included approximately 133 women, with roughly 66 participants in the treatment group.

The intervention comprised two groups: i) *Control Group* ($n = 826$), where participants received the standard labor and social inclusion services; and ii) *Treatment Group*: ($n = 826$), where participants were exposed to the new intervention.

Figure 1b presents the timeline for the implementation and evaluation of the CLM program. Following the completion of the experimental evaluation design, the SSAP conducted the recruitment process between August and October 2022. Randomization was performed in September 2022. Participants completed the baseline survey between Septem-

ber and December 2022, without knowing whether they were in the treatment or control group. The intervention was implemented from November 2022 to September 2023. Finally, the endline survey was administered between September and December 2023, after the intervention concluded.

4 Data and Descriptive Statistics

4.1 Data Sources and Outcomes of Interest

In both projects, we rely on both individual survey data and administrative employment and IMV data. In addition, in the CLM intervention, we use information from the SiSo scale, an official diagnostic tool to assess social exclusion.

Individual Surveys The individual survey data were collected before and after the interventions to capture socio-demographic characteristics, economic and employment variables, and self-reported measures of employability, social inclusion, health and subjective well-being for participants in both treatment and control groups. Appendix A details the survey text of the main scales collected in the individual surveys for each of the projects.

Throughout the paper, the survey-based scales are presented as composite indices constructed with the method proposed by [Anderson \(2008\)](#). This approach aggregates information from a set of variables meant to capture a common latent construct. Intuitively, it computes a weighted average of all variables, where the weight assigned to each variable is inversely proportional to its correlation with the others (i.e., a lower correlation implies a higher weight). Because the resulting index has no natural units, it is standardized to have a mean of zero and a variance of one, making the results easier to interpret.

In Barcelona, the baseline survey was completed by 89% of the participants and the endline survey by 71% of them. In Castilla-La Mancha, the baseline survey was completed by 79% of the participants and the endline survey by 58% of the participants. In section 4.2, we discuss descriptive summary statistics and attrition rates for each of the projects.

Administrative Data We also use administrative employment data from Social Security, offering detailed longitudinal employment information for all study participants. For each job spell, we have precise dates of initiation and termination, contract type (temporary, discontinuous permanent, or standard permanent), and part-time work fractions. This granularity permits us to derive measures such as total days worked, and their full-time equivalent. The records cover the period from the end of the intervention up to 15 months post-intervention in Barcelona and 18 months in Castilla-La Mancha.

In addition, we have administrative data on take-up of the IMV benefit from 2020 to May 2025 for every case opened during the period.

SiSo Scale In Castilla-La Mancha, a key outcome of interest is the SiSo scale and its subcomponents. The SiSo scale is an assessment tool designed to evaluate situations of social hardship and to support professional diagnoses conducted by social workers ([Diez and Fumanal, 2023](#)). It is used both for diagnostic purposes and for monitoring social interventions, and is periodically updated by primary care social workers.

In this paper, we use the overall SiSo score, which ranges from 0 (no social exclusion) to 113 (maximum exclusion). It comprises 25 items, each scored from 0 (low difficulty) to a maximum of 6 points, depending on the domain and severity of exclusion. The overall score is calculated as the unweighted sum across six key domains: economic situation, workplace, training, residential, social and health difficulties, and relational scope (see Table [A-5](#) for further details). We also use a categorical indicator of social exclusion severity based on the SiSo score: a value of 1 indicates mild exclusion (≤ 28 points), 2 indicates moderate exclusion (29–57 points), and 3 indicates severe exclusion (≥ 58 points). In addition, we consider the individual scores of each of the six different domains.

For the evaluation of the CLM intervention, we use pre-intervention data from the 2022 SiSo Scale and post-intervention data collected between September and December 2023.

4.2 Descriptive Statistics and Balance Test

Columns (1)–(3) of Tables 1 and 2 present summary statistics for key baseline variables for the control group in the BCN and CLM projects, respectively. Columns (5)–(6) of each table report balance tests showing the difference in means between the treatment and control groups, along with standard errors from pairwise t-tests.

4.2.1 BCN Summary Statistics

In the Barcelona sample (Table 1), 65% of control group participants are women, and 77% were registered in the municipal social services system (SIAS) prior to the program. Surveys were administered in Spanish (87%) or Catalan (13%), and enumerators rated participant comprehension highly, with average scores of 4.3 for questionnaire understanding and 4.4 for language comprehension on a 1–5 scale.

Participants are, on average, 47 years old. Half are single, and 27% are separated or divorced. Household sizes are small, with an average of 2.8 members and 0.8 children per participant; few have children under the age of four. One-third of participants were born in Spain, and 59% hold Spanish nationality. Educational attainment is generally low: 24% have completed at most primary education, and only 13% hold a university degree. A quarter of participants report having a disability, with an average certified disability level of 45%. At baseline, 18% reported being employed. Administrative data from the Social Security system indicate that between January 1 and September 30, 2022, 26% worked at least one day, averaging 46 days of employment over this period.

In addition to the employability and life satisfaction indices—which are standardized with a mean of zero and a standard deviation of one—information was also collected on several other outcomes. These include self-reported health, measured on a 1–6 scale (mean: 3.34); participation in community activities (mean: 40%); and trust in social services, measured on a 1–5 scale (mean: 3.2).

Balance tests confirm successful randomization in Barcelona: baseline differences between treatment and control groups are not statistically significant at conventional confidence

levels.

4.2.2 CLM Summary Statistics

Table 2 provides descriptive statistics for the sample of female participants in the control group in the CLM project. Twenty-three percent reside in urban areas, while 37% live in sparsely populated or extremely depopulated municipalities. At baseline, 43% were recipients of the Minimum Income Scheme (IMV). The average age is 39 years, and 39% are married. In terms of nationality, 55% are Spanish, 11% are from other EU countries, and 34% are from non-EU countries. Prior contact with primary social services is nearly universal (97%).

As in Barcelona, educational attainment is low: 44% of participants have not completed compulsory education, while only 3% have a university education. Households contain an average of 3.9 members with an average of 1.9 children. Only half of the sample resides in adequately heated homes, and 56% report having experienced arrears in the previous year.

We supplement the standardized indices with pre-intervention results from the SiSo scale, administered in 2022, which ranges from 0 (no social exclusion) to 113 (maximum exclusion), see section 4 and Table A-5 for further details. For descriptive purposes, we also use a categorical indicator of exclusion severity: scores of 0–28 indicate mild exclusion, 29–57 moderate exclusion, and 58 or more severe exclusion. In the control group, the mean overall SiSo score is 48.3, and the average categorical exclusion level is 2.20, indicating that most participants face moderate to severe levels of exclusion.

While balance is generally acceptable in Castilla–La Mancha, several baseline differences between treatment and control groups are statistically significant. Participants in the control group are more likely to be receiving the IMV (41% vs. 38%), to be single (40% vs. 35%), to report greater satisfaction with social services, and to have slightly fewer children. Educational attainment also differs slightly: 49% of treatment group members lack compulsory education, compared to 44% in the control group. Administrative records further suggest somewhat better pre-intervention labor market outcomes in the treatment

group. These differences suggest that the treatment and control groups are not fully comparable at baseline in this project. Consequently, all the regression models for this intervention will include controls for education, marital status, being recipient of the IMV and baseline labor market participation to adjust for observed differences across groups. Furthermore, as a robustness exercise we apply Inverse Probability Weighting (IPWT) to adjust for the baseline imbalances documented in Table 2. Table C-11 in the online appendix confirms that applying IPWT substantially improves balance, and the adjusted results remain robust to this reweighting (Tables C-12 to C-16 in the online appendix).

4.3 Attrition

In the Barcelona project, among the 750 individuals assigned to the treatment group, 218 (29.1%) dropped out of the project. There is no record of attrition in the control group (Table B-1 in the online appendix B). Regarding survey response rates, out of the 1,183 Barcelona participants, 71.2% completed the endline questionnaire (64.2% in the control group and 75.2% in the treatment group). Additionally, a total of 1,092 labor history records were obtained after the intervention: 393 from the control group (90.8%) and 699 from the treatment group (93.2%).

In Castilla-la-Mancha, among the 1,652 enrolled participants, a total of 369 dropped out of the program, resulting in a program completion rate of 77.7% (147 women from the control group compared to 222 women in the treatment group), see Table B-3 in the online appendix B. Regarding survey response rates, 58.29% of the 1,652 participants completed the endline survey (46.9% in the control group and 69.6% in the treatment group). Additionally, a total of 1,220 records were obtained from the SiSo system after the intervention between September and December 2023, including 563 from the control group (68.2%) and 657 from the treatment group (79.5%).

Tables B-2 and B-4 in the online appendix B present linear-probability estimates in which the dependent variable equals 1 when data are missing from either of the two main outcome sources: (i) the end-line individual survey (col. 1) and (ii) Spanish Social Security employment records (col. 2). The sole regressor is an indicator for assignment to the treatment group. In Barcelona, treated individuals are 11 percentage points more likely

to complete the end-line survey. In Castilla-La Mancha, this survey-completion gap doubles to 22 percentage points, and treated participants are also 11 percentage points more likely to have a post-intervention SISO diagnostic score. As expected, there is no evidence of differential attrition in the administrative labor-market data.

To address potential bias due to differential attrition on observables, we construct weights based on the estimated probability of survey response in both Barcelona and CLM, as well as on the probability of being recorded in the SiSo registry in CLM. We apply these inverse probability weights to our main results, as reported in Section C-3, to assess the robustness of our findings to non-random attrition.

5 Empirical Strategy

We estimate the effect of assignment to the treatment group using the following ANCOVA specification, run separately for each intervention:

$$y_i = \alpha + \beta T_i + \delta X_i + \gamma y_{i,0} + \epsilon_i \quad (1)$$

where y_i is the post-intervention value of the outcome variable for individual i ; T_i is a binary indicator equal to one if individual i was assigned to the treatment group and zero otherwise. X_i is a vector of baseline stratification variables, and $y_{i,0}$ is the pre-intervention value of the outcome variable, included where available. If $y_{i,0}$ is missing, it is set to zero, and a missing-value indicator equal to one is included to account for this case (McKenzie, 2012). The error term ϵ_i is robust to heteroskedasticity in the BCN project and clustered at the level of randomization (municipality or neighborhood, in the case of large municipalities) in the CLM project. In the Castilla-La-Mancha project, given the observed imbalances, X_i will also control for whether the respondent was single at baseline, educational attainment indicators (four levels), the number of dependent minors in the household, employment status in the previous six months, and whether the individual was receiving the Minimum Income Scheme (IMV) at baseline.

The coefficient of interest β corresponds to the intention-to-treat effect, which is the effect

of being assigned to the treatment group, compared to accessing social services in the standard way in the control group.

To assess whether the treatment effects on labor market outcomes persist, fade, or strengthen over time, we estimate a dynamic specification by interacting the treatment indicator with a set of post-intervention time dummies ($Post_i^t$) for each period for which data is available. This analysis is only feasible for labor market outcomes obtained from administrative records, as these are the only outcomes with available measures over time. Specifically, we estimate the following equation:

$$y_i = \sum_{t=1}^T \alpha^t Post_i^t + \sum_{t=1}^T \beta^t Post_i^t \times T_i + \delta X_i + \gamma y_{i,0} + \epsilon_i \quad (2)$$

6 Results

This section presents results from estimating equation (1) using data from the endline surveys, conducted 5 to 7 months after the intervention in Barcelona and 1 to 3 months after the intervention in Castilla-La Mancha. We also report findings from administrative labor market data, estimated using both the static specification in equation (1) and the dynamic specification in equation (2). For the static specification, labor market data cover 1 to 3 months post-intervention in Barcelona and 1 to 6 months in CLM. The dynamic specification incorporates all available post-intervention periods.

6.1 Labor Market Outcomes: Employability and Employment

Table 3 reports the estimated effects of the two interventions on participants' perceived employability, while Table 4 presents the corresponding effects on a range of employment outcomes.

Employability In Barcelona, employability is measured with an adaptation of the EAS scale of Llinares-Insa et al. (2018), a seven-item index covering training, skills, confidence, and job-search experience (Table A-1). Column (1) of Table 3 shows that the intervention

has no statistically significant effect on this composite measure of perceived employability.

