Experimental Analysis of the Health and Well-being Effects of a Non-contributory Social Security Program

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Abstract

Non-contributory social security programs have been implemented in at least 15 countries around the world. These are cash transfer programs aimed at poverty alleviation among the elderly population. Previous studies have found that these programs reduce poverty and inequality, while the health effects are less clear.

Our study designs and evaluates a new non-contributory social security program in the State of Yucatan, Mexico. This program is for individuals 70 years or over. Eligible individuals are assigned to treatment and control groups and a large array of background variables and outcome measures are collected at baseline and during the course of the experiment for individuals in both the treatment and control groups. In the current paper we provide evidence of the impact of the program based on information collected six months after the implementation of the program in two cities in Yucatan selected for the first phase of the program that has a quasi-experimental design.

Even after this short period we find significant treatment effects on labor supply, hunger, medical consumption, and memory. Eligible individuals spend their pension on food, visits to the doctor, and medicines, while sharply reducing labor supply. We also find an increase in the daily number of cigarettes smoked and a decline in the consumption of alcoholic beverages.

JEL classification: J14, J26, I38

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I. Introduction

In many countries, poverty is more prevalent among the elderly than among younger groups of the population, particularly for the elderly who do not have access to social security benefits (Bourguignon et al., 2004). Social security programs for the elderly provide cash transfers, in-kind resources, and/or health interventions (Coady et al., 2003).

In this study we evaluate the impact of a non-contributory social security program for elderly on the health and well-being of recipients. Many countries have introduced non-contributory pensions, including Argentina, Bolivia, Brazil, Bangladesh, Chile, Kosovo, Mauritius, Namibia, Nepal, South Africa, and Zambia (e.g., Barrientos, 2006; Palacios and Sluchynsky, 2006; Farrington et al., 2006; Rofman, 2005). Most non-contributory pension plans define an eligibility age and many are means-tested. In Mexico, non-contributory social security schemes have been introduced by the federal government (70 y más) and by some states, including Mexico City, Zacatecas, Quintana Roo, Tabasco, Chiapas, and Yucatan.

Several studies have found that cash transfer programs targeting the elderly reduce poverty and inequality (for example Lund, 1993; Ardington and Lund, 1995; Lund, 1999; Case and Deaton, 1998; Leibbrandt, 2001; Delgado and Cardoso, 2000; Delgado and Cardoso, 2000b; Schwarzer, 2000; Schwarzer and Querino, 2002b). These studies have found improvements in health, enrollment rates of school-age children, housing, and access to credit, concentrating on outcomes of the program on household members but not specifically on the principal recipients due to the lack of information. Many studies use household information to compare beneficiaries with non-beneficiaries. To the extent that claiming benefits is a choice, doing so may introduce sample selection problems. To our knowledge, none of the studies have used program evaluation methods with an experimental design with treatment and control groups and measurements before and after the intervention.

This study presents the evaluation of the social policy intervention using a quasi-experimental design with rich data capturing health and well-being outcomes in old age. The outcome measures are largely similar to the ones measured in the Mexican Health and Aging Study (MHAS), which is very similar to the Health and Retirement Study (HRS) in the U.S.

The social security program we consider is designed for individuals 70 years old or older living in the State of Yucatan, Mexico and provides a flat rate pension equivalent to $78USD per month at PPP (Purchasing Power Parity). The program is being introduced in phases with randomly assigned experimental and control groups. The research project started in October 2007. The first year of the project was devoted to developmental work including instrument development, multiple rounds of testing in the field, and recruitment and training of local field staff on computer assisted personal interviewing (CAPI), data collection protocols and procedures, and substantive training on the survey instrument. The survey instrument was designed in English and then translated into Spanish and Mayan. Two cities in the Northeast of the State of Yucatan, Valladolid and Motul, were selected for the first experimental phase of the implementation of the social security program. Valladolid was assigned to treatment and Motul to control. Prior to the announcement and implementation of the program in these two cities, we conducted a baseline survey of all the elderly adults age 70 or older, living

in these two towns (August-November 2008). Eligible adults in the treatment town, Valladolid, started receiving the social security benefit in December 2008. The first follow-up surveys in both Motul and Valladolid were conducted in June and July 2009, approximately six months after the treatment town received the intervention. In this paper we report on the results from the baseline and the first follow-up survey in these two communities.

The comparison of Valladolid and Motul is only the first phase of the research study. Due to budget constraints, the social security program is being implemented in phases with a new phase rolled out every year. The second and third phases of the social security program are being implemented in Merida, the state capital and the largest city in the State of Yucatan. For both the second phase and third phases, city blocks were selected randomly and households were randomly assigned to treatment and control groups within blocks. Baseline surveys are conducted with all eligible adults (those 70 years old or older) in the blocks selected as part of this experiment. Baseline data collection was conducted between August and November 2009 for phase 2 and was conducted between August and November 2010 for phase 3. The implementation of the social security program in treatment blocks selected for phase 2 started in December 2009 and in December 2010 for phase 3. More phases are planned for later years.

The experimental design of the social security program offers unique opportunities to study the effect of income changes on a large number of outcomes. One such outcome of great interest is health. Establishing causal links between income and health is notoriously difficult. Although it is likely that causality runs both ways and that SES and health are likely influenced by common factors, assessing the strength of each of the sources (e.g., Smith, 1999) of correlation is challenging because of a lack of experiments (natural or otherwise). One possible approach to establishing causal relations is exploiting the timing of income/wealth changes and subsequent health changes, or vice versa timing of health shocks and their effect on income or wealth in later periods (e.g., Adams et al., 2003; Michaud and Van Soest, 2004; Smith, 2005). Generally, there seems to be a clear effect of health on wealth or income; the opposite effect appears weaker, at least in the U.S. for individuals 51 or older.

The issue of whether one can expect clear health effects as a result of the introduction of a social security benefits at advanced ages is open to question. One example suggesting that even at high ages health effects may be detectable is the experience of German reunification. This has been used as a natural experiment to look at the health and mortality trajectories of cohorts in East and West Germany before and after reunification (e.g., Frijters et al., 2005; Gjonça et al., 2000; Scholz and Maier, 2003). Scholz and Maier follow cohorts born in 1895, 1900, 1905, and 1910. Before unification, mortality in these cohorts was substantially higher in the East than in the West. After reunification, mortality converged quickly (in about 5-10 years), particularly for women. It is remarkable that even at older ages mortality may respond strongly to changing socioeconomic circumstances. Frijters et al. (2005) consider health satisfaction as measured in the German Socio-Economic Panel and find the income improvements in East Germany resulting from reunification had a significantly positive, albeit quantitatively small effect on health satisfaction.

Be that as it may, one may still ask how much of an effect one can expect to see after only six months. We consider a number of broad outcome categories: self-reported

health, subjective mortality expectations, chronic and acute health conditions, ADL's and IADL's, smoking and alcohol consumption habits, depression, prevalence and intensity of pain, subjective wellbeing measures, food availability and food expenditures, paid work, doctor, dentist, and folk healer visits, number of outpatient procedures, some simple cognitive measures, food expenditure at home and out of home, as well as security and violence indicators. As will be seen, even after six months a number of clear effects emerge.

The initial results of the first phase of the experiment (conducted in Valladolid and Motul) show a positive effect on cognitive measures; a decline in hunger and deprivation of food, a decline in alcohol consumption, an increase in the daily number of cigarettes smoked, and a decline in labor supply. We find that individuals spend their cash transfer on food, visits to the doctor, and on buying medicines. More individuals report paying their out-of-pocket health expenses and a lower proportion report their relatives paying their out-of-pocket health expenses. The latter might indicate a crowding-out effect of family transfers to the elderly in terms of health expenses. We also find a lower proportion of elderly reporting not being able to travel to visit family or friends due to a lack of money. In the short term, the non-contributory social security program is causing a positive effect in the elderly population by decreasing hunger, increasing the amount of money they spend on food and medical expenses as well as reducing labor supply for those over 70 years old.

Although the social security program is limited to Yucatan, like other social experiments that have been carried out in Mexico, we expect to be able to draw inferences for other Mexican states and for both developing and developed countries. The remainder of the paper is structured as follows. Section II presents an illustrative model motivating the empirical analysis. Section III provides an extensive description of the data and of the organization of the fieldwork. Section IV provides a description of straightforward difference-in-differences analyses. Section V repeats the analysis of Section IV, but controls for a number of demographic variables and baseline socio-economic status (SES) variables. We also present the results including interactions of treatment effects with baseline SES and gender. We test the robustness of the results comparing parametric and nonparametric estimates.

Since in this first phase we only compare two communities there may be concerns of community level cluster effects that would affect our results. We discuss these issues in Section II for the parametric specification, and again in Section VI, providing evidence suggesting that this is probably not of great concern. Section VI also discusses potential sources of bias and robustness checks. Section VII concludes with a summary of results and a preview of future experiments and data collection.

II. A Model of Treatment Effects

There are various issues in the design of the project that merit further discussion. The first issue is the possibility of cluster effects or aggregate changes taking place in either the treatment and control communities, or both. A second issue concerns possible spill-over effects from treated households to others.

Consider the following model:

$$y_{ict} = \mu_{ic} + v_{ct} + \gamma D_{ict} + \delta \bar{D}_{ct} + \varepsilon_{ict}$$

where:

y_{ict} is an outcome variable of interest for household i in town c and time t, $t = 1, 2$

μ_{ic} is an individual effect for household i in town c

ν_{ct} is a time effect in town c, representing any aggregate effect that may influence individual outcomes in a similar way.

D_{ict} is a treatment dummy: $D_{ict} = 1$ for the treated household if $t = 2$; 0 otherwise

$\tilde{D}_{ct}$ is the spillover effect of treatments in town c. $\tilde{D}_{ct} = 0$ if there is no treatment.

ε_{ict} is an iid error term independent of the other variables on the right hand side of the equation.

Note that there are no covariates; this is just done for simplicity; these can be added easily.

The nature of the spillover term $\tilde{D}_{ct}$ is not a priori clear. It can represent effects on the local provision of shops or facilities (now that there is more money to be spent by the elderly some services may open, for instance health clinics), or it can raise prices of goods that the elderly tend to buy. It may also reflect envy, or transfers from the recipients of a benefit to those who received nothing, etc. Several studies show that spillovers (or externalities) may be substantial (e.g. Angelucci and De Giorgi (2009), Miguel and Kremer (2003a), Kuhn, Kooreman, Soetevent, and Kapteyn (2010)) and may bias the measurement of treatment effects significantly if ignored.

Note that the experiment is meant to determine the effect of the introduction of a universal social security system. Thus, what we are after is really $\gamma + \delta \tilde{D}_{ct}^u$, where $\tilde{D}_{ct}^u$ represents the situation with universal social security coverage in the town.

Let's now consider identification of possible treatment effects. Denote a treated observation (in period 2) by a superscript t and a non-treated observation by a superscript n. We consider two cases:

Case 1: Assume that in one community T everyone gets treated and in a second community N nobody gets treated. This is the case in the first phase of our experiment, where every eligible individual in Valladolid gets treated and no one in Motul. We then have for first differences:

$$\Delta y_{iT}^t \equiv y_{iT2}^t - y_{iT1}^t = \Delta \nu_T + \gamma + \delta \Delta \tilde{D}_T^u + \Delta \varepsilon_{iT}^t$$

$$\Delta y_{iN}^n \equiv y_{iN2}^n - y_{iN1}^n = \Delta \nu_N + \Delta \varepsilon_{iN}^n$$

Difference-in-difference gives

$$\Delta y_{iT}^t - \Delta y_{iN}^n = \Delta \nu_T - \Delta \nu_N + \gamma + \delta \Delta \tilde{D}_T^u + \Delta \varepsilon_{iT}^t - \Delta \varepsilon_{iN}^n \qquad (1)$$

So this identifies the full effect of the introduction of the social security program ($\gamma + \delta \tilde{D}_{cT}^u$), plus a possible effect of different aggregate effects in the two towns ($\Delta \nu_T - \Delta \nu_N$).