Columns (2)–(3) of Table 3 report results for the CLM project, where we focus on two SiSo sub-indices—*job qualification* and *job-search skills*. Both variables are rescaled so that higher values indicate less difficulty and are standardized relative to the control mean and standard deviation. Treatment increases the job-qualification score by 0.86 SD and the job-search-skills one by 0.36 SD; both effects are significant at the 1 percent confidence level.

Employment Table 4 summarizes effects on employment status. Column (1) (Barcelona) and column (4) (CLM) use self-reported employment at the time of the endline survey. Columns (2)–(3) and (5)–(6) use administrative Social Security records to capture, respectively, the number of days worked and their full-time-equivalent in the months following treatment.

In Barcelona, all point estimates are positive, yet none are statistically different from zero at conventional levels (columns 1–3). In Castilla–La Mancha, assignment to treatment raises the probability of being employed by 7.2 percentage points (column 4). As in Barcelona, there is no detectable impact on the administrative measures of employment at either the extensive or intensive margin (columns 5–6).

Figures 2 and 3 display the dynamic treatment effects on days worked, estimated from administrative data using equation (2). The results confirm that the null effects on actual employment persist over time.

Taken together, the results indicate that the CLM intervention improved participants’ self-assessed employability and was accompanied by a higher likelihood of (self-reported) employment, whereas the Barcelona intervention does not. Neither program yields measurable gains in administrative employment records over the follow-up horizon examined.

6.2 Health and Well-Being Outcomes

Table 5 presents estimates on self-reported life satisfaction, physical health, and mental health. Columns (1) and (2) report results on life satisfaction, based on participants' responses to the question: "Taking everything into account, how satisfied are you with your life right now on a scale from 0 to 10, where 0 means completely dissatisfied and 10 means completely satisfied?" Columns (3) and (4) summarize self-assessed physical health. In Barcelona, this is measured by the question: "Currently, how would you rate your overall health?" with answers ranging from 1 (very poor) to 6 (excellent). In Castilla-La Mancha, health status is reported on a five-point scale, from 1 (poor) to 5 (excellent). Columns (5) and (6) present estimates for a Mental Health Index, constructed as a composite of seven items reflecting general health, sense of usefulness, relaxation, energy, coping ability, internal well-being, confidence, and joy (Table A-2).

As with labor outcomes, we find no statistically significant effects of the Barcelona intervention on self-reported life satisfaction, physical health, or mental health. In contrast, treatment in CLM led to statistically significant improvements in subjective well-being. One to three months after the intervention, treated individuals report higher levels of life satisfaction and score significantly higher on the Mental Health Index—corresponding to an improvement of approximately 0.19 standard deviations relative to the control group.⁵

6.3 Social Inclusion, Social Services and IMV Take-Up

Social Inclusion We also find no significant treatment effects on social relations, community engagement, or trust in social services in the Barcelona sample (Table 6), at least within the five to seven months following the intervention (see Appendix A-1 for further details of these outcomes).

⁵The questionnaire in Castilla-La Mancha includes two additional items in the mental health scale: "*Tiene dificultades para dormir debido a las preocupaciones*" (Do you have trouble sleeping because of worries?) and "*Se ha sentido capaz de tomar decisiones*" (Have you felt capable of making decisions?). The first item was reverse-coded. Including these items in the construction of the mental health index yields a treatment effect of approximately 0.24 standard deviations relative to the control group, significant at the 1% level. We do not include this specification in the main table to maintain comparability of the scales between Barcelona and CLM.

By contrast, results from CLM suggest improvements in multiple dimensions of social inclusion. Table 7 shows that treatment significantly reduced social exclusion. Specifically, the program lowered the total score on the SiSo scale by 4.7 points, a reduction of approximately 11% relative to the control mean. It also improved participants’ position along the SiSo inclusion-exclusion axis by 0.13 levels (columns (1) and (2)). Treatment effects on material deprivation—measured by (i) a count index (0–13) of unaffordable items and (ii) a binary indicator equal to one if at least seven of these are lacking—are directionally positive but not statistically significant (columns (3) and (4)). However, in Table 8 we show that the positive and statistically significant effect on the SiSo score is driven by an overall improvement across the six domains that it is aimed to measure.

Social Services Take-Up Table 9 presents treatment effects of the one-stop-shop intervention on take-up of social and labor inclusion services in Barcelona. The hypothesis is that personalized case management and integrated service delivery would increase participants’ engagement with available services. Column (1) shows no significant effect on labor-related service take-up. In contrast, column (2) indicates a positive and statistically significant effect on the take-up of social services, with treatment increasing participation by approximately 5.4 percentage points relative to the control mean of 43.6%. Column (3) shows no effect on the take-up of training activities. Finally, column (4) presents an aggregated measure combining all types of services, showing that the intervention increased overall service take-up by about 6.8 percentage points, significant at the 5% level. These results suggest that while the program effectively increased social service engagement, it did not significantly affect labor or training-related service use.

IMV Take-Up Finally, Table 10 presents the effects of the interventions on participants’ receipt of the Minimum Income Scheme (IMV) as of April 2025, using administrative data from Social Security records. We find no statistically significant effects in either Barcelona (column 1) or Castilla–La Mancha (column 2). Overall, these results suggest that the interventions did not significantly affect participants’ likelihood of receiving the IMV in either setting.

6.4 Robustness checks

Given the baseline imbalances in several outcomes in the CLM project, in Appendix C-2, we present Weighted Least Squares estimates using IPTW for the outcome variables corresponding to Tables 3–8. We show that the results remain robust to this reweighting.

In addition, since we observe differential attrition in endline survey response rates in both programs, as well as in the SiSo registry data for CLM, we present in the online appendix estimates of our main treatment effects adjusted for attrition using Inverse Probability Weights (IPWs). These weights are derived from the relationship between attrition and observable baseline characteristics. In the case of CLM, the weights simultaneously account for both attrition and baseline imbalances in observed covariates. Tables C-17–C-22 show that the results remain robust after reweighting.

7 Heterogeneity Analysis

The results discussed in the prior section indicate that average treatment effects were largely null across outcomes in Barcelona, whereas the Castilla-La Mancha intervention showed positive impacts on subjective well-being and social exclusion, but no effects on actual employment.

One potential explanation for these modest effects lies in the considerable heterogeneity of the target population along key sociodemographic dimensions. In particular, differences in caregiving responsibilities, language and cultural barriers, or geographic constraints affecting local labor market conditions may moderate the effectiveness of the interventions.

To examine this possibility, we estimate heterogeneous treatment effects by extending equation (1) to include interactions between the treatment indicator and baseline characteristics, as well as controlling for those characteristics.

$$y_i = \alpha + \beta_1 T_i + \beta_2 T_i \times X^K + \delta X_i + \gamma y_{i,0} + \epsilon_i \quad (3)$$

where X^k denotes baseline covariates. In the Barcelona sample, these include participant’s sex, a binary indicator for prior registration with social services, a dummy for being over age 55, an indicator for having at least secondary education, and Spanish vs. foreign nationality. In the Castilla–La Mancha sample, X^k includes area of residence (urban, rural, or areas of intense or extreme depopulation), baseline SiSo-based social exclusion (minor, moderate, severe), employment status at baseline, Spanish vs. foreign nationality, and a binary indicator for receiving IMV at baseline.

7.1 Heterogeneous Treatment Effects in Barcelona

The results of estimating equation (3) for the Barcelona intervention are presented in Tables C-1–C-5. The heterogeneous treatment effects reveal modest yet suggestive patterns of differential impacts across key subgroups. While average treatment effects were largely null, interaction estimates indicate relatively more favorable outcomes among participants previously registered in the municipal social services system (SIAS) and those with Spanish nationality.

For example, SIAS-registered individuals experienced improvements in perceived employability (+0.15 SD) and employment probability (+5 percentage points). Participants with Spanish nationality showed suggestive gains in perceived employability (+0.16 SD), potentially reflecting fewer linguistic, cultural, or informational barriers. Conversely, foreign nationals appeared to benefit less—or in some domains, not at all—from the intervention. Regarding social service take-up, the program had statistically significant positive effects for women (+8 pp), SIAS-registered participants (+7 pp), and individuals with at least secondary education (+8 pp), indicating variation in program engagement along demographic lines.

7.2 Heterogeneous Treatment Effects in Castilla-La-Mancha

The results of estimating equation (3) for the Castilla–La Mancha intervention are shown in Tables C-6–C-10. The heterogeneity analysis reveals substantial variation in impacts across subgroups, suggesting that program effectiveness was shaped by both individual

and contextual characteristics. Overall, the personalized inclusion strategy generated more pronounced benefits among women residing in depopulated rural areas and participants who were employed at baseline.

Specifically, participants in areas of intense or extreme depopulation exhibited stronger improvements across several dimensions, including job qualification (+0.67 SD), job search skills (+0.32 SD), and mental health (+0.32 SD), with corresponding reductions in the SiSo social exclusion score (−7.15 points) and exclusion axis position (−0.22 levels).

The program also appears more effective for participants employed at baseline, who saw large gains in days worked (+12.3), mental health (+0.38 SD), along with a meaningful reduction in social exclusion (−6.21 points).

8 Conclusion

This paper evaluates the effects of personalized social services on the socio-economic inclusion of vulnerable populations in Spain through two randomized controlled trials. In Barcelona, the intervention modestly increased service take-up but did not improve employability, well-being, or social inclusion. In contrast, the Castilla–La Mancha program led to meaningful improvements in perceived employability, mental health, and social inclusion—particularly among women in rural and depopulated areas—though without translating into higher employment in administrative records.

An important limitation of the study is that the control groups in both sites retained access to standard municipal social services. While this design reflects realistic implementation conditions and enhances policy relevance, it also implies that our estimated treatment effects should be interpreted as the added value of personalization over “business-as-usual” rather than relative to no intervention. In particular, the presence of relatively active baseline service environments—especially in urban areas—may have attenuated detectable differences in outcomes across groups.

Future research should explore the long-term trajectories of participants in personalized inclusion programs, particularly whether initial gains in psychosocial well-being and service

engagement serve as precursors to sustained improvements in labor market outcomes. Understanding the temporal dynamics of inclusion is critical, as employment effects may materialize only after beneficiaries consolidate improvements in mental health, self-efficacy, and social networks.

In addition, future work should examine the complementarities between personalized services and structural interventions—such as local labor demand policies, employer engagement, or care infrastructure—that may be necessary to translate subjective gains into objective socioeconomic mobility. Experimental designs that vary program intensity, duration, or integration with complementary policies could shed light on the causal mechanisms at play. Finally, replicating and extending these evaluations across different institutional and labor market contexts would contribute to a more generalizable understanding of the conditions under which personalization enhances inclusion.