The term $\gamma + \delta \Delta \tilde{D}_T^u$ is the total treatment effect (own effect plus possible interactions/spillovers). For what follows, it is convenient to simply summarize that by a single parameter $\beta \equiv \gamma + \delta \Delta \tilde{D}_T^u$. The terms $\Delta \nu_T$ and $\Delta \nu_N$ can be thought of as fixed or random. If we think of them as fixed, the question arises if such aggregate movements are

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observable. As documented in Sections III and VI, we have collected various pieces of information at the community level through our community surveys, while other information (e.g. unemployment rates or the opening of a new hospital) can be obtained from public sources. It is possible therefore with considerable confidence, to decide if differences between Valladolid and Motul can plausibly be ascribed to other factors than the introduction of a Social Security program for the elderly (See section VI).

Nevertheless, it is conceivable that there are remaining aggregate effects[2] that we don't observe. One possible approach is treating these effects as random. For a start let's simplify the notation in the equations above, to obtain:

$$\Delta y_{iT} \equiv z_{iT} = \alpha + \beta + u_{iT} + \eta_T$$

$$\Delta y_{iN} \equiv z_{iN} = \alpha + u_{iN} + \eta_N$$

where $u_{iT} \equiv \Delta \varepsilon_{iT}^t$ and $u_{iN} = \Delta \varepsilon_{iN}^t$ are assumed i.i.d. with variance σ_u^2 and the aggregate errors η_T and η_N are i.i.d. with variance σ_η^2. The common intercept α represents the assumption that, except for the random errors η_T and η_N, observable aggregate movements are the same across the two communities (that is: $\Delta v_T = \alpha + \eta_T$ and $\Delta v_N = \alpha + \eta_N$). Furthermore, for notational simplicity let's assume that in both towns we have exactly m observations. We can estimate the parameter of interest β by means of OLS. The estimate for β is simply $\hat{\beta} = \bar{z}_T - \bar{z}_N$, i.e. the difference in sample means between the treatment town and the control town (remember that z_{iT} and z_{iN} are first differences, so we estimate β as the difference in changes, as in equation (1) above).

It is easy to work out the variance of the estimator (see e.g. Moulton (1990)):

$$\text{var}(\hat{\beta}) = 2\frac{\sigma_u^2}{m} + 2\sigma_\eta^2 .$$

This result is intuitive. The variance of each of the individual means $\bar{z}_T$ and $\bar{z}_N$ is equal to σ_u^2 / m so the variance of their difference, conditional on η_T and η_N is $2\sigma_u^2 / m$. In addition the variance of the difference of the independent aggregate errors η_T and η_N is equal to $2\sigma_\eta^2$.

Clearly by having only two communities in the first phase, we cannot control for differential aggregate changes in these two communities in a statistical way. We have to assume we can observe them, or we have to assume they are small enough not to swamp the treatment effects we are after. If we treat them as observable, we may want to assume (or verify to the extent possible) that the differences across towns are small. If we want to allow for the fact that not everything is observable, then the issue is how large the unobserved component is. If, for instance, we want to base conclusions on t-statistics then these two points are similar for practical purposes. Consider the "naïve" t-statistic ignoring aggregate effects

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[2] Or a clustering effect: A convenient way to represent clustering effects is to allow for equi-correlated errors (see e.g. Moulton (1990), which is equivalent to the approach here.

$$t = \frac{\overline{z}_T - \overline{z}_N}{\sqrt{2\frac{s_u^2}{m}}} \tag{2}$$

Allowing for clustering effects implies that we should increase the term under the square root with some upper bound on $2\sigma_\eta^2$. Allowing for differential aggregate effects means that we should reduce the absolute value of the numerator by some upper bound on the absolute value of the differential aggregate effect $\Delta \upsilon_T - \Delta \upsilon_N$. In both cases we would lower the t-statistic and thus be conservative in deciding that an observed difference is statistically significant.

We should realize that we are talking about unobservable effects in **changes**. Due to first differencing any correlation in **levels** within a town is eliminated.

Case 2: Assume that in each town c we have both treated and non-treated households. This is the case in phase 2 of the social security program, where we randomly assign treatments and controls in Merida, the capital city of the state and also the largest town. Then we have:

$$\Delta y_{ic}^t \equiv y_{ic2}^t - y_{ic1}^t = \Delta \nu_c + \gamma + \delta \Delta \bar{D}_c + \Delta \varepsilon_{ic}^t$$

$$\Delta y_{ic}^n \equiv y_{ic2}^n - y_{ic1}^n = \Delta \nu_c + \delta \Delta \bar{D}_c + \Delta \varepsilon_{ic}^n$$

Where the Δ once again indicates first differences. Now consider dif-in-dif:

$$\Delta y_{ic}^t - \Delta y_{ic}^n = \gamma + \Delta \varepsilon_{ic}^t - \Delta \varepsilon_{ic}^n$$

So this identifies γ, but as argued above, it misses any spillover effect.

The models considered here are simple, but they illustrate the main point. Implementing universal coverage in a small number of towns takes care of possible spillover effects, but implies vulnerability to aggregate changes that are different in the treatment and control towns, or to cluster effects or aggregate effects that are not completely observable. On the other hand, complete randomization within a town cannot identify the spillovers correctly for two reasons: (1) $\bar{D}_{ct}^u$ and $\bar{D}_{ct}$ may be very different and actually their effects may be different. For simplicity we have assumed a linear effect and a common parameter δ, but one can easily imagine non-linearities where the own treatment interacts with $\bar{D}_{ct}$; (2) as noted, dif-in-dif only identifies γ.

The strength of the current project is that we consider both designs: (1) designs where entire communities get assigned to the treatment group and (2) designs where randomization to treatment or control occurs within a city. In the second case we could randomize at the individual level, but randomization across blocks provides us with an opportunity to measure the extent of spillovers by modeling the effect on non-treated households in a way similar to that adopted by Miguel and Kremer (2003a). We will know the exact location of all treated and non-treated households (we collect the geographic coordinates for each household) and can use the geographical distance between households as a measure of the likely intensity of spillovers and thus ascertain the importance of these. Having both designs where an entire community is treated and another where treatment varies within a town should create opportunities to gain more

insight than would be available from just one of the two designs (either randomization within a town or treating a whole town).

III. First Phase of the Experiment

The social security program being implemented in the State of Yucatan is called *Reconocer Urbano,* a non-contributory, universal pension program being implemented in phases throughout the state. To avoid overlapping with other Federal government programs that are being implemented in localities with less than 20,000 inhabitants, the third phase of *Reconocer Urbano* is being implemented in 11 municipalities with more than 20,000 inhabitants. The roll-out of the pension program is done in stages. The first phase started in Valladolid in December 2008 with 1,047 beneficiaries.

The research study conducted to evaluate the impact of the pension program is called *Escuchar* and involves a series of surveys that collectively are dubbed ENCAHEY (*Encuesta de Características Socioeconómicas del Hogar en el Estado de Yucatán-*Survey of Household Socioeconomic Characteristics in the State of Yucatan).

III.1 Development of the Survey Instrument
Development of the baseline survey instrument started in the fall of 2007. In developing the baseline survey, we included survey measures that have been validated and tested in other surveys in both English and Spanish. Items included in the survey instrument were taken or adapted from existing surveys used in other longitudinal studies including the Mexican Health and Aging Study, the US Health and Retirement Study, the New Immigrant Study, *Oportunidades,* as well as from various family life surveys, some of them conducted by RAND.

III.2 Survey Content
The survey instruments used as part of *Escuchar* collect detailed community, household, and individual-level data at baseline (before the program is announced or implemented) and then yearly with the first follow up interview in both treatment and control groups approximately six months after the treatment group receives the intervention (the first pension payment). Both baseline and follow up surveys collect self-reported data on health, depression, chronic conditions, activities of daily living (ADLs), instrumental activities of daily living (IADLs), physical functioning, anthropometric measurements and a number of biomarkers. We collect anthropometric measurements for every age-eligible respondent, including height, weight, waist circumference, arm circumference, arm length, and height to knee. We also collect blood pressure, lung capacity, grip strength and do a series of balance tests and a timed walk. Where appropriate, respondents are asked for continuous answers (e.g., when asked for monetary quantities). If the respondent is unable to answer, unfolding brackets are used to reduce the number of missing responses. This mimics the current practice in the HRS.

III.3 Translation
In February and March of 2008, we updated the translation of the Spanish version of the survey instrument, and translated the survey instrument into Mayan. All survey instruments used in the evaluation study are available in Spanish, Mayan, and English.

Data collection is conducted in both Spanish and Mayan. Most of the interviews are conducted in Spanish; however, a significant percentage is conducted in Mayan.

III.4 Sampling Methods

To build the sampling frame for this study, we first carry out a complete listing of all households in a selected community and screen them in order to identify households with eligible adults. We have signed a collaborative agreement with INEGI, the National Institute for Statistics and Geography (the federal agency responsible for conducting the population census in addition to many other surveys) whereby they provide us with maps of the communities selected for each phase of *Reconocer Urbano*, and update these maps as necessary (a cartographer accompanies our data collection team to selected communities and updates the maps as households are being listed)

We currently have five data collection teams comprised of one Field Supervisor and 6-7 interviewers. Our Survey Coordinator in conjunction with the field supervisors has day-to-day responsibility for implementing the household survey, logistics and quality control. June and July of 2008, we conducted a census of all the households in Valladolid and Motul. In addition, we screened each household to identify those with age eligible respondents. This created the sampling frame for the baseline survey of the evaluation study. Table 1 shows results to date of the field operations for the first phase of the evaluation study. In Valladolid, we listed a total of 15,535 households and identified 2,371 persons age 65 years or older. In Motul, we listed 7,328 households and identified 1,547 persons age 65 years or older. In total for the first phase of the evaluation study, 22,863 households were listed, and 3,918 individuals 65 years old or older were identified and listed.

III.5 Baseline Data Collection for the First Phase

Baseline data collection in Valladolid took place in August and September 2008. Baseline data collection in Motul took place in October and November 2008. After the collection of baseline data, *Reconocer Urbano* was implemented in Valladolid in December 2008. The first follow-up interview in both Valladolid and Motul was completed simultaneously in the summer of 2009.

III.6 Community Survey

In February and March 2009, we completed key informant interviews with government officials in Valladolid and Motul. The Community Survey, adapted from the Community Survey used in the Indonesian Family Life Survey collects information about local transportation, electrical infrastructure, water and sanitation infrastructure, community history, migration, housing, business resources and infrastructure, environment, economic activity and employment, and community-level finance, etc.

IV. Initial Findings

Our approach is probably closest to that of Case (2001), who considers the health effects of the dramatic expansion of the South African pension system. Her analysis is based on a comparison of households that did and did not have members receiving the

pension. Moreover, the data indicate whether income is pooled among household members. She found that in households where income is pooled, pension receipt helps to improve the health status of all household members. She also discusses several mechanisms through which this may have happened and finds evidence for various pathways, including improved sanitation, nutrition (fewer skipped meals), and mental health.

One may wonder how large an effect can possibly be found over merely a six months period. As noted above, Scholz and Maier (2003) find that even among the oldest-old, health may be affected substantially over a relatively short period. Thus, if the pension has a substantial role to play in improving health among receiving households, then we expect at least some significant effects over a relatively short time period.

In Table 2 we present the descriptive characteristics of the baseline sample from the two communities, Valladolid and Motul, selected for the first phase of Reconocer Urbano. A high proportion are married or widowed as expected. Most individuals have no schooling or only incomplete primary education. Over 70 percent of the persons 70 years or older speak Mayan. A high proportion of individuals, over 40 percent, are illiterate as they report not being able to read and write a message in Spanish in Valladolid and over 30 percent in Motul. It is worth highlighting that more than 10 percent report living alone. This seems to be a quite high number given that in Mexico the elderly traditionally live with their children.