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Tables and Figures

Table 1: Balance. Barcelona

	Obs.	Mean	Std. Deviation	Diff.	Std. Error
Socio-demographic characteristics					
Woman	1150	0.65	(0.48)	0.00	(0.00)
SIAS	1183	0.77	(0.42)	0.00	(0.00)
Age	1148	47.33	(10.18)	0.38	(0.38)
Married or in a domestic partnership	1140	0.21	(0.41)	-0.01	(0.03)
Single	1140	0.50	(0.50)	0.01	(0.03)
Separated or divorced	1140	0.27	(0.45)	-0.01	(0.03)
Widowed	1140	0.02	(0.13)	0.01	(0.01)
Born in Spain	1178	0.33	(0.47)	0.02	(0.03)
Spanish nationality	1170	0.59	(0.49)	0.04	(0.03)
Primary education or lower	1121	0.24	(0.43)	-0.02	(0.02)
Compulsory secondary education	1121	0.30	(0.46)	0.02	(0.02)
Post-compulsory secondary education	1121	0.15	(0.36)	-0.02	(0.02)
Vocational secondary education	1121	0.17	(0.38)	-0.01	(0.02)
University education	1121	0.13	(0.34)	0.03	(0.02)
Household members	1058	2.79	(1.43)	0.05	(0.09)
Number of children in the household	1058	0.86	(1.09)	0.03	(0.07)
Number of children under 4 in the household	1058	0.08	(0.29)	0.00	(0.02)
Disability	1053	0.23	(0.42)	0.01	(0.03)
Percentage of disability	190	45.53	(15.93)	-2.31	(2.81)
Understanding of the survey					
Lengua encuesta español o catalán	1183	0.91	(0.29)	-0.02	(0.02)
Survey comprehension level	1058	4.32	(1.02)	0.07	(0.06)
Language comprehension level	1058	4.44	(1.02)	0.05	(0.06)
Outcome variables					
Employee or self-employed	1183	0.16	(0.37)	0.01	(0.02)
At least one day worked	1183	0.24	(0.42)	0.03	(0.02)
Number of days worked	1183	41.93	(89.81)	0.60	(4.20)
Number of full-time equivalent days	1183	25.56	(61.94)	3.45	(3.23)
Employability index (EAS scale)	1183	-0.00	(1.00)	-0.03	(0.06)
Life satisfaction index	1183	-0.00	(1.00)	-0.08	(0.06)
Self-reported health status	1183	3.34	(1.51)	-0.04	(0.09)
Mental health index	1183	-0.00	(1.00)	0.05	(0.06)
Community engagement index	1183	0.00	(1.00)	-0.09	(0.06)
Social relationships index	1183	0.00	(1.00)	-0.02	(0.06)
Trust in social services	1183	3.19	(1.67)	-0.03	(0.10)

Notes: Column (1) reports the number of observations. Columns (2) and (3) report the mean and the standard deviation of the control group. Column (4) reports estimates for the coefficient of the treatment indicator variable in Equation 1, controlling only for strata fixed effects. Column (5) reports robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 2: Balance. Castilla La Mancha

	Obs.	Mean	Std. Deviation	Diff.	Std. Error
Urban area	1652	0.20	(0.40)	0.00	(0.00)
Severe or extreme depopulation	1652	0.40	(0.49)	0.00	(0.00)
IMV beneficiary	1652	0.41	(0.49)	-0.03**	(0.01)
Age	1300	38.99	(7.89)	-0.32	(0.34)
Married or in a domestic partnership	1298	0.39	(0.49)	0.01	(0.02)
Single	1298	0.40	(0.49)	-0.05***	(0.02)
Spanish nationality	1298	0.55	(0.50)	-0.01	(0.03)
EU member state nationality	1298	0.11	(0.31)	-0.00	(0.01)
Non-EU state nationality	1298	0.34	(0.47)	0.01	(0.03)
Incomplete compulsory education	1289	0.44	(0.50)	0.05*	(0.03)
Completed compulsory education (EGB, ESO)	1289	0.33	(0.47)	-0.05**	(0.02)
General secondary education	1289	0.11	(0.32)	0.01	(0.01)
Vocational secondary education	1289	0.08	(0.27)	0.00	(0.01)
University education	1289	0.03	(0.17)	-0.00	(0.01)
Household members	1300	3.89	(1.40)	0.06	(0.06)
Number of children in the household	1279	1.93	(1.07)	0.11**	(0.04)
Keeps home at adequate temperature	1230	0.49	(0.50)	0.02	(0.02)
Household in arrears (past 12 months)	1279	0.56	(0.50)	-0.00	(0.02)
Had previously accessed social services	1300	0.97	(0.17)	-0.00	(0.01)
Social services satisfaction index	1155	0.07	(1.00)	-0.11**	(0.05)
Life satisfaction index	1653	-0.00	(1.00)	-0.03	(0.03)
Self-perceived autonomy index	1653	0.00	(1.00)	0.00	(0.04)
Mental Health index	1653	0.00	(1.00)	-0.02	(0.05)
Life satisfaction	1653	4.82	(3.33)	-0.02	(0.12)
Currently employed	1653	0.16	(0.36)	0.05***	(0.02)
Salaried job in the past 6 months	1653	0.33	(0.47)	0.06***	(0.02)
At least one day worked	1653	0.47	(0.50)	0.03**	(0.02)
Number of days worked	1653	46.14	(65.49)	5.32**	(2.40)
Number of full-time equivalent days	1653	38.62	(57.42)	5.04**	(2.02)
SiSo Scale					
Job qualification	1653	1.40	(1.00)	0.02	(0.03)
Job-seeking skills	1653	1.71	(1.26)	0.01	(0.04)
Score in economic domain	1653	10.17	(7.30)	0.38	(0.29)
Score in employment domain	1653	9.78	(6.90)	0.14	(0.26)
Score in education domain	1259	7.26	(2.39)	0.29**	(0.12)
Score in housing domain	1653	3.96	(4.49)	0.09	(0.21)
Score in health and social care domain	1653	2.69	(3.84)	0.32**	(0.13)
Score in social relationships domain	1653	3.83	(2.93)	0.29**	(0.11)
Total score	1653	35.84	(23.90)	1.65	(1.00)
Position on social inclusion/exclusion axis	1653	1.64	(1.06)	0.07	(0.04)

Notes: Column (1) reports the number of observations. Columns (2) and (3) report the mean and the standard deviation of the control group. Column (4) reports estimates for the coefficient of the treatment indicator variable in Equation 1, controlling only for strata fixed effects. Column (5) reports, in parentheses, clustered standard errors at the locality level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 3: Employability

	Barcelona	Castilla La Mancha	
	Employability index (EAS scale)	Job qualification	Job search skills
	(1)	(2)	(3)
Treatment	0.087 (0.065)	0.856*** (0.071)	0.364*** (0.043)
Observations	775	1039	1039
R^2	0.296	0.342	0.468
Mean Control	0.000	0.006	0.029
Controls		✓	✓
Ancova	✓	✓	✓

Notes: Estimates are based on OLS regressions. All columns present estimates using Equation 1. The estimation sample in column (1) consists of participants in Barcelona who completed the endline survey, while columns (2) and (3) include women from Castilla-La Mancha for whom SiSo scale data are available at endline. Depending on the column, outcomes are defined as described in Section 6. Outcomes in columns (2) and (3) are normalized with respect to the control group mean and standard deviation. All specifications include strata fixed effects, and columns (2) and (3) additionally control for individual-level baseline covariates. The full list of controls is presented in Section 6. Standard errors, reported in parentheses, are robust to heteroskedasticity in column (1) and clustered at the locality level in columns (2) and (3). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4: Employment

	Barcelona			Castilla La Mancha		
	Survey	Admin. Data: days worked		Survey	Admin. Data: days worked	
	Working (at endline)	Total	Full-time equivalent	Working (at endline)	Total	Full-time equivalent
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.032 (0.027)	0.031 (1.845)	0.071 (1.488)	0.072*** (0.022)	1.210 (3.072)	1.252 (2.703)
Observations	840	1092	1092	870	1237	1237
R^2	0.385	0.450	0.425	0.201	0.278	0.236
Mean Control	0.237	21.539	15.055	0.271	46.821	37.686
Controls				✓	✓	✓
Ancova	✓	✓	✓	✓	✓	✓

Notes: Estimates are based on OLS regressions. All columns present estimates using Equation 1. The estimation sample in columns (1)–(3) consists of participants in Barcelona: column (1) includes women responding to the endline survey, and columns (2) and (3) include participants for whom administrative Social Security records are available. Columns (4)–(6) present results for Castilla–La Mancha: column (4) includes women responding to the endline survey, and columns (5) and (6) include women for whom administrative records are available. Depending on the column, outcomes are defined as described in Section 6. All specifications include strata fixed effects, and columns (4)–(6) additionally control for individual-level baseline covariates. The full list of controls is presented in Section 6. Standard errors, reported in parentheses, are robust to heteroskedasticity in column (1)–(3) and clustered at the locality level in columns (4)–(6). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5: Well-being

	Life Satisfaction		Health status		Mental Health Index	
	Barcelona	Castilla LA Mancha	Barcelona	Castilla LA Mancha	Barcelona	Castilla LA Mancha
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.059 (0.177)	0.494*** (0.165)	0.050 (0.066)	-0.039 (0.045)	0.077 (0.071)	0.189** (0.073)
Observations	832	870	841	870	797	870
R^2	0.185	0.277	0.353	0.352	0.283	0.325
Mean Control	6.189	6.028	3.504	2.864	0.000	-0.006
Controls		✓		✓		✓
Ancova	✓	✓	✓	✓	✓	✓

Notes: Estimates are based on OLS regressions. All columns present estimates using Equation 1. The estimation sample in columns (1), (3), and (5) consists of participants in Barcelona who responded to the endline survey, while columns (2), (4), and (6) include women from Castilla–La Mancha who responded to the endline survey. Outcomes in columns (1) and (2) are life satisfaction, measured on a 0–10 scale where higher values indicate greater satisfaction. Outcomes in columns (3) and (4) measure health status: in Barcelona, this is reported on a six-point scale from 1 (very poor) to 6 (excellent), whereas in Castilla–La Mancha it is reported on a five-point scale from 1 (poor) to 5 (excellent). Columns (5) and (6) report the Mental Health Index. The definition of each outcome is described in Section 6, and index construction details are provided in Section A of the online appendix. All specifications include strata fixed effects, and columns (2), (4), and (6) additionally control for women-level baseline covariates. The full list of controls is presented in Section 6. Standard errors, reported in parentheses, are robust to heteroskedasticity in columns (1), (3), and (5), and clustered at the locality level in columns (2), (4), and (6). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 6: Effects on social relations, community engagement and trust in social services. Barcelona

	Social Relations Index	Community Engagement Index	Trust in Social Services
	(1)	(2)	(3)
Treatment	0.032 (0.055)	-0.070 (0.066)	0.001 (0.080)
Observations	821	806	812
R^2	0.477	0.299	0.256
Mean Control	-0.000	0.000	3.544
Controls			
Ancova	✓	✓	✓

Notes: Estimates are based on OLS regressions. All columns present estimates using Equation 1. The estimation sample consists of participants in Barcelona who responded to the endline survey. Outcomes in columns (1) to (3) are defined as described in Section 6: column (1) reports effects on the Social Relations Index, column (2) on the Community Engagement Index, and column (3) on Trust in Social Services. Outcomes in columns (1) and (2) are normalized with respect to the control group mean and standard deviation. All specifications include strata fixed effects. The full list of controls is presented in Section 6. Robust standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 7: Effects on the situation of exclusion and material deprivation. Castilla La Mancha.

	SiSo Scale		Material Deprivation	
	Inclusion/Exclusion			
	Total Score	Axis Position	Index	Situation
	(1)	(2)	(3)	(4)
Treatment	-4.719*** (0.708)	-0.126*** (0.029)	0.076 (0.055)	0.029 (0.033)
Observations	1039	1039	680	870
R^2	0.484	0.296	0.109	0.160
Mean Control	43.019	1.964	0.004	0.427
Controls	✓	✓	✓	✓
Ancova	✓	✓	✓	

Notes: Estimates are based on OLS regressions using Equation 1. The estimation sample in columns (1) and (2) includes women from Castilla–La Mancha for whom SiSo scale data are available at endline, while estimation sample in columns (3) and (4) includes all women who responded to the endline survey. Outcomes are defined as described in Section 6: column (1) reports the SiSo Inclusion-Exclusion Axis Position (higher values indicate greater exclusion); column (2) is the SiSo Total Score, where higher scores indicate greater exclusion (range: 0–100); column (3) is the Material and Social Deprivation Index, measured as a count of unaffordable items out of 13; and column (4) is a binary indicator equal to 1 if the participant reports lacking at least 7 of the 13 items, reflecting severe material deprivation.. All specifications include strata fixed effects and women-level baseline covariates, as listed in Section 6. Standard errors, in parentheses, are clustered at the locality level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 8: Effects on SiSo scale components. Castilla La Mancha

	SiSo Scale					
	Economic Score	Labor Score	Social and Health Score	Relational Score	Personal Score	Residential Score
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	-0.565** (0.251)	-1.311*** (0.255)	-0.508*** (0.139)	-0.690*** (0.106)	-0.508*** (0.105)	-0.507*** (0.163)
Observations	1039	1039	1039	1039	1039	1039
R^2	0.265	0.454	0.489	0.491	0.183	0.525
Mean Control	11.075	11.533	4.043	4.831	3.537	4.955
Controls	✓	✓	✓	✓	✓	✓
Ancova	✓	✓	✓	✓		✓