Table 3 shows simple difference-in-differences of the means for the main outcome variables. We observe the following patterns:

- The number of acute conditions declined more in Valladolid than in Motul. We define as acute conditions heart attack, stroke, liver or kidney infection, tuberculosis, and pneumonia. We find a decline by 22% in the treatment group.
- Health satisfaction improves in both towns, but more in Valladolid.
- Satisfaction with life as a whole also improves more in Valladolid than in Motul, but the difference is not significant.
- The number of respondents that drink alcohol beverages in the control town Motul increased but it remained constant for the treatment town.
- The number of drinks per day consumed decreased in Valladolid and increased in Motul.
- The number of respondents in Valladolid paying a visit to a doctor in the previous three months increased from 41 to 52 percent, while in Motul it increased from 48 to 50 percent. In Valladolid in comparison to Motul, we find an increase by 21% in the number of individuals that report visiting the doctor.
- The number of doctor visits fell in Motul and increased in Valladolid. The number of visits to the doctor increased in Valladolid by 27%.
- The number of instances where respondents report not to have taken medications because of the cost of the medication shows significant improvement in Valladolid. We find a decline by 25% on individuals reporting not buying medicines because there were too expensive.
- The out-of-pocket expenses for medical costs or medications paid by relatives declined in Valladolid and remained constant in Motul. In fact, the out-of-pocket

expenses paid by the elderly eligible of the program increased in the treatment town and the proportion remained constant in the control group.

- We find a lower proportion of individuals in Valladolid reporting not having enough money to visit family or friends in comparison to the control group.
- The number of instances that respondents reported not having enough food ("How often in the last 3 months did you run out of food and you didn't have the money or resources to get more") decreased significantly in Valladolid.
- Skipping or cutting meals (How often in the past 3 months, did you or another person in your household ever cut the size of your meals or skip a meal because there wasn't enough money to buy food) has become significantly less prevalent in Valladolid than in Motul.
- Eating less than needed (How often in the past 3 months, did you or another adult in your household eat less than you felt you should because there wasn't enough money to buy more food?) declined in Valladolid much more than in Motul.
- Elderly in Valladolid are less often hungry. This corresponds to the question: How often in the past 3 months, were you or other adults in your household hungry but didn't eat be cause you couldn't afford enough food?
- The incidence of not eating a day because of lack of food decreases significantly in Valladolid relative to Motul (How often in the past 3 months, did you or another person in your household not eat all day because there wasn't enough money to buy food?)
- We find less elderly are obtaining emergency food in Valladolid captured in the question: How often in the past 3 months, did you or another person in your household get emergency food from a church, government institution, or other institution?
- The amount spent on food last week increases slightly in Motul, but goes up by 31 pesos per week in Valladolid. In view of the pension of 550 pesos per month, this suggests that about 26 percent of the pension is spent on an increase in food consumption.
- The number of respondents in Valladolid reporting to have worked for pay in the last month fell from 16 to 12 percent, while in Motul it stayed the same (16 percent). There is thus a decline by 27% in work for pay for the treatment group.
- In terms of cognitive capabilities, immediate and delayed recall of words improved in Valladolid and declined in Motul. We find an increase in immediate recall by 13% and 29% in delayed recall for the treatment town.

V. Treatment Effects while Controlling for Covariates

Tables 4a-4i present results of the following model, which is a slightly simplified version of the model presented in Section 2:

$$y_{ict} = \mu_c + v_t + \gamma D_{ict} + X'_{ict}\beta + \varepsilon_{ict}$$

where:

y_{ict} is an outcome variable of interest for household i in town c and time t, $t = 1, 2$

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μ_c is a town dummy

v_t is a time dummy

D_{ict} is a treatment dummy: $D_{ict} = 1$ for the treated household if $t = 2$; 0 otherwise

X_{ict} is a vector of individual or household characteristics

ε_{ict} an error term independent of the other variables on the right hand side of the equation.

Since age is included as a quadratic we have included a row in the table indicating the maximum or the minimum (as the case may be) of the age parabola for each equation. Results of F-tests are included for the age parabola, education dummies, and for the quartile dummies for baseline personal income and household wealth. We have used linear regression, Tobit, Probit, and ordered Probit as appropriate. Tables 6a-6d show these results using probit, and ordered probit models for binary response outcome variables and ordered variables, respectively. We use Tobit models for the expenditure variables as we have a truncated distribution due to infrequency of purchase.

The response categories vary by question and sometimes a minus sign may imply an improvement, whereas in other cases it would indicate deterioration. To ease interpretation of the outcomes, the headings indicate the response categories.

V.1 Health

Tables 4a to 4e presents a number of health and subjective well-being related outcomes. The row "Valladolid wave 2" shows the treatment effects of the social security program after six months. There does not appear to be a discernible effect on the number of chronic or acute health conditions, nor on the number of ADL's or IADL's. As in Table 3 we see an increase in the number of doctor's visits and a decrease in the number of cases where a household foregoes the use of medicine because it would be too expensive. Tables 4d and Table 4e also show that more individuals report paying their out-of-pocket health expenses and fewer reports that their relatives pay their out-of-pocket health expenses.

The effects of the demographics are according to expectation. ADL's and IADL's go up with age, but not significantly. Doctor's visits increase with age (the top of the parabolas are at 60 years for the prevalence of doctor's visits and at 70 for the number of doctor's visits). The number of chronic and acute conditions seems to go up until approximately age 80 and to decrease after that. Individuals with completed primary schooling have fewer IADL's.

V.2 Satisfaction

Table 4a and Table 4b show the determinants of satisfaction in six domains. The treatment effects are not significant, although there is some suggestion that satisfaction with income, health, and life in general has improved.

V.3 Alcohol Consumption and Smoking Habits

Table 4c shows a decline in the number of alcoholic beverages consumed and the number of drinks consumed per day. The coefficient for the number of cigarettes smoked per day is positive but not significant.

V.4 Food Expenditure, Food Availability, and Eating Patterns

The last three columns of Table 4f, Table 4g, and Table 4h summarize the effects of the social security program on food availability, food consumption, and eating patterns. The treatment outcomes for the first two columns of Table 4g show a remarkable contrast. The response to the question "How often in the last 3 months have you been worried that food would run out before you got money to buy more" suggests an increase in prevalence. On the other hand, the response to the question "How often in the last 3 months did you run out of food and you didn't have the money or resources to get more" indicates a clear improvement. Thus, the households in the treatment group seem to worry more at the follow up, while at the same time the actual incidence of food shortage has decreased. The effect is not statistically significant for being worried that food would run out before you got money to buy more. Table 4g also shows an overall improvement as a result of the treatment: individuals in Valladolid are less frequently hungry, less likely to eat less than they felt they should, less likely to have gone a full day without eating and are less likely to have received food from a charity. Although not significant, the estimates for the amount of money spent on food last week, suggests an increase of about 24 pesos a week, or about 96 pesos a month (see Table 4h). This would suggest respondents spend about one sixth of the pension on an increase of food at home. This estimate is somewhat smaller than suggested by the simple dif-in-dif results in Table 3. On the other hand, the table also suggests a decrease in the amount spent on food away from home.

Education generally has a highly significant effect on the prevalence of hunger and the amounts spent on food.

V.4 Labor Supply and Cognitive Functioning

Table 4i shows a strong treatment effect on whether a respondent worked for pay last month. The estimate implies a reduction of work for pay by 4.3 percentage points. On a base of about 16% in wave 1, this implies a reduction by about 30%. Strikingly, the treatment has a significant positive effect on memory; both immediate and delayed word recall show significant improvements. This may be related to the improved nutritional situation described above.

V.5 Interactions

The current social security benefit is not means-tested. One would expect the benefit to have more of an effect for households with limited financial means than for households that were already well off before the benefit receipt. To investigate this further we have rerun the analyses in Table 4 while including interactions with income quartile and with gender. Table 5a-5i presents the results. For simplicity we only present the interactions and the results of the significance tests. The results for the other variables don't change much compared to Tables 4a-4i. Using probit, ordered probit, and Tobit

models as in Tables 6a-6i, the results of the interactions are qualitatively similar. Tables 7a-7i show the results including the interaction terms using discrete choice models.

The income and wealth quartiles refer to the baseline wave. To preserve a maximal number of observations we have followed the strategy of including a dummy for missing observations for baseline income or baseline wealth. The dummies for missing information are taken to be the reference category for these cases.

Table 5a does not show significant interaction effects of the treatment with personal income. Males become significantly less likely to report that they ran out of food, skipped or cut meals, food was not always enough, and went hungry. This is confirmed by Table 5f and 5g, where generally males report marked improvements in food availability and reduction of the incidence of hunger. Males increase their expenditure on food at home, which explains the results on the food availability variables. There do not appear to be gender or income differences in the effect on immediate or delayed word recall. The effect on work effort is larger for males and there is a significant effect on work effort. In the sample, 5% of women and 28% of men work. We find a decline by 25% in the proportion of men that work.

So, perhaps somewhat surprisingly the only interaction effect we find is with gender. Baseline income does not play a significant role, except for work effort.

VI. Discussion

In this section we discuss potential sources of bias of the difference-in-differences estimates. Some of these are differential macro shocks, treatment announcement effects, differential implementation of the government programs in the treatment and control towns, and differences in pre-treatment trends. We also discuss the validity of the estimates and potential bias due to cluster effects.

VI.1 Announcement Effects in Treatment Group

We have designed the rollout schedule of the program and the timing of public information campaigns designed to promote the program jointly with the State government of Yucatan. This level of input into the design of the program is allowing us to limit anticipatory effects that have been observed in other programs and spillover effects that could occur from the program being implemented in treatment and control groups that are geographically proximate.

Because of funding constraints and competing priorities, the program will be implemented in stages across the 11 towns in Yucatan with a population of more than 20,000. Control groups will remain untreated at least until the end of the rollout period scheduled for mid-2012 and will not receive information about when they will receive the intervention until right before the program will be extended. Originally the plan was to incorporate all control groups into the program by the end of 2012. In view of budget constraints due to the recent economic crisis, it now seems likely that the end date will be moved back, allowing us to follow control and treatment groups over a longer period.

VI.2 Differential Implementation of Government Programs in Treatment and Control Groups

In June 2007, the Mexican federal government announced a social security program for elderly residents 70 and older (called *70 y Más*) living in towns with less than 2,500 inhabitants. In February 2008, the program was expanded to cover towns with less than 20,000 inhabitants. To complement this federal program, the state of Yucatan initiated a new social security program for the elderly that is implemented in the eleven towns and cities of more than 20,000 inhabitants. There is no overlap between the federal government program and the state level program. Moreover, the State of Yucatan agreed to ensure there would be no differential implementation of other public programs in these towns.

VI.3 Differences in Pre-treatment Trends for Treatment and Control Groups

According to the Mexican Census 2005, Valladolid had a total of 45,868 inhabitants and Motul 21,508 inhabitants. The Census 2005, also reports that 10.95 percent of the population 15 years old or above are illiterate in Valladolid and in Motul this figure is 11.23 percent. Table 8 shows other indicators of poverty at the community level. Valladolid is categorized according to the Census 2005 as having a low level of poverty and Motul has a medium level. However, it should be noted that the poverty index between Valladolid and Motul is not that different: they are both on the margin between low and medium level of poverty. Motul has a higher proportion of households without sewage or toilet and piped water than Valladolid. All other indicators are similar between the treatment and the control town.

We conducted a community survey to understand in more detail the differences between the two cities in terms of health care infrastructure, economic activity, government programs, among others. None of the towns have flooding problems, they have enough public light systems, and the air quality is good. Both towns have similar federal government programs and state government programs. In terms of health infrastructure both towns have clinics of the Mexican Social Security Institute (IMSS), and the Ministry of health of the Government of the State of Yucatan. Valladolid has 6 clinics of the Ministry of health and Motul has only one. Also Valladolid has 4 private hospitals and Motul has none. All other health infrastructure is similar. The economic activity in both towns includes manufacturing industry (textile, automotive, wood, plastic, etc.), assembly plants, construction, wholesale and retail commerce, restaurants, and hotels. In addition, Valladolid has some agricultural employment. The most important economic activities in Motul are the assembly plant, construction, and services (commerce, restaurants, and hotels). For Valladolid the most important activities are services, manufacturing, and agriculture.

In sum, Valladolid has more inhabitants; therefore there is a larger infrastructure of services. The poverty index in Motul is slightly higher. They receive similar federal and state government programs. In terms of economic activity, they overlap in most of them but Valladolid has also agriculture.

VI.4 Differential Macro Shocks in Treatment and Control Groups

In the community survey, we also collect information about aggregate changes in the treatment and control towns. In terms of natural disasters, none of the two cities has

experienced floods, earthquakes, fires, landslides, hurricanes or plagues since the beginning of the social security program. However, both towns have had droughts (April and May 2009). In Valladolid, officials reported that the drought affected 22 persons and Motul did not report any effects. This suggests only small differences in aggregate effects between the two towns. In general the state of Yucatan suffered a drought in April and May 2009. Since one of Valladolid's economic activities is agriculture, we would expect that if anything aggregate effects have been more severe in Valladolid.

VI.5 Robustness Checks and Sensitivity Analysis

Reported standard errors allow for clustering at the household level. Since we include a town dummy, systematic aggregate differences are controlled for. As argued above, differential aggregate changes between the two towns are probably small and more likely to have affected Valladolid than Motul. Nevertheless, further sensitivity analyses are still possible. For now, we show the results using propensity score matching. Figure 1 presents the densities of the propensity score for the treatment and control groups. We can observe a common region of support between groups. After imposing the common support we drop 1.04% of the sample. The propensity core is estimated using a probit model that estimates the probability of being treated conditional on the demographic characteristics included as control variables in tables 4a-4d. Therefore, we can compare the propensity score matching results to the parametric findings. We tested the balancing property and it is satisfied (Rosenbaum and Rubin, 1983).

Table 9 shows the results comparing the difference-in-differences of the mean, using parametric and non-parametric methods for the outcome variables for which we found an effect of the program in previous sections. We obtain very similar coefficients and standard errors with propensity score matching as in the OLS regressions.

VI.6 Attrition

In the baseline survey of Valladolid we obtained 1,264 interviews and 956 in Motul (see Table 10). For the follow-up the re-interview rate for Valladolid was 91.6 percent and 89.8 percent for Motul. Failure to re-interview was due to death, refusal or non-contacted; 5 percent of the sample from Valladolid died and 5.9 percent in Motul; 0.7 percent of the sample refused to do the follow-up survey in Valladolid and 1.2 percent in Motul. We were unable to contact 2.5 percent of the individuals in Valladolid and 2.9 percent in Motul. We will do further analysis to understand the characteristics of the different groups that refused or could not be contacted in order to understand potential attrition bias. However, the number of refusals or non-contacts are relatively small so that we anticipate negligible attrition effects.

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VII. Conclusion

In this study we have presented initial results of an experimental research project that designs and evaluates the impact of a non-contributory social security program as a poverty alleviation policy for the elderly. We analyzed the effects of the program on the health and well-being of elderly recipients, using data from the first phase of the experiment. We also described the evaluation design, capacity building efforts, survey instrument, and field operations.

The initial results are a decline in hunger, cutting meals, and running out of food due to the lack of money. The elderly recipients are spending more on food, visits to the doctor, and medicines and show improvement in memory function. We also find a decline in alcohol consumption. There is some indication of improved subjective well-being and a decline in acute conditions. For many of the effects we would expect substantially larger effects over a longer period. The second set of follow-up surveys is planned for the beginning of 2011. By then the program will have been in existence for about two years so that we can see if the initial findings get confirmed, become more pronounced, or get weaker.

Simultaneously with the follow-up studies in Valladolid and Motul, we are conducting several new experiments in Merida. By combining different sampling schemes and by considering variations on the basic experiment (e.g. providing benefits in the form of debit cards, additional health experiments, targeting experiments, etc.) the project should not only provide insight in the effects of a non-contributory social security scheme, but also in the effect of various parameters that may affect the efficacy of alternative designs.

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Figure 1.- Densities Propensity Scores for Treatment and Control Groups
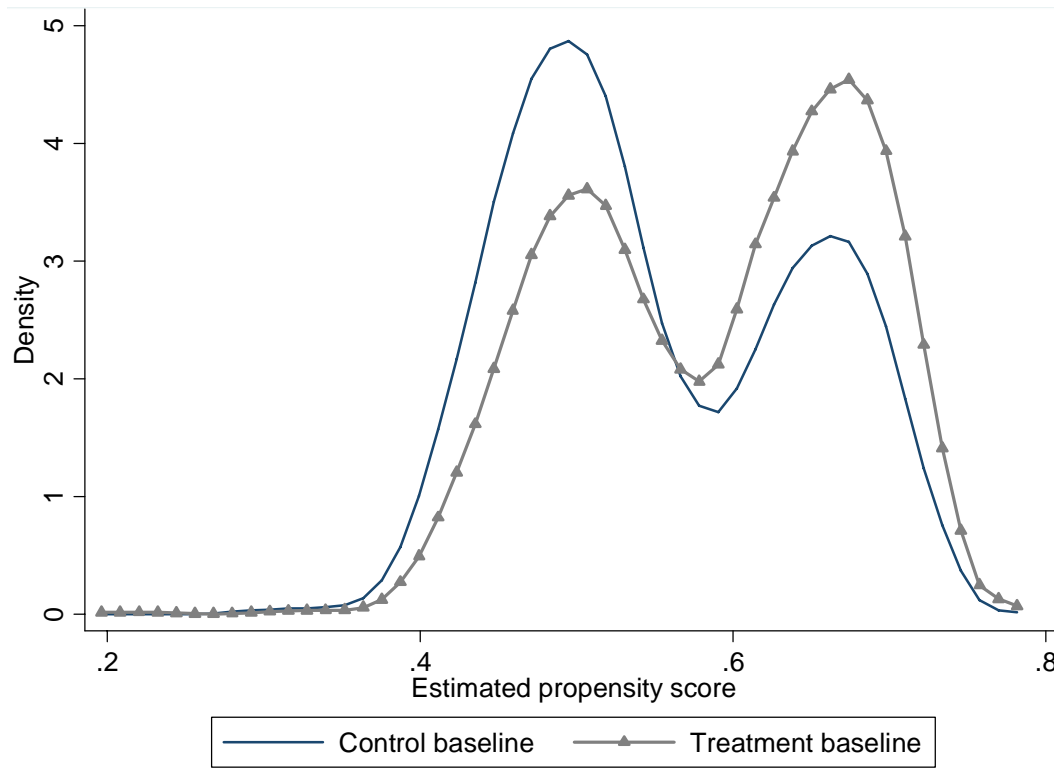
Table 1.- Field Operations First Phase, June 2010

City	Number of households	Number of persons 65 years old or above
Valladolid	15,535	2,371
Motul	7,328	1,547
Total	22,863	3,918

NOTE: The first phase of the research project is conducted in the cities of Valladolid and Motul. The household listing took place between June and July 2008, where individuals 65 years old or above were identified.
SOURCE: Aguila, Robles, and Vargas (2010).

Table 2.- Descriptive Statistics Baseline First Phase

Variable	Treatment Town (Valladolid)	Control Town (Motul)
Mean age	78.51	78.10
Standard .deviation.	(6.39)	(6.71)
Male (%)	43.05	48.01
Marital status (%)		
Single	5.35	5.70
Couple	53.32	54.48
Divorced/Separated	3.36	2.68
Widowed	37.88	37.14
Missing	0.09	0.00
Education (%)		
No schooling	42.11	29.57
Incomplete primary	44.52	61.70
Primary or more	12.08	8.38
Missing	1.29	0.35
Speaks Maya (%)	76.70	79.28
Read and write a message in Spanish (%)	54.53	65.31
Living alone (%)	12.47	13.50
Mean number of household residents	2.54	2.58
Standard deviation	(2.22)	(2.21)
No. Observations	1,159	859

NOTE: The first phase of the research project is conducted in the cities of Valladolid and Motul.
SOURCE: Baseline ENCAHEY first phase, 2008

Table 3.- Difference-in-Differences of the Means

Variable (verbal scale [numeric codes])	Valladolid Baseline	Valladolid follow-up	Difference Valladolid	Motul Baseline	Motul follow-up	Difference Motul	Dif-in-dif of the means
Self-reported health (excellent, very good, good, fair, poor [1-5])	3.96	3.84	-0.117	4.05	3.85	-0.204	0.0863
	(0.0211)	(0.0205)	(0.0294)	(0.0224)	(0.0225)	(0.0318)	(0.0367)*
Subjective mortality expectation (chances to live at least 10 years more [0-100])	59.2	56.8	-2.39	55.7	56.2	0.532	1.01
	(0.986)	(1.09)	(1.47)	(1.08)	(1.2)	(1.61)	(2.38)
Feel sad, blue or depressed for 2 weeks more during the past 3 months (yes-no[1-0])	0.598	0.44	-0.158	0.511	0.376	-0.135	-0.0238
	(0.0157)	(0.0166)	(0.0228)	(0.0188)	(0.0183)	(0.0262)	(0.0332)
Satisfied relation fam. members (very satisfied-very dissatisfied [1-5])	2.11	2.07	-0.043	2.11	2.03	-0.0865	0.0368
	(0.0217)	(0.0213)	(0.0304)	(0.0235)	(0.0226)	(0.0326)	(0.041)
Satisfied hh income(very satisfied-very dissatisfied [1-5])	2.58	2.33	-0.247	2.6	2.4	-0.198	-0.0741
	(0.0268)	(0.0227)	(0.0352)	(0.0309)	(0.0282)	(0.0418)	(0.0523)
Satisfied social contacts (very satisfied-very dissatisfied [1-5])	2.26	2.22	-0.0424	2.25	2.17	-0.0744	0.0118
	(0.0228)	(0.0207)	(0.0308)	(0.0246)	(0.0232)	(0.0338)	(0.0431)
Satisfied with job (very satisfied-very dissatisfied [1-5])	2.39	2.28	-0.108	2.34	2.23	-0.111	0.00215
	(0.0254)	(0.0224)	(0.0339)	(0.0262)	(0.0257)	(0.0367)	(0.0442)
Satisfied with health (very satisfied-very dissatisfied [1-5])	2.61	2.43	-0.177	2.63	2.54	-0.0881	-0.0946
	(0.028)	(0.0251)	(0.0376)	(0.0311)	(0.031)	(0.0439)	(0.0502)
Satisfied life in general (very satisfied-very dissatisfied [1-5])	2.26	2.11	-0.144	2.28	2.18	-0.1	-0.0409
	(0.0218)	(0.0159)	(0.027)	(0.0244)	(0.0228)	(0.0334)	(0.0408)
Number of acute conditions	0.178	0.119	-0.0587	0.151	0.132	-0.0198	-0.0389
	(0.013)	(0.0105)	(0.0167)	(0.0134)	(0.0121)	(0.0181)	(0.0192)*
Often Pain (yes-no[1-0])	0.665	0.627	-0.038	0.654	0.549	-0.105	0.0668
	(0.0139)	(0.0142)	(0.0199)	(0.0163)	(0.017)	(0.0235)	(0.0263)*
How strong is the pain (mild, moderate, severe [1,2,3])	1.38	1.17	-0.204	1.27	1.07	-0.206	0.00253
	(0.034)	(0.0316)	(0.0464)	(0.0382)	(0.0376)	(0.0536)	(0.0595)