Notes: Estimates are based on OLS regressions using Equation 1. The estimation sample includes women from Castilla–La Mancha with available SiSo scale data at endline. Outcomes correspond to SiSo dimensions as described in Sections 6 and A-2. Higher scores indicate greater exclusion. All specifications include strata fixed effects and control for individual-level baseline covariates.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 9: Take-up. Barcelona

	Take-up			
	Labora	Social Assistance	Training	Aggregate
	(1)	(2)	(3)	(4)
Treatment	-0.001 (0.022)	0.054* (0.030)	-0.022 (0.016)	0.068** (0.030)
Observations	1182	1182	1182	1183
R^2	0.064	0.127	0.085	0.127
Mean Control	0.139	0.436	0.079	0.508
Controls				
Ancova				

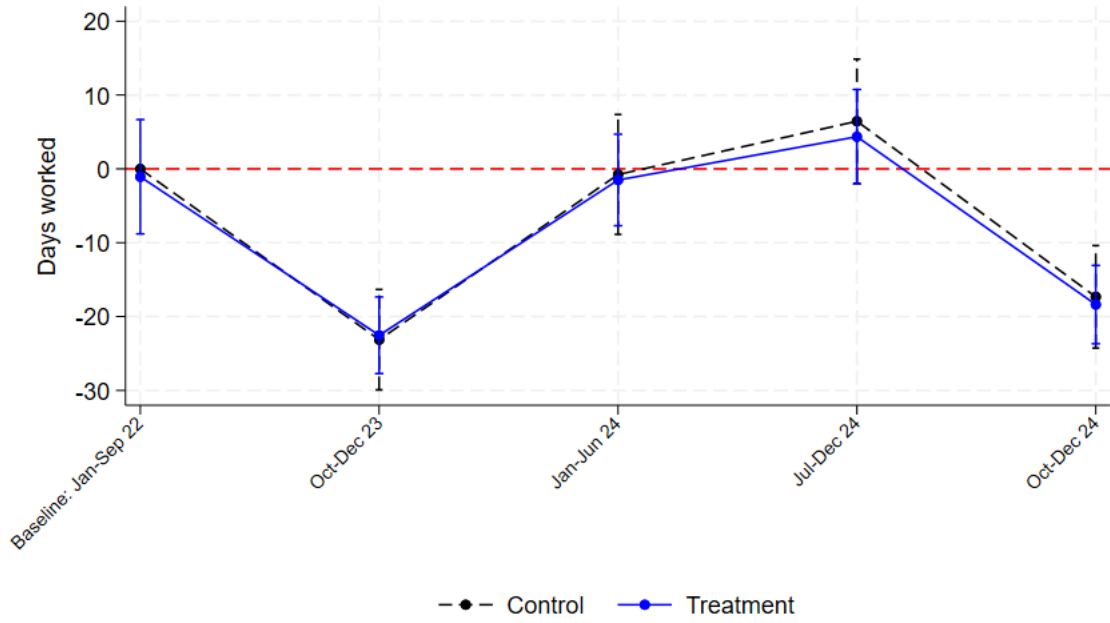
Notes: Estimates are based on OLS regressions using Equation 1. The estimation sample includes participants in Barcelona who signed the information consent. The outcome variable measures take-up of social inclusion and employment services, as described in Section 6. All specifications include strata fixed effects. Robust standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 10: Minimum Income Scheme - April 2025

	Barcelona	Castilla LA Mancha
	(1)	(2)
Treatment	-0.015 (0.029)	-0.004 (0.042)
Observations	1011	669
R^2	0.109	0.282
Mean Control	0.726	0.641
Controls		✓
Ancova		✓
IPWT		✓

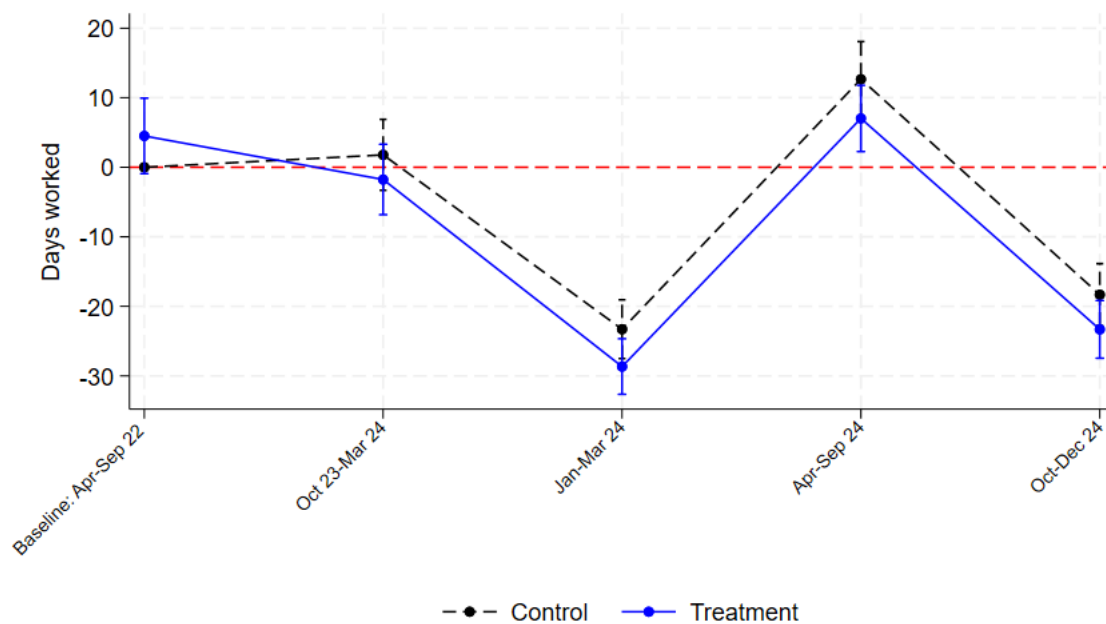
Notes: Estimates are based on Equation 1. Outcome in column 1 is estimated using OLS regressions, while outcome in column (2) applies Inverse Probability Weighting (IPWT) to Equation 1. Weights are constructed as explained in Section C-2 of the online appendix. The estimation sample includes participants in Barcelona (column 1) and Castilla-La Mancha (column 2) for whom administrative records on the Minimum Income Scheme (IMV) were available as of April 2025. The outcome is an indicator equal to 1 if the participant received the IMV benefit. All specifications include strata fixed effects and control for baseline covariates, as listed in Section 6. Standard errors, reported in parentheses, are robust to heteroskedasticity in column (1) and clustered at the locality level in column (2). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Figure 2: BCN: Treatment Effect on Days Worked Over Time



Notes: This figure presents the estimated coefficients $\hat{\alpha}$ (in black) from equation (2) for the BCN project, which capture the evolution of days worked for the control group. The coefficients $\hat{\alpha} + \hat{\beta}$ (in blue) reflect the corresponding evolution for the treatment group. For both groups, 90% confidence intervals are displayed.

Figure 3: CLM: Treatment Effect on Days Worked Over Time



Notes: This figure presents the estimated coefficients $\hat{\alpha}$ (in black) from equation (2) for the CLM project, which capture the evolution of days worked for the control group. The coefficients $\hat{\alpha} + \hat{\beta}$ (in blue) reflect the corresponding evolution for the treatment group. For both groups, 90% confidence intervals are displayed.

ONLINE APPENDIX

Personalized Social Services and Socioeconomic Inclusion: Experimental Evidence from Spain

María Hernández-de-Benito and Teresa Molina-Millán

A Measurement

A-1 BCN: Scales Included in Individual Surveys

Employability In Barcelona, employability is measured using a five-item scale adapted from the Employability Appraisal Scale developed by [Llinares-Insa et al. \(2018\)](#) (Table A-1). Responses are recorded on a five-point Likert scale ranging from strong disagreement to strong agreement.

Table A-1: BCN: Perceived Employability Scale

Item (original)	Item (English translation)
1. Le falta formación para poder trabajar en lo que quiere	I lack the training to work in what I want.
2. No sabe cómo buscar trabajo	I don't know how to look for a job.
3. Necesita formarse para estar al día en su profesión	I need to train to stay up to date in my profession.
4. Le falta confianza y seguridad en sí mismo en el trabajo / búsqueda de empleo / estudios	I lack confidence and self-assurance at work, in job searching, or in my studies.
5. Le falta experiencia para que le contraten o poder cambiar a un trabajo mejor	I lack the experience to get hired or to move to a better job.

Mental Health In Barcelona, mental health is assessed using a seven-item scale that asks respondents how they have felt during the past two weeks (Table A-2). For each item, respondents are asked to select the option that best describes their experience, using a five-point frequency Likert scale ranging from “Never” to “Always”.

Table A-2: BCN: Mental Health Scale

Ítem (original)	Item (English translation)
1. Se ha sentido útil	Have you felt useful?
2. Se ha sentido relajado/a	Have you felt relaxed?
3. Ha tenido energía de sobra	Have you had plenty of energy?
4. Ha afrontado bien los problemas	Have you coped well with problems?
5. Se ha sentido bien consigo mismo/a	Have you felt good about yourself?
6. Se ha sentido seguro/a (con confianza)	Have you felt confident?
7. Se ha sentido alegre	Have you felt cheerful?

Social Relations In Barcelona, social relations are measured using a four-item scale capturing the frequency of different types of social interactions (Table A-3). Responses are recorded on a six-point frequency scale ranging from “never” to “every day.”

Table A-3: BCN: Social Relations Scale

Item (original)	Item (English translation)
1. ¿Se reúne con familiares, que no vivan en su mismo hogar?	Do you meet with relatives who do not live in your household?
2. ¿Se reúne con amigos/as, que no vivan en su mismo hogar?	Do you meet with friends who do not live in your household?
3. ¿Contacta (por teléfono, sms, whatsapp, Telegram, carta, internet, etc.) con familiares que no vivan en su mismo hogar?	Do you contact (by phone, SMS, WhatsApp, Telegram, letter, internet, etc.) relatives who do not live in your household?
4. ¿Contacta (por teléfono, sms, whatsapp, Telegram, carta, internet, etc.) con amigos que no sean miembros de su hogar?	Do you contact (by phone, SMS, WhatsApp, Telegram, letter, internet, etc.) friends who are not members of your household?

Community Engagement In Barcelona, community engagement is measured using a four-item scale assessing participation in neighborhood and civic associations (Table A-4). Responses are recorded on a three-point scale: 1 = “I never participate / I’m not a

member”; 2 = “I am a member but do not participate actively”; and 3 = “I participate actively (meetings, activities, etc.).”

Table A-4: BCN: Community Engagement Scale

Ítem (original)	Item (English translation)
1. Asociación de vecinos o asociación/grupo a nivel de barrio de ayuda mutua	Neighborhood association or mutual aid group at the neighborhood level
2. Asociación cívica a nivel de barrio (cultural, de ocio, educativa, etc.)	Civic association at the neighborhood level (cultural, leisure, educational, etc.)
3. Asociación de Familias de Alumnos (AFA) de centros educativos	Parent-Teacher Association (PTA) of educational centers
4. Entidades de voluntariado de ayuda a personas desfavorecidas	Volunteering organizations supporting disadvantaged people

Trust in Social Services In Barcelona, in the endline survey, this outcome was measured using a five-point Likert scale ranging from strong disagreement to strong agreement with the following statement: “Social services offer effective support to address the problems or needs of the person being assisted.”

A-2 CLM: SISO Score

Table A-5: SISO Score

	A lot of difficulty	Quite difficult	Some difficulty	Low difficulty
Economic situation				
1. Income Volume	6	4	2	0
2. Source of income	6	4	2	0
3. Forecast: main source of income	6	2	2	0
4. Severe material deprivation	6	4	2	0
Workplace				
5. Employment status	6	4	2	0
6. Intensity at work	6	4	2	0
7. Job continuity forecast	6	4	2	0
Training				
8. Level of studies completed	3	2	1	0
9. Job qualification	3	2	1	0
10. Job search skills	3	2	1	0
11. Other competencies	3	2	1	0
Residential				
12. Tenure regime	6	4	2	0
13. Housing conditions	6	4	2	0
14. Accessibility	6	4	2	0
15. Location in the environment	6	4	2	0
Social and Health field				
16. Access to the healthcare system	4	3	2	0
17. Health status	4	3	2	0
18. Family burden	4	3	2	0
19. Difficulty following treatment	4	3	2	0
20. Health habits	4	3	2	0
Relational Scope				
21. Family Relationships	3	2	1	0
22. Coexistence in the environment	3	2	1	0
23. Support Network	3	2	1	0
24. Social participation	3	2	1	0
25. Asocial or conflictive behaviors	3	2	1	0

A-3 CLM: Scales Included in Surveys

Mental Health In Castilla-La-Mancha, mental health was assessed with the same scale as in Barcelona (Table A-2), but supplemented with two items: “Tiene dificultades para dormir debido a las preocupaciones” (“Have you had trouble sleeping due to worries?”); and “Se ha sentido capaz de tomar decisiones” (“Have you felt capable of making decisions?”).

Material Deprivation The material deprivation index is measured with the survey questions included in Table A-6, where the response options were “yes” or “no”.

Table A-6: CLM: Material Deprivation

Item (original)	Item (English translation)
1. ¿Puede permitirse ir de vacaciones al menos una semana al año?	Can you afford to go on vacation for at least one week per year?
2. ¿Puede permitirse una comida de carne, pollo o pescado al menos cada dos días?	Can you afford a meal with meat, chicken, or fish at least every other day?
3. ¿Puede el hogar permitirse mantener la vivienda con una temperatura adecuada (invierno o verano)?	Can your household afford to keep the home at an adequate temperature (in winter or summer)?
4. ¿Tiene capacidad para afrontar gastos imprevistos (de 800 euros)?	Are you able to face unexpected expenses (of 800 euros)?
5. ¿Ha tenido retrasos en el pago de gastos relacionados con la vivienda principal (hipoteca o alquiler, recibos de gas, comunidad...) o en compras a plazos en los últimos 12 meses?	Have you had delays in paying expenses related to the main home (mortgage or rent, gas bills, community fees...) or in installment purchases in the last 12 months?
6. ¿Puede permitirse disponer de un automóvil?	Can you afford to have a car?
7. ¿Puede sustituir muebles estropeados o viejos?	Can you replace damaged or old furniture?
8. ¿Puede permitirse sustituir ropa estropeada por otra nueva?	Can you afford to replace worn-out clothing with new items?
9. ¿Puede permitirse tener dos pares de zapatos en buenas condiciones?	Can you afford to have two pairs of shoes in good condition?
10. ¿Puede permitirse reunirse con amigos/familia para comer o tomar algo al menos una vez al mes?	Can you afford to meet with friends/family for a meal or drink at least once a month?
11. ¿Puede permitirse participar regularmente en actividades de ocio?	Can you afford to regularly participate in leisure activities?
12. ¿Puede permitirse gastar una pequeña cantidad de dinero en sí mismo?	Can you afford to spend a small amount of money on yourself?
13. ¿Puede permitirse conexión a internet?	Can you afford to have an internet connection?

B Attrition

Table B-1: Program Retention and Final Survey Response Rates. Barcelona.

	(1) Leaves the program		(2) Participates in endline survey		(3) Admin. data available	
	Total	%	Total	%	Total	%
Control						
No	0	0.00	155	35.80	40	9.24
Sí	0	0.00	278	64.20	393	90.76
Total	433	100.00	433	100.00	433	100.00
Treatment						
No	531	70.80	186	24.80	51	6.80
Sí	218	29.07	564	75.20	699	93.20
Total	750	100.00	750	100.00	750	100.00
Total						
No	531	44.89	341	28.83	91	7.69
Sí	218	18.43	842	71.17	1092	92.31
Total	1183	100.00	1183	100.00	1183	100.00

Notes: Columns show counts and percentages, total and by treatment status, for all participants who signed the informed consent. Column (1) is an indicator variable equal to 1 if the participant left the program before completion; column (2) is equal to 1 if she participated in the endline survey; column (3) is equal to 1 if administrative data are available for the participant.

Table B-2: Program Retention and Final Survey Response Rates by treatment group. Barcelona.

	Participates in endline survey	Admin. data available
	(1)	(2)
Treatment	0.111*** (0.028)	0.025 (0.017)
Obs.	1183	1183
R^2	0.095	0.094
Control Mean	0.642	0.908
Strata	✓	✓

Notes: Estimates based on OLS regressions. All columns present estimates using Equation 1, controlling only for strata fixed effects. The estimation sample in columns (1) and (2) includes all participants who signed the information consent. The outcome in column (1) is an indicator variable equal to 1 if the participant was interviewed in the endline survey, and in column (2) an indicator equal to 1 if administrative records are available for the participant. Robust standard errors are reported in parenthesis. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table B-3: Program Dropout and Survey Participation. Castilla La Mancha.

	(1)		(2)		(3)		(4)	
	Leaves the program		Participates in endline survey		Participates in SiSo scale (Sep - Dec 2023)		Admin. data available	
	Total	%	Total	%	Total	%	Total	%
Control								
No	679	82.20	438	53.03	263	31.84	21	2.54
Yes	147	17.80	388	46.97	563	68.16	805	97.46
Total	826	100.00	826	100.00	826	100.00	826	100.00
Tratamiento								
No	604	73.12	251	30.39	169	20.46	21	2.54
Yes	222	26.88	575	69.61	657	79.54	805	97.46
Total	826	100.00	826	100.00	826	100.00	826	100.00
Total								
No	1283	77.66	689	41.71	432	26.15	42	2.54
Yes	369	22.34	963	58.29	1220	73.85	1610	97.46
Total	1652	100.00	1652	100.00	1652	100.00	1652	100.00

Notes: Columns show counts and percentages, total and by treatment status, for all participants who signed the informed consent. Column (1) is an indicator variable equal to 1 if the participant left the program before completion; column (2) is equal to 1 if she participated in the endline survey; column (3) is equal to 1 if she participated in the SiSo scale between September and December 2023; and column (4) is equal to 1 if administrative data are available for the participant.

Table B-4: Program Retention and Final Survey Response Rates by treatment group. Castilla La Mancha.

	Leaves the program	Participates in endline survey	Participates in SiSo scale (Sep - Dec 2023)	Admin. data available
	(1)	(2)	(3)	(4)
Treatment	0.091*** (0.020)	0.224*** (0.041)	0.109*** (0.022)	-0.002 (0.007)
Obs.	1652	1652	1652	1652
R^2	0.094	0.164	0.095	0.109
Control Mean	0.178	0.470	0.682	0.975
Strata	✓	✓	✓	✓

Notes: Estimates based on OLS regressions. All columns present estimates using Equation 1, controlling only for strata fixed effects. The estimation sample in columns (1), (2) and (3) includes all women who signed the information consent. The outcome in column (1) is an indicator variable equal to 1 if the participant left the program before completion; column (2) equals 1 if she participated in the endline survey; column (3) equals 1 if she participated in the SiSo scale between September and December 2023; and column (4) equals 1 if administrative data are available for the participant. Standard errors, in parenthesis, are clustered at the locality level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

C Auxiliary Results

C-1 Heterogeneous effect

Table C-1: Heterogeneous effects by sex. Barcelona.

	Take-up	Employability index (EAS scale)	Working (at endline)	Total days worked	Life Satisfaction	Health status	Mental Health Index	Social Relations Index	Community Engagement Index	Trust in Social Services
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treatment	0.039 (0.050)	0.120 (0.106)	0.006 (0.044)	-1.003 (2.884)	-0.009 (0.323)	0.003 (0.116)	0.119 (0.121)	0.141 (0.103)	-0.057 (0.113)	0.006 (0.146)
Treat. \times Woman	0.040 (0.063)	-0.081 (0.135)	0.026 (0.057)	0.464 (3.757)	0.183 (0.384)	0.095 (0.141)	-0.031 (0.148)	-0.160 (0.122)	-0.009 (0.140)	0.009 (0.177)
Observations	1150	752	816	1061	808	817	775	798	784	790
R^2	0.130	0.296	0.388	0.456	0.194	0.366	0.303	0.481	0.297	0.250
Mean Control	0.512	0.008	0.244	21.908	6.144	3.496	0.003	0.004	-0.014	3.544
Treat. + Treat. \times X1	0.08** (0.04)	0.04 (0.08)	0.03 (0.04)	-0.54 (2.42)	0.17 (0.21)	0.10 (0.08)	0.09 (0.09)	-0.02 (0.07)	-0.07 (0.08)	0.01 (0.10)

Notes: Estimates based on OLS regressions. All columns present estimates using Equation 3. The estimation sample in column (1) includes all women who signed the informed consent to participate in the program; columns (2), (3), (5)-(10) include participants who responded to the endline survey; and column (4) includes participants for whom administrative Social Security records are available. Definitions of the outcomes are provided in Section 6, and the construction of the indices is described in Section A of the online appendix. All specifications include strata fixed effects. Robust standard errors are reported in parenthesis. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-2: Heterogeneous effects by registration at SIAS. Barcelona.

	Take-up	Employability index (EAS scale)	Working (at endline)	Total days worked	Life Satisfaction	Health status	Mental Health Index	Social Relations Index	Community Engagement Index	Trust in Social Services
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treatment	0.047 (0.059)	-0.146 (0.124)	-0.035 (0.068)	1.827 (4.414)	-0.080 (0.330)	0.155 (0.149)	-0.053 (0.147)	0.159 (0.112)	0.087 (0.130)	0.244 (0.171)
Treat. \times SIAS	0.027 (0.068)	0.295** (0.146)	0.084 (0.074)	-2.300 (4.851)	0.176 (0.387)	-0.132 (0.166)	0.164 (0.167)	-0.160 (0.129)	-0.199 (0.150)	-0.303 (0.193)
Observations	1183	775	840	1092	832	841	797	821	806	812
R^2	0.127	0.299	0.387	0.451	0.185	0.353	0.284	0.478	0.301	0.258
Mean Control	0.508	0.000	0.237	21.539	6.189	3.504	0.000	-0.000	0.000	3.544
Treat. + Treat. \times X1	0.07** (0.03)	0.15* (0.08)	0.05* (0.03)	-0.47 (2.01)	0.10 (0.21)	0.02 (0.07)	0.11 (0.08)	-0.00 (0.06)	-0.11 (0.08)	-0.06 (0.09)

Notes: Estimates based on OLS regressions. All columns present estimates using Equation 3. The estimation sample in column (1) includes all women who signed the informed consent to participate in the program; columns (2), (3), (5)-(10) include participants who responded to the endline survey; and column (4) includes participants for whom administrative Social Security records are available. Definitions of the outcomes are provided in Section 6, and the construction of the indices is described in Section A of the online appendix. All specifications include strata fixed effects. Robust standard errors are reported in parenthesis. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-3: Heterogeneous effects by age group. Barcelona.

	Take-up	Employability index (EAS scale)	Working (at endline)	Total days worked	Life Satisfaction	Health status	Mental Health Index	Social Relations Index	Community Engagement Index	Trust in Social Services
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treatment	0.059* (0.035)	0.119 (0.076)	0.023 (0.034)	-0.232 (2.225)	-0.000 (0.205)	0.033 (0.077)	0.077 (0.080)	0.002 (0.063)	-0.121 (0.084)	0.073 (0.094)
Treat. \times Age above 55	0.023 (0.069)	-0.217 (0.156)	0.001 (0.056)	-1.988 (3.964)	0.463 (0.403)	0.136 (0.146)	0.088 (0.163)	0.117 (0.132)	0.225* (0.128)	-0.248 (0.190)
Observations	1149	752	816	1060	808	817	775	798	784	790
R^2	0.129	0.298	0.388	0.456	0.195	0.366	0.303	0.481	0.300	0.252
Mean Control	0.512	0.008	0.244	21.908	6.144	3.496	0.003	0.004	-0.014	3.544
Treat. + Treat. \times X1	0.08 (0.06)	-0.10 (0.14)	0.02 (0.04)	-2.22 (3.28)	0.46 (0.35)	0.17 (0.12)	0.16 (0.14)	0.12 (0.12)	0.10 (0.10)	-0.17 (0.17)

Notes: Estimates based on OLS regressions. All columns present estimates using Equation 3. The estimation sample in column (1) includes all women who signed the informed consent to participate in the program; columns (2), (3), (5)-(10) include participants who responded to the endline survey; and column (4) includes participants for whom administrative Social Security records are available. Definitions of the outcomes are provided in Section 6, and the construction of the indices is described in Section A of the online appendix. All specifications include strata fixed effects. Robust standard errors are reported in parenthesis. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-4: Heterogeneous effects by education. Barcelona.