Number of chronic conditions	0.908	0.876	-0.0319	1.03	0.971	-0.057	0.0251
	(0.029)	(0.0278)	(0.0402)	(0.0347)	(0.0326)	(0.0476)	(0.0442)
Number of ADL's	4.6	4.07	-0.529	4.75	4.17	-0.586	-0.177
	(0.115)	(0.108)	(0.157)	(0.13)	(0.119)	(0.176)	(0.164)
Number of IADL's	0.76	0.63	-0.129	0.653	0.524	-0.129	0.00421
	(0.0304)	(0.0285)	(0.0417)	(0.0336)	(0.0298)	(0.0449)	(0.0509)
Smoke now (yes-no [1-0])	0.0311	0.0294	-0.0017	0.0373	0.0315	-0.00575	0.00411
	(0.0051)	(0.00496)	(0.00711)	(0.00647)	(0.00597)	(0.0088)	(0.00571)
Number of cigarettes in a day	0.0811	0.0828	0.00173	0.192	0.129	-0.0629	0.0646
	(0.0205)	(0.0219)	(0.03)	(0.0492)	(0.0395)	(0.0631)	(0.0325)*
Drink alcoholic beverages (yes-no[1-0])	0.522	0.51	-0.0116	0.591	0.74	0.149	-0.161
	(0.0147)	(0.0147)	(0.0208)	(0.0168)	(0.015)	(0.0225)	(0.0235)**
Number of days a week drinks alcoholic beverages	0.232	0.163	-0.0689	0.214	0.216	0.00184	-0.0516
	(0.0216)	(0.0192)	(0.0289)	(0.0268)	(0.0258)	(0.0372)	(0.0358)
Number of drinks per day	0.345	0.287	-0.0574	0.271	0.345	0.0745	-0.138
	(0.035)	(0.0359)	(0.0501)	(0.0345)	(0.0424)	(0.0547)	(0.0602)*
Visited doctor (yes-no[1-0])	0.414	0.522	0.109	0.489	0.509	0.0204	0.0882
	(0.0145)	(0.0147)	(0.0206)	(0.0171)	(0.0171)	(0.0241)	(0.0274)**
Number of doctor visits	1.07	1.28	0.205	1.31	1.23	-0.0805	0.286
	(0.0518)	(0.0582)	(0.078)	(0.0814)	(0.0573)	(0.0995)	(0.112)*
Visited a folk healer (yes-no[1-0])	0.0501	0.0397	-0.0104	0.0221	0.0291	0.00702	-0.0174
	(0.00641)	(0.00574)	(0.0086)	(0.00502)	(0.00575)	(0.00763)	(0.011)
Number of folk healer visits	0.108	0.0785	-0.0295	0.0477	0.0606	0.0129	-0.0439
	(0.0166)	(0.0146)	(0.0222)	(0.0145)	(0.0162)	(0.0217)	(0.0297)
Visited a dentist (yes-no[1-0])	0.0751	0.0664	-0.00869	0.0653	0.0711	0.00583	-0.0145
	(0.00775)	(0.00732)	(0.0107)	(0.00844)	(0.00878)	(0.0122)	(0.0151)
Number of dentist visits	0.168	0.123	-0.0453	0.126	0.129	0.0035	-0.0502
	(0.0241)	(0.0171)	(0.0296)	(0.0199)	(0.0202)	(0.0284)	(0.0389)
Outpatient procedures (yes-no[1-0])	0.0112	0.0069	-0.00433	0.0105	0.00932	-0.00115	-0.00316
	(0.0031)	(0.00243)	(0.00394)	(0.00348)	(0.00328)	(0.00478)	(0.00623)
Number of outpatient procedures (ambulatory surgery)	0.0199	0.0112	-0.00866	0.0116	0.0105	-0.00115	-0.00748
	(0.00705)	(0.00447)	(0.00835)	(0.00402)	(0.00385)	(0.00556)	(0.0101)
Consulted a pharmacist (yes-no[1-0])	0.0771	0.0596	-0.0175	0.0478	0.0315	-0.0163	-0.00101
	(0.00786)	(0.00696)	(0.0105)	(0.00729)	(0.00596)	(0.00942)	(0.0135)
Bought no medicines because they are too expensive (yes-no[1-0])	0.238	0.125	-0.113	0.186	0.133	-0.0535	-0.0595
	(0.0125)	(0.00973)	(0.0159)	(0.0133)	(0.0116)	(0.0177)	(0.0219)**

Pay out-of-pocket (oop) medical cost or medications (yes-no[1-0])	0.459 (0.0147)	0.436 (0.0146)	-0.0233 (0.0207)	0.412 (0.0168)	0.383 (0.0166)	-0.0294 (0.0236)	0.00584 (0.0284)
OOP expenses paid by relatives (yes-no[1-0])	0.268 (0.013)	0.15 (0.0105)	-0.117 (0.0167)	0.159 (0.0125)	0.152 (0.0123)	-0.00682 (0.0175)	-0.111 (0.0219)**
OOP expenses paid by elderly eligible (yes-no[1-0])	0.168 (0.011)	0.239 (0.0125)	0.0717 (0.0167)	0.221 (0.0142)	0.208 (0.0139)	-0.0137 (0.0198)	0.0846 (0.0237)**
Serious health problem but did not go to the doctor (yes-no[1-0])	0.172 (0.0111)	0.0814 (0.00805)	-0.0902 (0.0137)	0.123 (0.0112)	0.0606 (0.00815)	-0.0619 (0.0139)	-0.0285 (0.0188)
Did not go to the doctor because of money (yes-no[1-0])	0.104 (0.00899)	0.0406 (0.0058)	-0.0638 (0.0107)	0.0827 (0.0094)	0.0349 (0.00627)	-0.0477 (0.0113)	-0.0161 (0.0149)
Relatives or friends pay your expenses (not true, sometimes true, often true, always true [1-4])	2.19 (0.0361)	2.19 (0.0358)	0.000381 (0.0508)	2.04 (0.0406)	2.07 (0.0405)	0.026 (0.0574)	-0.0214 (0.0621)
Feel a burden on your family or friends (not true, sometimes true, often true, always true [1-4])	1.92 (0.0664)	2.07 (0.0727)	0.154 (0.0985)	2.04 (0.0775)	1.89 (0.0834)	-0.154 (0.114)	0.573 (0.207)**
Activities you used to do but can't do because of lack of money (yes-no[1-0])	0.386 (0.0156)	0.231 (0.0141)	-0.154 (0.0211)	0.295 (0.0171)	0.16 (0.0139)	-0.134 (0.0221)	-0.038 (0.0312)
Donation to the church but can't do due to money (yes-no[1-0])	0.0224 (0.00435)	0.0112 (0.00309)	-0.0112 (0.00534)	0.0175 (0.00447)	0.00698 (0.00284)	-0.0105 (0.0053)	-0.00074 (0.00757)
Donation to local parties but can't do due to money (yes-no[1-0])	0.00777 (0.00258)	0.00173 (0.00122)	-0.00604 (0.00285)	0.00466 (0.00232)	0.00116 (0.00116)	-0.00349 (0.0026)	-0.00255 (0.00386)
Donation to family or friends parties but can't do due to money (yes-no[1-0])	0.025 (0.00459)	0.0112 (0.00309)	-0.0138 (0.00554)	0.0268 (0.00551)	0.00815 (0.00307)	-0.0186 (0.00631)	0.00482 (0.00845)
Community activities but can't do due to money (yes-no[1-0])	0.019 (0.00401)	0.0104 (0.00297)	-0.00863 (0.00499)	0.00582 (0.0026)	0.00582 (0.0026)	0 (0.00367)	-0.00863 (0.00623)
Help out family members but	0.134	0.135	0.00173	0.118	0.0978	-0.0198	0.0215

can't do due to money (yes-no[1-0])							
	(0.01)	(0.0101)	(0.0142)	(0.011)	(0.0101)	(0.015)	(0.02)
Help out non-relatives but can't do due to money (yes-no[1-0])	0.0336	0.0121	-0.0216	0.0198	0.00466	-0.0151	-0.00644
	(0.0053)	(0.00321)	(0.0062)	(0.00475)	(0.00232)	(0.00529)	(0.00811)
Travel to visit family or friends but can't do due to money (yes-no[1-0])	0.0595	0.0207	-0.0388	0.0326	0.0116	-0.021	-0.0179
	(0.00695)	(0.00418)	(0.00812)	(0.00606)	(0.00366)	(0.00708)	(0.0107)
Sometimes we do not have enough to eat (yes-no[1-0])	0.298	0.207	-0.0906	0.352	0.282	-0.0698	-0.0207
	(0.0134)	(0.0119)	(0.018)	(0.0163)	(0.0154)	(0.0224)	(0.026)
Often we do not have enough to eat (yes-no[1-0])	0.0544	0.0423	-0.0121	0.071	0.0349	-0.0361	0.024
	(0.00666)	(0.00591)	(0.00891)	(0.00877)	(0.00627)	(0.0108)	(0.0132)
Sometimes or often we don't have enough to eat because of money (yes-no[1-0])	0.267	0.247	-0.0207	0.373	0.314	-0.0582	0.0375
	(0.013)	(0.0127)	(0.0182)	(0.0165)	(0.0158)	(0.0229)	(0.0263)
Often worried run out of food last three months (never-always [1-4]))	1.93	1.78	-0.142	1.91	1.66	-0.245	0.0666
	(0.0282)	(0.0277)	(0.0395)	(0.0314)	(0.0298)	(0.0433)	(0.0532)
Often run out of food last three months (never-always [1-4]))	1.76	1.49	-0.26	1.61	1.51	-0.106	-0.146
	(0.025)	(0.024)	(0.0346)	(0.0247)	(0.025)	(0.0351)	(0.046)**
Skip or cut meals (never-always [1-4])	1.66	1.42	-0.244	1.59	1.43	-0.157	-0.0748
	(0.0242)	(0.0218)	(0.0325)	(0.0248)	(0.0238)	(0.0343)	(0.0446)
Often eat less than you felt you should (never-always [1-4])	1.6	1.35	-0.255	1.54	1.39	-0.147	-0.0995
	(0.0234)	(0.0201)	(0.0308)	(0.0231)	(0.0222)	(0.032)	(0.0422)*
Often hungry (never-always [1-4])	1.4	1.16	-0.246	1.3	1.16	-0.14	-0.103
	(0.0205)	(0.0145)	(0.0251)	(0.0199)	(0.015)	(0.0249)	(0.0341)**
Not eat all day (never-always [1-4])	1.24	1.07	-0.176	1.15	1.09	-0.0591	-0.121
	(0.0158)	(0.00943)	(0.0184)	(0.0136)	(0.0119)	(0.0181)	(0.0253)**
Food from charity (never-always [1-4])	1.08	1.03	-0.0491	1.04	1.05	0.00848	-0.0565
	(0.0108)	(0.00691)	(0.0128)	(0.00779)	(0.00994)	(0.0126)	(0.018)**
Spend on food at home last week	444	480	36.1	424	437	13.4	8.73
	(11.9)	(11.1)	(16.2)	(10.3)	(11.2)	(15.2)	(20.6)
Spend on food away from home	36.6	25.3	-11.2	22.9	25.7	2.84	-14.1

	(6.69)	(9.53)	(11.6)	(3.32)	(3.66)	(4.94)	(13)
Total Food	485	516	31.2	446	469	22.8	-15.1
	(17.5)	(19.2)	(26)	(11.4)	(12.6)	(17)	(34.1)
Received free food (yes-no [1-0])	0.146	0.148	0.0016	0.0964	0.149	0.0529	-0.0452
	(0.0106)	(0.0115)	(0.0156)	(0.0101)	(0.0134)	(0.0168)	(0.0213)*
Eat diary products: milk, cheese, yogurt (at least once a day, at least once a week, several times a month, once in a while, never [1-5])	2.84	2.68	-0.166	3.03	2.91	-0.119	-0.0456
	(0.0422)	(0.0409)	(0.0588)	(0.0482)	(0.0474)	(0.0676)	(0.0713)
Eat eggs, beans or lentil (at least once a day, at least once a week, several times a month, once in a while, never [1-5])	2.07	2.15	0.0736	2.21	2.29	0.0767	-0.00385
	(0.0311)	(0.0277)	(0.0417)	(0.0341)	(0.0315)	(0.0464)	(0.0585)
Eat meat, poultry or fish (at least once a day, at least once a week, several times a month, once in a while, never [1-5])	2.51	2.48	-0.0281	2.51	2.52	0.0135	-0.0432
	(0.0322)	(0.0284)	(0.0429)	(0.0355)	(0.0336)	(0.0489)	(0.0601)
Eat fruit or vegetables (at least once a day, at least once a week, several times a month, once in a while, never [1-5])	2.38	2.31	-0.0779	2.37	2.33	-0.0384	-0.0412
	(0.0355)	(0.0316)	(0.0475)	(0.041)	(0.0378)	(0.0558)	(0.0644)
Eat tortillas, bread, crackers or other cereals (at least once a day, at least once a week, several times a month, once in a while, never [1-5])	1.12	1.09	-0.0337	1.08	1.05	-0.0231	-0.0105
	(0.0141)	(0.0128)	(0.0191)	(0.0148)	(0.0135)	(0.02)	(0.0267)
Worked for pay, last month (yes-no[1-0])	0.165	0.121	-0.0439	0.162	0.164	0.00233	-0.0453
	(0.0109)	(0.00959)	(0.0145)	(0.0126)	(0.0127)	(0.0179)	(0.0155)**
Immediate recall (number of words)	2.2	2.34	0.132	2.39	2.23	-0.161	0.293
	(0.0511)	(0.0547)	(0.0749)	(0.0608)	(0.0604)	(0.0857)	(0.0834)**
Delayed recall (number of words)	2.09	2.58	0.491	2.39	2.28	-0.118	0.609
	(0.0579)	(0.0654)	(0.0874)	(0.0707)	(0.0693)	(0.099)	(0.102)**
Feel fear someone robbing you (never, sometimes, usually, always [1-4])	1.59	1.46	-0.124	1.42	1.31	-0.11	-0.0363
	(0.0291)	(0.0265)	(0.0393)	(0.0287)	(0.0255)	(0.0384)	(0.0531)
Feel fear someone close to you will take your money (never,	1.24	1.21	-0.035	1.18	1.14	-0.0429	0.0129

sometimes, usually, always [1-4])							
	(0.0198)	(0.0178)	(0.0266)	(0.0181)	(0.0184)	(0.0258)	(0.0366)
Money in a safe place (yes-no [1-0])	0.0301	0.0212	-0.00885	0.0155	0.0114	-0.00405	-0.00355
	(0.0055)	(0.00482)	(0.00732)	(0.00464)	(0.00403)	(0.00614)	(0.01)
Feel verbally or physically abused (never, sometimes, usually, always [1-4])	1.13	1.11	-0.0167	1.1	1.1	-0.00098	-0.0182
	(0.0136)	(0.0137)	(0.0193)	(0.014)	(0.0163)	(0.0215)	(0.0287)