	Take-up	Employability index (EAS scale)	Working (at endline)	Total days worked	Life Satisfaction	Health status	Mental Health Index	Social Relations Index	Community Engagement Index	Trust in Social Services
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treatment	0.055 (0.041)	0.019 (0.095)	0.059 (0.036)	1.372 (2.267)	0.202 (0.273)	0.129 (0.098)	0.113 (0.107)	-0.005 (0.079)	-0.163* (0.094)	0.029 (0.115)
Treat. \times Secondary education	0.029 (0.061)	0.090 (0.133)	-0.081 (0.057)	-4.499 (3.871)	-0.195 (0.351)	-0.143 (0.132)	-0.028 (0.139)	0.047 (0.110)	0.208 (0.134)	-0.076 (0.166)
Observations	1121	736	797	1037	789	798	757	779	765	771
R^2	0.119	0.291	0.379	0.446	0.186	0.352	0.300	0.484	0.291	0.242
Mean Control	0.508	0.022	0.245	21.769	6.143	3.510	0.013	0.024	-0.025	3.551
Treat. + Treat. \times X1	0.08* (0.04)	0.11 (0.09)	-0.02 (0.04)	-3.13 (3.14)	0.01 (0.22)	-0.01 (0.09)	0.08 (0.09)	0.04 (0.08)	0.05 (0.10)	-0.05 (0.12)

Notes: Estimates based on OLS regressions. All columns present estimates using Equation 3. The estimation sample in column (1) includes all women who signed the informed consent to participate in the program; columns (2), (3), (5)-(10) include participants who responded to the endline survey; and column (4) includes participants for whom administrative Social Security records are available. Definitions of the outcomes are provided in Section 6, and the construction of the indices is described in Section A of the online appendix. All specifications include strata fixed effects. Robust standard errors are reported in parenthesis. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-5: Heterogeneous effects by nationality.

	Take-up	Employability index (EAS scale)	Working (at endline)	Total days worked	Life Satisfaction	Health status	Mental Health Index	Social Relations Index	Community Engagement Index	Trust in Social Services
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treatment	0.072 (0.048)	-0.065 (0.120)	0.022 (0.044)	0.260 (2.756)	-0.353 (0.297)	0.056 (0.109)	0.108 (0.121)	0.176* (0.092)	-0.118 (0.123)	-0.033 (0.132)
Treat. \times Spanish nationality	-0.008 (0.062)	0.229 (0.144)	0.010 (0.056)	-0.391 (3.653)	0.698* (0.365)	0.011 (0.139)	-0.034 (0.149)	-0.224* (0.120)	0.101 (0.144)	0.070 (0.170)
Observations	1170	768	833	1084	825	834	790	814	799	805
R^2	0.128	0.301	0.385	0.448	0.188	0.350	0.288	0.485	0.310	0.256
Mean Control	0.511	0.004	0.240	21.469	6.184	3.495	-0.005	0.004	-0.000	3.543
Treat. + Treat. \times X1	0.06 (0.04)	0.16** (0.08)	0.03 (0.04)	-0.13 (2.45)	0.34 (0.22)	0.07 (0.08)	0.07 (0.09)	-0.05 (0.07)	-0.02 (0.08)	0.04 (0.10)

Notes: Estimates based on OLS regressions. All columns present estimates using Equation 3. The estimation sample in column (1) includes all women who signed the informed consent to participate in the program; columns (2), (3), (5)-(10) include participants who responded to the endline survey; and column (4) includes participants for whom administrative Social Security records are available. Definitions of the outcomes are provided in Section 6, and the construction of the indices is described in Section A of the online appendix. All specifications include strata fixed effects. Robust standard errors are reported in parenthesis. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-6: Heterogeneous effects by area of residence. Castilla-La Mancha.

	Program dropout	Job qualification	Job search skills	Working (at endline)	Total days worked	Life Satisfaction	Health status	Mental Health Index	SiSo Total Score	SiSo Axis Position
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treatment	0.085*** (0.030)	0.528*** (0.071)	0.289*** (0.076)	0.046 (0.034)	-7.136** (3.146)	-0.057 (0.295)	-0.092 (0.081)	0.029 (0.161)	-2.836*** (1.006)	-0.049 (0.041)
Treat. \times Urban area	0.146*** (0.053)	0.080 (0.170)	0.108 (0.102)	0.056 (0.051)	5.088 (6.618)	0.796 (0.518)	-0.036 (0.119)	0.062 (0.203)	0.465 (1.844)	0.011 (0.075)
Treat. \times Intense or extreme depopulation	-0.018 (0.036)	0.142 (0.100)	0.032 (0.093)	0.027 (0.048)	18.192*** (6.129)	0.783** (0.338)	0.118 (0.109)	0.289 (0.179)	-4.309*** (1.480)	-0.171*** (0.063)
Observations	1286	1053	1053	879	1253	879	879	879	1053	1053
R^2	0.124	0.345	0.466	0.202	0.284	0.282	0.357	0.325	0.489	0.303
Mean Control	0.037	2.109	2.482	0.272	46.120	6.014	2.871	-0.006	43.057	1.964
Treat. + Treat. \times X1	0.23*** (0.04)	0.61*** (0.15)	0.40*** (0.07)	0.10** (0.04)	-2.05 (5.85)	0.74* (0.42)	-0.13 (0.09)	0.09 (0.13)	-2.37 (1.56)	-0.04 (0.06)
Treat. + Treat. \times X2	0.07*** (0.02)	0.67*** (0.07)	0.32*** (0.05)	0.07** (0.03)	11.06** (5.29)	0.73*** (0.18)	0.03 (0.07)	0.32*** (0.08)	-7.15*** (1.06)	-0.22*** (0.05)

Notes: Estimates based on OLS regressions. All columns present estimates using Equation 3. The estimation sample in column (1) includes all women who signed the informed consent to participate in the program; columns (2), (3), (9), and (10) include women for whom SiSo data are available at endline; columns (4), (6), (7), and (8) include women who responded to the endline survey; and column (5) includes women for whom administrative Social Security records are available. Definitions of the outcomes are provided in Section 6, and the construction of the indices is described in Section A of the online appendix. All specifications include strata fixed effects, and women-level controls. The full list of controls is presented in Section 5. Standard errors, reported in parenthesis are clustered at the locality level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-7: Heterogeneous effects by axis position social inclusion/exclusion scale. Castilla-La Mancha.

	Program dropout	Job qualification	Job search skills	Working (at endline)	Total days worked	Life Satisfaction	Health status	Mental Health Index	SiSo Total Score	SiSo Axis Position
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treatment	0.094*** (0.034)	0.711*** (0.116)	0.346*** (0.093)	-0.034 (0.080)	-9.225 (6.731)	0.875** (0.348)	-0.023 (0.155)	0.296 (0.181)	-5.100*** (1.810)	-0.096 (0.085)
Treat. \times Minor exclusion	-0.062 (0.071)	0.028 (0.204)	0.204 (0.231)	0.025 (0.124)	12.701 (18.094)	-1.322* (0.731)	0.070 (0.362)	-0.155 (0.421)	0.309 (3.071)	-0.075 (0.157)
Treat. \times Moderate exclusion	0.038 (0.038)	-0.123 (0.137)	-0.003 (0.107)	0.114 (0.098)	12.821 (9.333)	-0.348 (0.345)	0.105 (0.186)	-0.053 (0.196)	0.546 (2.075)	-0.037 (0.101)
Observations	952	776	776	644	932	644	644	644	776	776
R^2	0.126	0.393	0.573	0.224	0.300	0.325	0.413	0.340	0.603	0.371
Mean Control	0.035	2.065	2.462	0.248	47.518	5.957	2.798	-0.058	42.709	1.959
Treat. + Treat. \times X1	0.03 (0.07)	0.74*** (0.17)	0.55*** (0.21)	-0.01 (0.10)	3.48 (16.81)	-0.45 (0.69)	0.05 (0.32)	0.14 (0.38)	-4.79** (2.26)	-0.17 (0.12)
Treat. + Treat. \times X2	0.13*** (0.02)	0.59*** (0.07)	0.34*** (0.04)	0.08** (0.03)	3.60 (4.48)	0.53** (0.22)	0.08 (0.07)	0.24** (0.10)	-4.55*** (0.90)	-0.13*** (0.04)

Notes: Estimates based on OLS regressions. All columns present estimates using Equation 3. The estimation sample in column (1) includes all women who signed the informed consent to participate in the program; columns (2), (3), (9), and (10) include women for whom SiSo data are available at endline; columns (4), (6), (7), and (8) include women who responded to the endline survey; and column (5) includes women for whom administrative Social Security records are available. Definitions of the outcomes are provided in Section 6, and the construction of the indices is described in Section A of the online appendix. All specifications include strata fixed effects, and women-level controls. The full list of controls is presented in Section 5. Standard errors, reported in parenthesis are clustered at the locality level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-8: Heterogeneous effects of being employed at baseline. Castilla-La Mancha.

	Program dropout	Job qualification	Job search skills	Working (at endline)	Total days worked	Life Satisfaction	Health status	Mental Health Index	SiSo Total Score	SiSo Axis Position
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treatment	0.158*** (0.026)	0.595*** (0.068)	0.309*** (0.048)	0.023 (0.035)	-7.797* (4.053)	0.394* (0.228)	-0.059 (0.073)	0.045 (0.085)	-3.399*** (0.883)	-0.054 (0.037)
Treat. \times Employed	-0.114*** (0.034)	0.028 (0.097)	0.038 (0.088)	0.110* (0.062)	20.184*** (7.325)	0.231 (0.271)	0.048 (0.117)	0.333*** (0.111)	-2.811** (1.302)	-0.155*** (0.057)
Observations	1286	1053	1053	879	1253	879	879	879	1053	1053
R^2	0.122	0.344	0.466	0.204	0.286	0.278	0.356	0.327	0.485	0.302
Mean Control	0.037	2.109	2.482	0.272	46.120	6.014	2.871	-0.006	43.057	1.964
Treat. + Treat. \times X1	0.04** (0.02)	0.62*** (0.07)	0.35*** (0.07)	0.13*** (0.04)	12.39** (5.28)	0.62*** (0.19)	-0.01 (0.07)	0.38*** (0.09)	-6.21*** (1.01)	-0.21*** (0.04)

Notes: Estimates based on OLS regressions. All columns present estimates using Equation 3. The estimation sample in column (1) includes all women who signed the informed consent to participate in the program; columns (2), (3), (9), and (10) include women for whom SiSo data are available at endline; columns (4), (6), (7), and (8) include women who responded to the endline survey; and column (5) includes women for whom administrative Social Security records are available. Definitions of the outcomes are provided in Section 6, and the construction of the indices is described in Section A of the online appendix. All specifications include strata fixed effects, and women-level controls. The full list of controls is presented in Section 5. Standard errors, reported in parenthesis are clustered at the locality level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-9: Heterogeneous effects by nationality. Castilla-La Mancha.

	Program dropout	Job qualification	Job search skills	Working (at endline)	Total days worked	Life Satisfaction	Health status	Mental Health Index	SiSo Total Score	SiSo Axis Position
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treatment	0.066*** (0.020)	0.653*** (0.063)	0.313*** (0.061)	0.060* (0.033)	4.577 (4.669)	0.660*** (0.226)	-0.015 (0.079)	0.241** (0.093)	-6.080*** (1.024)	-0.208*** (0.048)
Treat. × Spanish nationality	0.073** (0.036)	-0.082 (0.112)	0.025 (0.081)	0.020 (0.054)	-5.802 (6.391)	-0.323 (0.294)	-0.045 (0.117)	-0.102 (0.131)	2.633* (1.366)	0.156** (0.064)
Observations	1286	1053	1053	879	1253	879	879	879	1053	1053
R^2	0.116	0.344	0.465	0.202	0.282	0.278	0.356	0.322	0.485	0.302
Mean Control	0.037	2.109	2.482	0.272	46.120	6.014	2.871	-0.006	43.057	1.964
Treat. + Treat. × X1	0.14*** (0.03)	0.57*** (0.08)	0.34*** (0.05)	0.08** (0.04)	-1.23 (4.06)	0.34 (0.21)	-0.06 (0.07)	0.14 (0.10)	-3.45*** (0.92)	-0.05 (0.04)

Notes: Estimates based on OLS regressions. All columns present estimates using Equation 3. The estimation sample in column (1) includes all women who signed the informed consent to participate in the program; columns (2), (3), (9), and (10) include women for whom SiSo data are available at endline; columns (4), (6), (7), and (8) include women who responded to the endline survey; and column (5) includes women for whom administrative Social Security records are available. Definitions of the outcomes are provided in Section 6, and the construction of the indices is described in Section A of the online appendix. All specifications include strata fixed effects, and women-level controls. The full list of controls is presented in Section 5. Standard errors, reported in parenthesis are clustered at the locality level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-10: Heterogeneous effects of being a beneficiary of the Minimum Income Scheme. Castilla-La Mancha.

	Program dropout	Job qualification	Job search skills	Working (at endline)	Total days worked	Life Satisfaction	Health status	Mental Health Index	SiSo Total Score	SiSo Axis Position
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treatment	0.053*** (0.018)	0.568*** (0.060)	0.263*** (0.049)	0.080*** (0.030)	5.490 (4.108)	0.797*** (0.193)	0.031 (0.061)	0.328*** (0.077)	-5.291*** (0.964)	-0.160*** (0.041)
Treat. × MIS	0.135*** (0.038)	0.104 (0.098)	0.167** (0.080)	-0.026 (0.052)	-10.209 (6.890)	-0.790** (0.338)	-0.182 (0.112)	-0.363*** (0.136)	1.701 (1.522)	0.099 (0.063)
Observations	1286	1053	1053	879	1253	879	879	879	1053	1053
R^2	0.125	0.344	0.467	0.202	0.282	0.283	0.358	0.328	0.484	0.299
Mean Control	0.037	2.109	2.482	0.272	46.120	6.014	2.871	-0.006	43.057	1.964
Treat. + Treat. × X1	0.19*** (0.03)	0.67*** (0.08)	0.43*** (0.06)	0.05 (0.04)	-4.72 (4.93)	0.01 (0.26)	-0.15* (0.08)	-0.04 (0.11)	-3.59*** (1.08)	-0.06 (0.04)

Notes: Estimates based on OLS regressions. All columns present estimates using Equation 3. The estimation sample in column (1) includes all women who signed the informed consent to participate in the program; columns (2), (3), (9), and (10) include women for whom SiSo data are available at endline; columns (4), (6), (7), and (8) include women who responded to the endline survey; and column (5) includes women for whom administrative Social Security records are available. Definitions of the outcomes are provided in Section 6, and the construction of the indices is described in Section A of the online appendix. All specifications include strata fixed effects, and women-level controls. The full list of controls is presented in Section 5. Standard errors, reported in parenthesis are clustered at the locality level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

C-2 Robustness of estimates to Inverse Probability of Treatment Weighting. Castilla La Mancha.

To address potential baseline imbalances between treatment and control groups, we implement an inverse probability weighting approach. We use individuals' baseline characteristics to estimate each participant's likelihood of being assigned to the treatment group. Specifically, we estimate the following probit model:

$$P_{is}(\text{Treatment}) = \Phi(\alpha + X_i' \gamma + v_i), \quad (4)$$

where $P_{is}(\text{Treatment})$ denotes the probability that individual i resides in a treated municipality at baseline, $\Phi()$ is the cumulative distribution function of the standard normal, and X_i is a vector of individual covariates, including strata fixed effects. Given the large number of potential predictors, we adopt a model selection approach similar to [Doyle et al. \(2017\)](#). We first retain variables that are statistically significant predictors of treatment status, then perform backward stepwise elimination using adjusted R^2 as the selection criterion, always keeping strata fixed effects in the model.

Using the final set of predictors, we estimate each individual's probability of treatment assignment. Since the distribution of observed characteristics is balanced across treatment groups conditional on this propensity score (see [Table C-11](#)), we obtain unbiased treatment effect estimates by weighting observations to create a pseudo-population in which baseline characteristics are independent of treatment status ([Joffe et al., 2004](#)). The Inverse Probability of Treatment Weighting (IPTW) is calculated as:

$$IPTW_i = \frac{A_i}{\hat{P}_i(\text{Treatment})} + \frac{1 - A_i}{1 - \hat{P}_i(\text{Treatment})}, \quad (5)$$

where A_i equals 1 if the individual was assigned to treatment and 0 otherwise.

[Tables C-12 to C-16](#) present Weighted Least Squares estimates using IPTW for the outcome variables corresponding to [Tables 3–8](#).

Table C-11: Balance. Castilla La Mancha. IPWT

	Obs.	Mean	Std. Deviation	Diff.	Std. Error
Urban area	1652	0.20	(0.40)	0.00	(0.00)
Severe or extreme depopulation	1652	0.40	(0.49)	0.00	(0.00)
IMV beneficiary	1652	0.41	(0.49)	-0.01	(0.02)
Age	1300	38.99	(7.89)	-0.14	(0.37)
Married or in a domestic partnership	1298	0.39	(0.49)	-0.03	(0.03)
Single	1298	0.40	(0.49)	-0.04	(0.02)
Spanish nationality	1298	0.55	(0.50)	0.01	(0.03)
EU member state nationality	1298	0.11	(0.31)	0.01	(0.02)
Non-EU state nationality	1298	0.34	(0.47)	-0.03	(0.03)
Incomplete compulsory education	1289	0.44	(0.50)	-0.04	(0.03)
Completed compulsory education (EGB, ESO)	1289	0.33	(0.47)	0.01	(0.03)
General secondary education	1289	0.11	(0.32)	0.03*	(0.02)
Vocational secondary education	1289	0.08	(0.27)	0.00	(0.02)
University education	1289	0.03	(0.17)	0.01	(0.01)
Household members	1300	3.89	(1.40)	-0.05	(0.08)
Number of children in the household	1279	1.93	(1.07)	-0.01	(0.06)
Keeps home at adequate temperature	1230	0.49	(0.50)	0.05**	(0.03)
Household in arrears (past 12 months)	1279	0.56	(0.50)	0.02	(0.03)
Had previously accessed social services	1300	0.97	(0.17)	0.00	(0.00)
Social services satisfaction index	1155	0.07	(1.00)	0.01	(0.06)
Life satisfaction index	1653	-0.00	(1.00)	-0.02	(0.05)
Self-perceived autonomy index	1653	0.00	(1.00)	0.03	(0.05)
Mental Health index	1653	0.00	(1.00)	0.00	(0.07)
Life satisfaction	1653	4.82	(3.33)	0.07	(0.13)
Currently employed	1653	0.16	(0.36)	0.01	(0.03)
Salaried job in the past 6 months	1653	0.33	(0.47)	0.01	(0.03)
At least one day worked	1653	0.47	(0.50)	0.03	(0.03)
Number of days worked	1653	46.14	(65.49)	0.92	(3.49)
Number of full-time equivalent days	1653	38.62	(57.42)	1.31	(2.85)
Job qualification	1653	1.40	(1.00)	0.00	(0.03)
Job-seeking skills	1653	1.71	(1.26)	0.01	(0.06)
Score in economic domain	1653	10.17	(7.30)	-0.05	(0.26)
Score in employment domain	1653	9.78	(6.90)	-0.01	(0.26)
Score in education domain	1259	7.26	(2.39)	-0.03	(0.15)
Score in housing domain	1653	3.96	(4.49)	-0.20	(0.26)
Score in health and social care domain	1653	2.69	(3.84)	0.14	(0.23)
Score in social relationships domain	1653	3.83	(2.93)	0.11	(0.13)
Total score	1653	35.84	(23.90)	-0.03	(0.76)
Position on social inclusion/exclusion axis	1653	1.64	(1.06)	-0.03	(0.03)

Notes: Column (1) reports the number of observations. Columns (2) and (3) report the mean and the standard deviation of the control group. Column (4) reports estimates for the coefficient of the treatment indicator variable in Equation 1, controlling only for strata fixed effects. Column (5) reports, in parentheses, clustered standard errors at the locality level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-12: Employability

	Barcelona	Castilla La Mancha	
	Employability index (EAS scale)	Job qualification	Job search skills
	(1)	(2)	(3)
Treatment	0.087 (0.065)	0.904*** (0.074)	0.424*** (0.042)
Observations	775	675	675
R^2	0.296	0.429	0.605
Mean Control	0.000	-0.068	-0.022
Controls		✓	✓
Ancova	✓	✓	✓
IPWT		✓	✓

Notes: Estimates are based on Equation 1. Outcome in column (1) is estimated using OLS regressions, while outcomes in columns (2) and (3) apply Inverse Probability Weighting (IPWT) to Equation 1. Weights are constructed as explained in Section C-2 of the online appendix. The estimation sample in column (1) consists of participants in Barcelona who completed the endline survey, while columns (2) and (3) include women from Castilla-La Mancha for whom SiSo scale data are available at endline. Depending on the column, outcomes are defined as described in Section 6. Outcomes in columns (2) and (3) are normalized with respect to the control group mean and standard deviation. All specifications include strata fixed effects, and columns (2) and (3) additionally control for individual-level baseline covariates. The full list of controls is presented in Section 6. Standard errors, reported in parentheses, are robust to heteroskedasticity in column (1) and clustered at the locality level in columns (2) and (3). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-13: Employment

	Barcelona			Castilla La Mancha		
	Survey	Admin. Data: days worked		Survey	Admin. Data: days worked	
	Working (at endline)	Total	Full-time equivalent	Working (at endline)	Total	Full-time equivalent
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.032 (0.027)	0.031 (1.845)	0.071 (1.488)	0.084*** (0.030)	1.744 (3.655)	2.810 (3.379)
Observations	840	1092	1092	575	815	815
R^2	0.385	0.450	0.425	0.198	0.268	0.230
Mean Control	0.237	21.539	15.055	0.243	46.674	37.108
Controls				✓	✓	✓
Ancova	✓	✓	✓	✓	✓	✓
IPWT				✓	✓	✓

Notes: Estimates are based on Equation 1. Outcomes in columns (1)–(3) are estimated using OLS regressions, while outcomes in columns (4)–(6) apply Inverse Probability Weighting (IPWT) to Equation 1. Weights are constructed as explained in Section C-2 of the online appendix. The estimation sample in columns (1)–(3) consists of participants in Barcelona: column (1) includes women responding to the endline survey, and columns (2) and (3) include participants for whom administrative Social Security records are available. Columns (4)–(6) present results for Castilla–La Mancha: column (4) includes women responding to the endline survey, and columns (5) and (6) include women for whom administrative records are available. Depending on the column, outcomes are defined as described in Section 6. All specifications include strata fixed effects, and columns (4)–(6) additionally control for individual-level baseline covariates. The full list of controls is presented in Section 6. Standard errors, reported in parentheses, are robust to heteroskedasticity in column (1)–(3) and clustered at the locality level in columns (4)–(6). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-14: Well-being

	Life Satisfaction		Health status		Mental Health Index	
	Barcelona	Castilla LA Mancha	Barcelona	Castilla LA Mancha	Barcelona	Castilla LA Mancha
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.059 (0.177)	0.595*** (0.221)	0.050 (0.066)	0.090 (0.057)	0.077 (0.071)	0.284*** (0.090)
Observations	832	575	841	575	797	575
R^2	0.185	0.332	0.353	0.378	0.283	0.331
Mean Control	6.189	5.951	3.504	2.792	0.000	-0.024
Controls		✓		✓		✓
Ancova	✓	✓	✓	✓	✓	✓
IPWT		✓		✓		✓

Notes: Estimates are based on Equation 1. Outcomes in columns (1), (3), and (5) are estimated using OLS regressions, while outcomes in columns (2), (4), and (6) apply Inverse Probability Weighting (IPWT) to Equation 1. Weights are constructed as explained in Section C-2 of the online appendix. The estimation sample in columns (1), (3), and (5) consists of participants in Barcelona who responded to the endline survey, while columns (2), (4), and (6) include women from Castilla–La Mancha who responded to the endline survey. Outcomes in columns (1) and (2) are life satisfaction, measured on a 0–10 scale where higher values indicate greater satisfaction. Outcomes in columns (3) and (4) measure health status: in Barcelona, this is reported on a six-point scale from 1 (very poor) to 6 (excellent), whereas in Castilla–La Mancha it is reported on a five-point scale from 1 (poor) to 5 (excellent). Columns (5) and (6) report the Mental Health Index. The definition of each outcome is described in Section 6, and index construction details are provided in Section A of the online appendix. All specifications include strata fixed effects, and columns (2), (4), and (6) additionally control for women-level baseline covariates. The full list of controls is presented in Section 6. Standard errors, reported in parentheses, are robust to heteroskedasticity in columns (1), (3), and (5), and clustered at the locality level in columns (2), (4), and (6). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-15: Effects on the situation of exclusion and material deprivation. Castilla La Mancha.

	SiSo Scale		Material Deprivation	
	Inclusion/Exclusion			
	Total Score	Axis Position	Index	Situation
	(1)	(2)	(3)	(4)
Treatment	-4.565*** (0.771)	-0.115*** (0.030)	0.097 (0.074)	0.024 (0.049)
Observations	675	675	443	575
R^2	0.602	0.383	0.168	0.226
Mean Control	42.488	1.958	0.035	0.407
Controls	✓	✓	✓	✓
Ancova	✓	✓	✓	
IPWT	✓	✓	✓	✓

Notes: Estimates are based on Equation 1. Outcomes in columns (1)-(4) apply Inverse Probability Weighting (IPWT) to Equation 1. Weights are constructed as explained in Section C-2 of the online appendix. The estimation sample in columns (1) and (2) includes women from Castilla-La Mancha for whom SiSo scale data are available at baseline, while estimation sample in columns (3) and (4) includes all women who responded to the baseline survey. Outcomes are defined as described in Section 6: column (1) reports the SiSo Inclusion-Exclusion Axis Position (higher values indicate greater exclusion); column (2) is the SiSo Total Score, where higher scores indicate greater exclusion (range: 0–100); column (3) is the Material and Social Deprivation Index, measured as a count of unaffordable items out of 13; and column (4) is a binary indicator equal to 1 if the participant reports lacking at least 7 of the 13 items, reflecting severe material deprivation. All specifications include strata fixed effects and women-level baseline covariates, as listed in Section 6. Standard errors, in parentheses, are clustered at the locality level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-16: Effects on SiSo scale components. Castilla La Mancha

	SiSo Scale					
	Economic Score	Labor Score	Social and Health Score	Relational Score	Personal Score	Residential Score
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	-0.312 (0.312)	-1.022*** (0.256)	-0.521*** (0.175)	-0.774*** (0.119)	-0.587*** (0.135)	-0.655*** (0.155)
Observations	675	675	675	675	675	675
R^2	0.340	0.538	0.630	0.635	0.226	0.696
Mean Control	10.907	11.585	3.789	4.747	3.616	4.734
Controls	✓	✓	✓	✓	✓	✓
Ancova	✓	✓	✓	✓		✓
IPWT	✓	✓	✓	✓	✓	✓

Notes: Notes: Estimates are based on Equation 1. Outcomes in columns (1)-(4) apply Inverse Probability Weighting (IPWT) to Equation 1. Weights are constructed as explained in Section C-2 of the online appendix. The estimation sample includes women from Castilla-La Mancha with available SiSo scale data at baseline. Outcomes correspond to SiSo dimensions as described in Sections 6 and A-2. Higher scores indicate greater exclusion. All specifications include strata fixed effects and control for individual-level baseline covariates. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

C-3 Adjusting for attrition based on observables.

Table C-17: Employability

	Barcelona	Castilla La Mancha	
	Employability index (EAS scale)	Job qualification	Job search skills
	(1)	(2)	(3)
Treatment	0.032 (0.068)	0.872*** (0.093)	0.449*** (0.054)
Observations	687	622	622
R^2	0.316	0.486	0.666
Mean Control	0.038	-0.074	-0.019
Controls		✓	✓
Ancova	✓	✓	✓
IPWT		✓	✓
IPWattrition	✓	✓	✓

Notes: Estimates are based on Equation 1, with all outcomes estimated using Inverse Probability Weighting (IPWT) to adjust for differential attrition. In all columns, IPW is used to correct for differential attrition. Weights are constructed as explained in Section 4.3. The estimation sample in column (1) consists of participants in Barcelona who completed the endline survey, while columns (2) and (3) include women from Castilla-La Mancha for whom SiSo scale data are available at endline. Depending on the column, outcomes are defined as described in Section 6. Outcomes in columns (2) and (3) are normalized with respect to the control group mean and standard deviation. All specifications include strata fixed effects, and columns (2) and (3) additionally control for individual-level baseline covariates. The full list of controls is presented in Section 6. Standard errors, reported in parentheses, are robust to heteroskedasticity in column (1) and clustered at the locality level in columns (2) and (3). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-18: Employment

	Barcelona			Castilla La Mancha		
	Survey		Admin. Data: days worked	Survey		Admin. Data: days worked
	Working (at endline)	Total	Full-time equivalent	Working (at endline)	Total	Full-time equivalent
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.004 (0.030)	0.031 (1.845)	0.071 (1.488)	0.067** (0.030)	1.210 (3.072)	1.252 (2.703)
Observations	744	1092	1092	522	1237	1237
R^2	0.386	0.450	0.425	0.222	0.278	0.236
Mean Control	0.240	21.539	15.055	0.246	46.821	37.686
Controls				✓	✓	✓
Ancova	✓	✓	✓	✓	✓	✓
IPWT				✓		
IPWattrition				✓		

Notes: Estimates are based on OLS regressions. All columns present estimates using Equation 1. The estimation sample in columns (1)–(3) consists of participants in Barcelona: column (1) includes women responding to the endline survey, and columns (2) and (3) include participants for whom administrative Social Security records are available. Columns (4)–(6) present results for Castilla–La Mancha: column (4) includes women responding to the endline survey, and columns (5) and (6) include women for whom administrative records are available. Depending on the column, outcomes are defined as described in Section 6. All specifications include strata fixed effects, and columns (4)–(6) additionally control for individual-level baseline covariates. The full list of controls is presented in Section 6. Standard errors, reported in parentheses, are robust to heteroskedasticity in column (1)–(3) and clustered at the locality level in columns (4)–(6). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-19: Well-being

	Life Satisfaction		Health status		Mental Health Index	
	Barcelona	Castilla LA Mancha	Barcelona	Castilla LA Mancha	Barcelona	Castilla LA Mancha
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.111 (0.192)	0.424** (0.211)	0.052 (0.070)	0.104* (0.060)	0.094 (0.074)	0.327*** (0.094)
Observations	736	522	744	522	707	522
R^2	0.202	0.359	0.368	0.399	0.321	0.337
Mean Control	6.142	5.972	3.516	2.777	0.014	-0.030
Controls		✓		✓		✓
Ancova	✓	✓	✓	✓	✓	✓
IPWT		✓		✓		✓
IPWattrition	✓	✓	✓	✓	✓	✓

Notes: Estimates are based on Equation 1, with all outcomes estimated using Inverse Probability Weighting (IPWT) to adjust for differential attrition. In all columns, IPW is used to correct for differential attrition. Weights are constructed as explained in Section 4.3. The estimation sample in columns (1), (3), and (5) consists of participants in Barcelona who responded to the endline survey, while columns (2), (4), and (6) include women from Castilla–La Mancha who responded to the endline survey. Outcomes in columns (1) and (2) are life satisfaction, measured on a 0–10 scale where higher values indicate greater satisfaction. Outcomes in columns (3) and (4) measure health status: in Barcelona, this is reported on a six-point scale from 1 (very poor) to 6 (excellent), whereas in Castilla–La Mancha it is reported on a five-point scale from 1 (poor) to 5 (excellent). Columns (5) and (6) report the Mental Health Index. The definition of each outcome is described in Section 6, and index construction details are provided in Section A of the online appendix. All specifications include strata fixed effects, and columns (2), (4), and (6) additionally control for women-level baseline covariates. The full list of controls is presented in Section 6. Standard errors, reported in parentheses, are robust to heteroskedasticity in columns (1), (3), and (5), and clustered at the locality level in columns (2), (4), and (6). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-20: Effects on social relations, community engagement and trust in social services. Barcelona

	Social Relations Index	Community Engagement Index	Trust in Social Services
	(1)	(2)	(3)
Treatment	0.037 (0.058)	-0.031 (0.070)	-0.002 (0.086)
Observations	726	714	719
R^2	0.508	0.295	0.257
Mean Control	0.026	-0.039	3.547
Controls			
Ancova	✓	✓	✓
IPWT			
IPWattrition	✓	✓	✓

Estimates are based on Equation 1, with all outcomes estimated using Inverse Probability Weighting (IPWT) to adjust for differential attrition. In all columns, IPW is used to correct for differential attrition. Weights are constructed as explained in Section 4.3. The estimation sample consists of participants in Barcelona who responded to the endline survey. Outcomes in columns (1) to (3) are defined as described in Section 6: column (1) reports effects on the Social Relations Index, column (2) on the Community Engagement Index, and column (3) on Trust in Social Services. Outcomes in columns (1) and (2) are normalized with respect to the control group mean and standard deviation. All specifications include strata fixed effects. The full list of controls is presented in Section 6. Robust standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-21: Effects on the situation of exclusion and material deprivation. Castilla La Mancha.

	SiSo Scale		Material Deprivation	
	Inclusion/Exclusion			
	Total Score	Axis Position	Index	Situation
	(1)	(2)	(3)	(4)
Treatment	-5.433*** (0.989)	-0.121*** (0.035)	0.076 (0.081)	-0.005 (0.050)
Observations	622	622	405	522
R^2	0.606	0.391	0.165	0.241
Mean Control	42.555	1.964	0.026	0.398
Controls	✓	✓	✓	✓
Ancova	✓	✓	✓	
IPWT	✓	✓	✓	✓
IPWattrition	✓	✓	✓	✓

Notes: Estimates are based on Equation 1, with all outcomes estimated using Inverse Probability Weighting (IPWT) to adjust for differential attrition. In all columns, IPW is used to correct for differential attrition. Weights are constructed as explained in Section 4.3. The estimation sample in columns (1) and (2) includes women from Castilla-La Mancha for whom SiSo scale data are available at baseline, while estimation sample in columns (3) and (4) includes all women who responded to the baseline survey. Outcomes are defined as described in Section 6: column (1) reports the SiSo Inclusion-Exclusion Axis Position (higher values indicate greater exclusion); column (2) is the SiSo Total Score, where higher scores indicate greater exclusion (range: 0–100); column (3) is the Material and Social Deprivation Index, measured as a count of unaffordable items out of 13; and column (4) is a binary indicator equal to 1 if the participant reports lacking at least 7 of the 13 items, reflecting severe material deprivation. All specifications include strata fixed effects and women-level baseline covariates, as listed in Section 6. Standard errors, in parentheses, are clustered at the locality level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C-22: Effects on SiSo scale components. Castilla La Mancha

SiSo Scale	Economic	Labor	Social and	Relational	Personal	Residential
	Score	Score	Health Score	Score	Score	Score
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	-0.591 (0.400)	-1.068*** (0.312)	-0.581*** (0.217)	-0.833*** (0.132)	-0.693*** (0.179)	-0.758*** (0.240)
Observations	622	622	622	622	622	622
R^2	0.339	0.495	0.730	0.703	0.304	0.708
Mean Control	10.898	11.562	3.880	4.759	3.650	4.701
Controls	✓	✓	✓	✓	✓	✓
Ancova	✓	✓	✓	✓		✓
IPWT	✓	✓	✓	✓	✓	✓
IPWattrition	✓	✓	✓	✓	✓	✓

Notes: Estimates are based on Equation 1, with all outcomes estimated using Inverse Probability Weighting (IPWT) to adjust for differential attrition. In all columns, IPW is used to correct for differential attrition. Weights are constructed as explained in Section 4.3. The estimation sample includes women from Castilla-La Mancha with available SiSo scale data at endline. Outcomes correspond to SiSo dimensions as described in Sections 6 and A-2. Higher scores indicate greater exclusion. All specifications include strata fixed effects and control for individual-level baseline covariates. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.