NOTE: Scales of variables shown in the first column. SOURCE: Baseline and follow-up ENCAHEY, 2008 and 2009
** = significant at 5% level of confidence. * = significant at 10% level of confidence.

Table 4a.- Treatment Regressions

	Self-reported health (excellent, very good, good, fair, poor [1-5])	Subjective mortality expectation (chances to leave at least 10 years more [1-100	Feel sad, blue or depressed for 2 weeks or more during the last 3 months (yes-no	Satisfied relation fam. members (very satisfied-very unsatisfied [1-5])	Satisfied hh income (very satisfied-very unsatisfied [1-5])	Satisfied social contacts (very satisfied-very unsatisfied [1-5])	Satisfied with job (very satisfied-very unsatisfied [1-5])	Satisfied with health (very satisfied-very unsatisfied [1-5])
Wave	-0.229	0.401	-0.203	-0.100	-0.189	-0.065	-0.145	-0.061
	(0.045)**	(2.401)	(0.037)**	(0.046)*	(0.060)**	(0.050)	(0.052)**	(0.061)
Valladolid	0.089	-4.302	-0.076	-0.004	0.009	-0.015	-0.029	0.013
	(0.032)**	(1.575)**	(0.025)**	(0.034)	(0.044)	(0.035)	(0.038)	(0.044)
Valladolid wave 2	0.085	-3.107	-0.018	0.046	-0.049	0.031	0.021	-0.092
	(0.037)*	(2.219)	(0.034)	(0.041)	(0.053)	(0.044)	(0.045)	(0.051)
Age	0.049	-5.887	0.037	-0.026	-0.080	0.014	-0.009	-0.041
	(0.037)	(1.973)**	(0.031)	(0.049)	(0.046)	(0.042)	(0.052)	(0.058)
Age squared	-0.000	0.036	-0.000	0.000	0.000	-0.000	0.000	0.000
	(0.000)	(0.012)**	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Gender (male=1)	-0.088	3.756	-0.135	0.022	0.035	-0.044	0.022	-0.109
	(0.025)**	(1.111)**	(0.019)**	(0.026)	(0.029)	(0.026)	(0.029)	(0.033)**
Speaks Maya	-0.035	0.850	-0.040	0.034	0.019	0.070	0.014	0.038
	(0.039)	(1.746)	(0.028)	(0.039)	(0.050)	(0.038)	(0.047)	(0.048)
Reads/writes Spanish	0.007	-1.714	-0.050	-0.063	-0.012	-0.063	-0.053	-0.007
	(0.034)	(1.759)	(0.027)	(0.036)	(0.048)	(0.039)	(0.041)	(0.046)
Lives alone	-0.046	1.122	0.031	0.113	0.104	0.045	0.046	-0.059
	(0.045)	(2.072)	(0.033)	(0.050)*	(0.055)	(0.047)	(0.054)	(0.057)
household size	-0.003	-0.265	0.001	0.000	0.008	0.017	0.010	0.000
	(0.006)	(0.279)	(0.005)	(0.006)	(0.008)	(0.007)*	(0.008)	(0.009)
Incomplete primary	0.003	1.432	0.018	-0.051	-0.027	-0.004	-0.076	0.087
	(0.028)	(1.339)	(0.021)	(0.028)	(0.036)	(0.031)	(0.033)*	(0.037)*
Primary	-0.142	0.987	-0.062	-0.324	-0.087	-0.218	-0.210	-0.027

	(0.046)**	(1.926)	(0.033)	(0.046)**	(0.053)	(0.044)**	(0.050)**	(0.056)
Couple	0.107	4.545	0.085	-0.041	0.074	0.009	0.019	-0.029
	(0.070)	(2.644)	(0.047)	(0.054)	(0.064)	(0.047)	(0.056)	(0.075)
Divorced/Separated	-0.057	1.146	0.078	0.096	0.131	0.033	-0.023	0.126
	(0.107)	(3.914)	(0.066)	(0.101)	(0.092)	(0.080)	(0.090)	(0.115)
Widow	0.079	1.233	0.108	-0.043	0.088	0.015	0.053	0.006
	(0.071)	(2.704)	(0.047)*	(0.056)	(0.063)	(0.048)	(0.056)	(0.075)
Constant	1.798	299.185	-0.893	3.231	5.644	1.599	2.463	4.016
	(1.499)	(79.642)**	(1.238)	(1.947)	(1.867)**	(1.688)	(2.078)	(2.329)
Observations	4007	2405	3271	3258	3253	3248	3257	3261
R-squared	0.03	0.02	0.06	0.04	0.03	0.02	0.03	0.02
F-test education	5.77	0.57	3.62	24.95	1.35	15.69	9.11	4.15
Prob>F	0.003	0.565	0.027	0.845	0.215	0.000	0.005	0.016
F-test age	1.827	5.093	2.251	0.169	1.538	0.956	5.251	1.905
Prob>F	0.161	0.006	0.106	0.000	0.261	0.385	0.000	0.149
age parabola min/max	86.322	82.265	87.088	78.595	80.519	103.706	41.510	70.954

NOTE: The reference categories are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, and single.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

	Satisfied life in general (very satisfied-very unsatisfied [1-5])	Number of acute conditions	Often pain (yes-no [1-0])	How strong is the pain (mild, moderate, severe [1-3])	Number of chronic conditions	Number of ADL's	Number of IADL's	Smokes now (yes-no [1-0])
Wave	-0.089	-0.032	-0.120	-0.278	-0.055	-1.596	-0.288	-0.007
	(0.049)	(0.026)	(0.030)**	(0.073)**	(0.061)	(0.235)**	(0.066)**	(0.009)
Valladolid	0.018	-0.018	-0.007	-0.081	0.139	0.284	-0.071	0.003
	(0.035)	(0.019)	(0.022)	(0.054)	(0.046)**	(0.173)	(0.047)	(0.008)
Valladolid wave 2	-0.044	-0.035	0.070	0.012	0.028	0.139	0.018	0.004
	(0.041)	(0.020)	(0.027)*	(0.061)	(0.046)	(0.171)	(0.052)	(0.006)
Age	0.024	0.050	0.032	0.099	0.192	0.395	0.043	-0.008
	(0.038)	(0.016)**	(0.025)	(0.055)	(0.047)**	(0.216)	(0.058)	(0.009)
Age squared	-0.000	-0.000	-0.000	-0.001	-0.001	-0.002	-0.000	0.000
	(0.000)	(0.000)**	(0.000)	(0.000)	(0.000)**	(0.001)	(0.000)	(0.000)
Gender (male=1)	-0.030	-0.002	-0.037	-0.108	-0.260	-0.793	-0.180	0.051
	(0.024)	(0.014)	(0.018)*	(0.042)*	(0.039)**	(0.144)**	(0.035)**	(0.007)**
Speaks Maya	0.066	-0.015	-0.008	-0.042	0.032	-0.593	-0.110	-0.009
	(0.037)	(0.022)	(0.025)	(0.060)	(0.053)	(0.210)**	(0.056)*	(0.010)
Reads/writes Spanish	-0.061	0.003	-0.011	-0.054	-0.048	-0.701	-0.080	0.005
	(0.040)	(0.021)	(0.023)	(0.055)	(0.047)	(0.177)**	(0.050)	(0.007)
Lives alone	0.052	-0.028	0.001	-0.058	-0.064	-0.099	0.006	0.003
	(0.043)	(0.025)	(0.031)	(0.071)	(0.064)	(0.245)	(0.062)	(0.012)
household size	0.000	0.005	-0.000	-0.005	-0.009	-0.018	-0.003	-0.002
	(0.006)	(0.004)	(0.004)	(0.010)	(0.009)	(0.035)	(0.009)	(0.002)
Incomplete primary	0.006	0.024	-0.028	-0.092	0.058	0.320	-0.021	0.002
	(0.028)	(0.017)	(0.019)	(0.044)*	(0.041)	(0.147)*	(0.039)	(0.007)
Primary	-0.157	0.102	-0.152	-0.276	0.009	-0.339	-0.129	0.022
	(0.041)**	(0.028)**	(0.031)**	(0.072)**	(0.065)	(0.223)	(0.056)*	(0.015)
Couple	0.043	0.052	0.109	0.289	0.151	0.176	-0.027	0.015
	(0.050)	(0.023)*	(0.043)*	(0.091)**	(0.081)	(0.331)	(0.085)	(0.013)
Divorced/Separated	0.036	0.144	0.131	0.378	0.283	0.218	-0.165	-0.011
	(0.073)	(0.052)**	(0.059)*	(0.137)**	(0.130)*	(0.457)	(0.111)	(0.014)

Widow	0.032	0.076	0.063	0.197	0.103	0.394	0.001	0.011
	(0.050)	(0.024)**	(0.042)	(0.089)*	(0.081)	(0.331)	(0.085)	(0.012)
Constant	1.230	-1.919	-0.743	-2.745	-6.663	-14.344	-1.595	0.337
	(1.547)	(0.683)**	(1.007)	(2.251)	(1.944)**	(8.720)	(2.346)	(0.366)
Observations	3257	4011	4006	4003	4011	3769	4002	4008
R-squared	0.02	0.02	0.02	0.03	0.03	0.07	0.05	0.03
F-test education	10.30	6.71	11.95	7.45	1.15	6.07	2.91	1.06
Prob>F	0.000	0.005	0.174	0.108	0.318	0.000	0.055	0.347
F-test age	0.292	5.244	1.750	2.227	20.122	36.032	35.543	0.910
Prob>F	0.747	0.001	0.000	0.001	0.000	0.002	0.000	0.403
age parabola min/max	84.360	81.676	86.865	85.204	77.917	107.069	184.752	89.213

NOTE: The reference categories are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, and single.

SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 4c.- Treatment Regressions

	Number of cigarettes in a day	Drink alcoholic beverages (yes-no [1-0])	Number of days a week drinks alcoholic beverages	Number of drinks per day	Visited a doctor (yes-no [1-0])	Number of doctor visits	Visited a folk healer (yes-no [1-0])	Number of folk healer visits
Wave	-0.117	0.115	0.033	0.116	0.087	0.129	-0.025	-0.034
	(0.060)	(0.030)**	(0.055)	(0.088)	(0.034)*	(0.117)	(0.014)	(0.033)
Valladolid	0.113	0.040	-0.037	-0.114	0.072	0.248	-0.024	-0.053
	(0.057)*	(0.022)	(0.036)	(0.051)*	(0.024)**	(0.100)*	(0.008)**	(0.024)*
Valladolid wave 2	0.068	-0.161	-0.075	-0.135	0.083	0.274	-0.013	-0.034
	(0.035)	(0.025)**	(0.042)	(0.063)*	(0.029)**	(0.115)*	(0.011)	(0.030)
Age	0.027	-0.007	-0.047	-0.089	0.014	0.131	0.010	0.042
	(0.038)	(0.023)	(0.032)	(0.054)	(0.030)	(0.096)	(0.007)	(0.018)*
Age squared	-0.000	0.000	0.000	0.000	-0.000	-0.001	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)*
Gender (male=1)	0.185	0.361	0.144	0.283	-0.078	-0.268	0.019	0.031
	(0.038)**	(0.016)**	(0.024)**	(0.039)**	(0.018)**	(0.069)**	(0.006)**	(0.017)
Speaks Maya	-0.082	-0.081	-0.040	-0.024	0.049	0.191	-0.020	-0.014
	(0.068)	(0.025)**	(0.044)	(0.061)	(0.027)	(0.099)	(0.012)	(0.025)
Reads/writes Spanish	0.009	0.041	0.081	0.061	0.036	0.070	-0.024	-0.053
	(0.030)	(0.023)	(0.033)*	(0.055)	(0.024)	(0.094)	(0.010)*	(0.027)
Lives alone	0.079	0.022	-0.022	0.052	-0.040	-0.158	0.005	0.013
	(0.070)	(0.030)	(0.044)	(0.070)	(0.032)	(0.125)	(0.012)	(0.036)
household size	-0.001	-0.000	-0.015	-0.003	-0.003	0.002	-0.002	-0.004
	(0.005)	(0.004)	(0.005)**	(0.012)	(0.004)	(0.019)	(0.002)	(0.004)
Incomplete primary	0.006	0.071	0.089	0.151	0.051	0.109	-0.008	-0.021
	(0.021)	(0.019)**	(0.024)**	(0.043)**	(0.020)*	(0.063)	(0.008)	(0.020)
Primary	0.309	0.096	0.212	0.186	0.087	0.413	-0.030	-0.065
	(0.146)*	(0.031)**	(0.060)**	(0.073)*	(0.031)**	(0.162)*	(0.009)**	(0.020)**
Couple	0.122	0.035	0.075	0.106	0.081	0.229	0.011	-0.033
	(0.033)**	(0.040)	(0.043)	(0.076)	(0.040)*	(0.140)	(0.012)	(0.060)
Divorced/Separated	0.007	0.100	0.047	0.027	0.000	0.459	-0.010	-0.074
	(0.035)	(0.060)	(0.067)	(0.114)	(0.059)	(0.444)	(0.016)	(0.062)

Widow	0.116	0.033	0.068	0.053	0.106	0.259	0.013	-0.028
	(0.041)**	(0.039)	(0.041)	(0.074)	(0.040)**	(0.139)	(0.012)	(0.057)
Constant	-1.234	0.749	2.283	4.352	-0.171	-4.095	-0.300	-1.492
	(1.620)	(0.941)	(1.338)	(2.277)	(1.211)	(3.982)	(0.309)	(0.720)*
Observations	4011	4010	3983	3992	4008	4004	4009	4009
R-squared	0.02	0.20	0.04	0.04	0.03	0.02	0.01	0.01
F-test education	2.79	8.34	11.14	7.48	4.98	3.76	7.58	6.92
Prob>F	0.062	0.000	0.000	0.000	0.007	0.000	0.001	0.001
F-test age	1.665	7.905	7.522	23.314	5.861	14.688	0.883	2.987
Prob>F	0.190	0.000	0.001	0.001	0.003	0.024	0.414	0.051
age parabola min/max	74.540	392.061	97.452	99.180	60.147	70.483	82.505	82.457

NOTE: The reference categories are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, and single.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 4d: Treatment Regressions

	Visited a dentist (yes-no [1-0])	Number of dentist visits	Outpatient procedures (yes-no [1-0])	Consulted a pharmacist (yes-no [1-0])	Bought no medicines because they are too expensive (yes-no [1-0])	Pay out-of-pocket (oop) medical cost or medication (yes-no [1-0])	Oop expenses paid by relatives (yes-no [1-0])
Wave	0.027	0.050	-0.002	-0.084	-0.147	-0.045	-0.023
	(0.017)	(0.049)	(0.007)	(0.019)**	(0.029)**	(0.035)	(0.029)
Valladolid	-0.013	-0.053	-0.001	-0.023	-0.040	-0.044	-0.102
	(0.012)	(0.033)	(0.005)	(0.011)*	(0.019)*	(0.023)	(0.019)**
Valladolid wave 2	-0.017	-0.059	-0.004	0.004	-0.051	0.006	-0.110
	(0.016)	(0.040)	(0.006)	(0.014)	(0.023)*	(0.030)	(0.023)**
Age	-0.016	-0.032	-0.003	0.007	0.022	0.001	-0.004
	(0.011)	(0.031)	(0.005)	(0.010)	(0.017)	(0.027)	(0.023)
Age squared	0.000	0.000	0.000	-0.000	-0.000	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Gender (male=1)	-0.019	-0.028	0.002	-0.000	-0.027	-0.059	-0.068
	(0.009)*	(0.022)	(0.003)	(0.007)	(0.013)*	(0.017)**	(0.013)**
Speaks Maya	-0.003	-0.014	-0.006	-0.070	-0.078	-0.015	0.030
	(0.015)	(0.044)	(0.006)	(0.016)**	(0.024)**	(0.027)	(0.022)
Reads/writes Spanish	0.030	0.077	0.007	-0.019	-0.048	-0.001	-0.051
	(0.013)*	(0.033)*	(0.005)	(0.013)	(0.020)*	(0.025)	(0.021)*
Lives alone	0.024	0.063	-0.005	0.008	-0.008	-0.070	-0.059
	(0.018)	(0.048)	(0.005)	(0.013)	(0.023)	(0.030)*	(0.023)*
household size	-0.003	-0.002	-0.001	-0.002	0.004	-0.003	0.010
	(0.002)	(0.008)	(0.001)	(0.002)	(0.004)	(0.004)	(0.004)**
Incomplete primary	0.020	0.049	-0.006	-0.028	-0.035	0.026	0.020
	(0.009)*	(0.020)*	(0.004)	(0.009)**	(0.014)*	(0.020)	(0.015)
Primary	0.060	0.163	-0.000	-0.050	-0.030	0.060	0.002
	(0.018)**	(0.048)**	(0.007)	(0.012)**	(0.022)	(0.030)*	(0.022)
Couple	0.017	0.063	0.012	0.008	0.004	-0.079	-0.108
	(0.019)	(0.036)	(0.003)**	(0.017)	(0.028)	(0.039)*	(0.034)**
Divorced/Separated	0.039	0.125	0.009	-0.018	0.090	0.094	0.034

	(0.034)	(0.092)	(0.008)	(0.023)	(0.049)	(0.055)	(0.052)
Widow	-0.004	0.031	0.008	-0.004	-0.019	-0.042	-0.011
	(0.019)	(0.035)	(0.002)**	(0.016)	(0.027)	(0.039)	(0.034)
Constant	0.753	1.495	0.136	-0.057	-0.408	0.514	0.435
	(0.456)	(1.257)	(0.211)	(0.427)	(0.709)	(1.102)	(0.943)
Observations	4008	4006	4008	4003	4006	4007	4006
R-squared	0.02	0.01	0.00	0.02	0.03	0.01	0.07
F-test education	6.08	7.37	1.45	8.43	3.01	2.15	0.96
Prob>F	0.002	0.119	0.236	0.000	0.049	0.932	0.001
F-test age	2.745	2.128	0.301	1.349	3.695	0.070	7.463
Prob>F	0.065	0.001	0.740	0.260	0.025	0.117	0.382
age parabola min/max	89.454	89.312	78.435	74.166	74.804	125.485	38.875

NOTE: The reference categories are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, and single. The model for the number of outpatient procedures could not be estimated due to the few number of observations.

SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 4e: Treatment regressions

	Oop expenses paid by elderly eligible (yes-no [1-0])	Serious health problem but did not go to the doctor (yes-no[1-0])	Did not go to the doctor because of money (yes-no[1-0])	Relatives or friends pay your expenses (not true, sometimes true, often true, al	Feel a burden on your family or friends (not true, sometimes true, often true, a	Activities you used to do but can't do because of lack of money (yes-no[1-0])	Donation to the church but can't do due to money (yes-no[1-0])	Donation to local parties but can't do due to money (yes-no[1-0])
Wave	-0.030	-0.109	-0.091	0.075	-0.329	-0.149	-0.016	-0.006
	(0.028)	(0.024)**	(0.020)**	(0.077)	(0.151)*	(0.036)**	(0.008)*	(0.005)
Valladolid	0.050	-0.047	-0.020	-0.107	0.103	-0.097	-0.005	-0.002
	(0.019)**	(0.016)**	(0.014)	(0.057)	(0.105)	(0.025)**	(0.006)	(0.004)
Valladolid wave 2	0.086	-0.024	-0.014	-0.030	0.295	-0.019	-0.000	-0.002
	(0.025)**	(0.019)	(0.016)	(0.066)	(0.149)*	(0.031)	(0.008)	(0.004)
Age	0.004	-0.000	-0.004	0.094	0.045	-0.048	-0.002	-0.000
	(0.017)	(0.013)	(0.012)	(0.067)	(0.118)	(0.025)	(0.005)	(0.002)

Age squared	-0.000	-0.000	0.000	-0.000	-0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)
Gender (male=1)	0.027	-0.031	-0.026	-0.200	-0.020	0.006	-0.014	0.003
	(0.014)*	(0.011)**	(0.008)**	(0.040)**	(0.078)	(0.016)	(0.004)**	(0.002)
Speaks Maya	-0.048	-0.029	-0.035	0.136	-0.208	-0.014	-0.010	-0.004
	(0.022)*	(0.020)	(0.018)*	(0.064)*	(0.126)	(0.028)	(0.009)	(0.005)
Reads/writes Spanish	0.029	-0.043	-0.027	-0.030	-0.047	-0.013	0.001	0.001
	(0.019)	(0.018)*	(0.015)	(0.057)	(0.116)	(0.027)	(0.008)	(0.004)
Lives alone	0.007	0.008	-0.004	-0.175	0.245	-0.013	0.011	0.002
	(0.025)	(0.018)	(0.013)	(0.077)*	(0.135)	(0.028)	(0.008)	(0.004)
household size	-0.011	0.000	0.000	0.059	0.027	0.008	-0.001	0.000
	(0.004)**	(0.002)	(0.002)	(0.012)**	(0.019)	(0.005)	(0.001)	(0.001)
Incomplete primary	0.015	0.021	-0.002	-0.086	-0.032	0.015	0.004	-0.002
	(0.016)	(0.012)	(0.010)	(0.047)	(0.093)	(0.019)	(0.005)	(0.002)
Primary	0.061	-0.016	-0.033	-0.164	-0.321	-0.033	-0.007	-0.001
	(0.027)*	(0.017)	(0.013)*	(0.075)*	(0.130)*	(0.028)	(0.006)	(0.004)
Couple	0.042	0.036	0.026	-0.391	-0.270	0.042	0.004	0.000
	(0.030)	(0.020)	(0.017)	(0.106)**	(0.166)	(0.033)	(0.009)	(0.005)
Divorced/Separated	0.061	0.026	0.004	0.025	-0.459	0.067	-0.017	-0.005
	(0.050)	(0.035)	(0.025)	(0.159)	(0.219)*	(0.055)	(0.008)*	(0.005)
Widow	-0.023	0.016	0.011	0.043	-0.255	0.023	0.003	-0.001
	(0.029)	(0.020)	(0.016)	(0.104)	(0.161)	(0.032)	(0.009)	(0.005)
Constant	0.094	0.322	0.384	-2.176	0.431	2.439	0.125	0.022
	(0.721)	(0.553)	(0.477)	(2.722)	(4.791)	(1.027)*	(0.204)	(0.103)
Observations	4006	3999	4011	3996	910	3254	4011	4011
R-squared	0.03	0.03	0.02	0.09	0.03	0.04	0.01	0.00
F-test education	2.54	3.45	4.33	2.88	3.63	1.78	2.28	0.42
Prob>F	0.079	0.022	0.013	0.000	0.875	0.079	0.007	0.658
F-test age	6.118	3.848	1.746	17.315	0.133	2.541	5.013	0.006
Prob>F	0.002	0.032	0.175	0.057	0.027	0.169	0.103	0.994
age parabola min/max	43.783	-0.838	114.568	104.679	78.624	84.864	157.096	83.646

NOTE: The reference categories are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, and single.

SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 4f: Treatment regressions

	Donation to family or friends parties but can't do due to money (yes-no[1-0])	Community activities but can't do due to money (yes-no[1-0])	Help out family members but can't do due to money (yes-no[1-0])	Help out non-relatives but can't do due to money (yes-no[1-0])	Travel to visit family or friends but can't do due to money (yes-no[1-0])	Sometimes do not have enough to eat (yes-no[1-0])	Often we do not have enough to eat (yes-no[1-0])	Sometimes or often we don't have enough to eat because of money (yes-no[1-0])
Wave	-0.005	-0.002	-0.033	-0.036	-0.024	-0.162	-0.051	0.039
	(0.008)	(0.007)	(0.023)	(0.012)**	(0.014)	(0.035)**	(0.019)**	(0.033)
Valladolid	0.001	-0.014	-0.018	-0.013	-0.029	0.062	0.019	0.103
	(0.007)	(0.005)**	(0.016)	(0.008)	(0.010)**	(0.025)*	(0.013)	(0.025)**
Valladolid wave 2	0.003	-0.009	0.025	-0.004	-0.020	-0.010	0.026	0.035
	(0.009)	(0.007)	(0.021)	(0.008)	(0.012)	(0.031)	(0.016)	(0.030)
Age	-0.005	-0.003	-0.016	0.002	0.005	0.005	0.001	-0.003
	(0.005)	(0.004)	(0.015)	(0.006)	(0.007)	(0.027)	(0.010)	(0.027)
Age squared	0.000	0.000	0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Gender (male=1)	-0.005	0.004	0.015	0.003	0.002	0.008	-0.000	-0.006
	(0.005)	(0.003)	(0.011)	(0.004)	(0.006)	(0.013)	(0.006)	(0.013)
Speaks Maya	0.007	-0.010	-0.010	-0.020	-0.016	-0.067	-0.011	0.125
	(0.008)	(0.007)	(0.018)	(0.011)	(0.013)	(0.027)*	(0.015)	(0.024)**
Reads/writes Spanish	0.012	0.008	-0.014	-0.007	0.014	-0.066	-0.012	-0.010
	(0.007)	(0.005)	(0.017)	(0.009)	(0.010)	(0.024)**	(0.012)	(0.024)
Lives alone	0.015	0.004	-0.012	0.004	0.004	0.007	0.024	0.050
	(0.008)	(0.006)	(0.019)	(0.008)	(0.010)	(0.027)	(0.014)	(0.028)
household size	0.003	0.000	0.003	-0.000	0.003	0.002	0.001	0.004
	(0.001)*	(0.001)	(0.003)	(0.001)	(0.002)	(0.005)	(0.002)	(0.005)
Incomplete primary	-0.009	0.000	0.005	0.000	-0.001	-0.047	-0.021	-0.054
	(0.005)	(0.004)	(0.013)	(0.005)	(0.007)	(0.018)**	(0.010)*	(0.018)**
Primary	-0.002	-0.003	-0.050	-0.004	0.003	-0.162	-0.029	-0.147
	(0.008)	(0.006)	(0.018)**	(0.008)	(0.011)	(0.025)**	(0.012)*	(0.026)**
Couple	0.012	0.004	-0.002	-0.019	-0.007	-0.068	0.011	-0.038

	(0.008)	(0.007)	(0.025)	(0.013)	(0.014)	(0.042)	(0.017)	(0.037)
Divorced/Separated	0.020	0.006	0.015	0.003	0.014	-0.064	0.024	-0.010
	(0.017)	(0.013)	(0.045)	(0.022)	(0.024)	(0.054)	(0.029)	(0.053)
Widow	0.008	-0.001	-0.015	-0.020	-0.014	-0.105	-0.006	-0.083
	(0.008)	(0.007)	(0.024)	(0.013)	(0.014)	(0.040)**	(0.016)	(0.036)*
Constant	0.249	0.164	0.919	0.039	-0.066	0.335	0.023	0.379
	(0.222)	(0.171)	(0.634)	(0.233)	(0.312)	(1.090)	(0.428)	(1.094)
Observations	4011	4011	4011	4011	4011	4011	4011	4011
R-squared	0.01	0.01	0.01	0.01	0.02	0.04	0.01	0.03
F-test education	1.93	0.19	5.93	0.19	0.08	21.03	3.22	16.18
Prob>F	0.146	0.827	0.003	0.086	0.088	0.000	0.997	0.121
F-test age	5.295	0.641	5.908	2.452	2.435	1.581	0.003	2.114
Prob>F	0.005	0.527	0.003	0.830	0.920	0.206	0.040	0.000
age parabola min/max	99.242	89.760	99.595	61.774	72.474	53.333	82.393	-1028.559

NOTE: The reference categories are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, and single.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 4g: Treatment regressions

	Often worried to run out of food last three months (never-always [1-4])	Run out of food and money not enough (never-always [1-4])	Skip or cut meals (never-always [1-4])	Often eat less than you felt you should (never-always [1-4])	Often hungry (never-always [1-4])	Not eat all day (never-always [1-4])	Food from charity (never-always [1-4])	Spend on food at home last week
Wave	-0.411	-0.252	-0.299	-0.238	-0.263	-0.163	-0.053	35.325
	(0.069)**	(0.059)**	(0.058)**	(0.054)**	(0.050)**	(0.039)**	(0.024)*	(22.248)
Valladolid	-0.007	-0.129	-0.065	-0.064	-0.102	-0.080	-0.034	-21.703
	(0.049)	(0.041)**	(0.041)	(0.038)	(0.033)**	(0.024)**	(0.015)*	(17.810)
Valladolid wave 2	0.116	-0.139	-0.071	-0.099	-0.092	-0.100	-0.050	18.869
	(0.061)	(0.052)**	(0.050)	(0.047)*	(0.038)*	(0.028)**	(0.019)**	(22.229)
Age	-0.093	-0.109	-0.062	-0.121	-0.091	-0.044	-0.003	15.747
	(0.061)	(0.052)*	(0.052)	(0.043)**	(0.041)*	(0.033)	(0.016)	(24.308)

Age squared	0.001	0.001	0.000	0.001	0.001	0.000	0.000	-0.098
	(0.000)	(0.000)*	(0.000)	(0.000)**	(0.000)*	(0.000)	(0.000)	(0.150)
Gender (male=1)	0.049	0.057	0.039	0.056	0.061	0.027	0.003	-17.353
	(0.027)	(0.023)*	(0.021)	(0.021)**	(0.018)**	(0.013)*	(0.009)	(9.317)
Speaks Maya	-0.108	-0.108	-0.059	-0.058	-0.082	-0.061	-0.051	12.071
	(0.055)*	(0.048)*	(0.047)	(0.045)	(0.040)*	(0.031)*	(0.022)*	(20.207)
Reads/writes Spanish	-0.144	-0.115	-0.158	-0.087	-0.100	-0.089	-0.030	24.653
	(0.051)**	(0.041)**	(0.042)**	(0.038)*	(0.037)**	(0.026)**	(0.017)	(17.426)
Lives alone	-0.035	-0.042	-0.046	-0.044	0.052	0.036	0.041	-125.042
	(0.055)	(0.047)	(0.045)	(0.042)	(0.037)	(0.027)	(0.019)*	(20.130)**
household size	0.009	-0.004	0.007	0.003	0.001	-0.003	-0.002	27.904
	(0.009)	(0.008)	(0.007)	(0.007)	(0.006)	(0.004)	(0.002)	(3.816)**
Incomplete primary	-0.094	-0.140	-0.055	-0.090	-0.074	-0.049	-0.012	35.731
	(0.040)*	(0.033)**	(0.033)	(0.030)**	(0.026)**	(0.016)**	(0.014)	(14.161)*
Primary	-0.351	-0.363	-0.269	-0.302	-0.204	-0.104	-0.037	179.514
	(0.055)**	(0.047)**	(0.042)**	(0.037)**	(0.032)**	(0.021)**	(0.015)*	(33.636)**
Couple	0.126	0.077	0.009	0.031	-0.013	-0.026	0.024	41.721
	(0.079)	(0.054)	(0.062)	(0.056)	(0.050)	(0.036)	(0.020)	(26.994)
Divorced/Separated	0.136	0.174	0.088	0.084	0.082	0.136	-0.008	64.195
	(0.117)	(0.101)	(0.104)	(0.094)	(0.075)	(0.071)	(0.026)	(36.637)
Widow	0.086	0.021	-0.055	-0.031	-0.033	-0.045	0.015	72.397
	(0.077)	(0.051)	(0.059)	(0.052)	(0.045)	(0.034)	(0.019)	(25.624)**
Constant	5.633	6.521	4.313	6.641	5.365	3.293	1.208	-317.186
	(2.479)*	(2.085)**	(2.089)*	(1.758)**	(1.655)**	(1.305)*	(0.650)	(976.605)
Observations	3624	3624	3619	3623	3624	3625	3630	3041
R-squared	0.04	0.06	0.05	0.05	0.06	0.06	0.02	0.11
F-test education	21.44	30.36	23.18	35.06	21.50	11.70	3.60	14.30
Prob>F	0.000	0.000	0.000	0.000	0.056	0.000	0.027	0.000
F-test age	2.051	2.384	0.964	4.118	2.884	1.680	0.986	0.225
Prob>F	0.129	0.093	0.382	0.016	0.000	0.187	0.373	0.798
age parabola min/max	77.555	82.226	78.688	80.565	82.350	83.422	51.237	80.243

NOTE: The reference categories are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, and single.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 4h: Treatment regressions

	Spend on food away from home	Total food	Received free food (yes-no [1-0])	Eat diary products: milk, cheese, yogurt (at least once a day, at least once a w	Eat eggs, beans or lentil (at least once a day, at least once a week, several ti	Eat meat, poultry or fish (at least once a day, at least once a week, several ti	Eat fruit or vegetables (at least once a day, at least once a week, several time	Eat tortillas, bread, crackers or other cereals (at least once a day, at least o
Wave	6.258	39.465	0.088	-0.163	0.172	0.076	-0.069	-0.113
	(9.444)	(27.691)	(0.024)**	(0.089)	(0.070)*	(0.071)	(0.075)	(0.033)**
Valladolid	-11.161	-37.044	-0.046	0.191	0.136	0.017	0.004	-0.031
	(9.170)	(24.539)	(0.016)**	(0.067)**	(0.049)**	(0.051)	(0.058)	(0.021)
Valladolid wave 2	-11.726	11.128	-0.051	-0.010	-0.012	-0.022	-0.007	0.002
	(17.510)	(37.975)	(0.023)*	(0.075)	(0.062)	(0.064)	(0.069)	(0.027)
Age	-0.015	17.364	0.035	-0.023	0.009	-0.004	-0.060	0.014
	(12.480)	(34.470)	(0.019)	(0.087)	(0.048)	(0.053)	(0.067)	(0.016)
Age squared	-0.003	-0.111	-0.000	0.000	-0.000	0.000	0.000	-0.000
	(0.073)	(0.209)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
Gender (male=1)	-4.557	-21.972	0.007	0.350	-0.137	0.086	0.166	-0.007
	(3.925)	(11.153)*	(0.011)	(0.050)**	(0.033)**	(0.034)*	(0.038)**	(0.015)
Speaks Maya	15.202	25.127	0.032	0.237	0.080	0.209	0.120	-0.055
	(9.862)	(28.006)	(0.018)	(0.072)**	(0.054)	(0.055)**	(0.061)	(0.026)*
Reads/writes Spanish	-13.759	5.694	0.022	-0.383	0.049	-0.171	-0.195	-0.069
	(10.768)	(26.219)	(0.017)	(0.067)**	(0.053)	(0.053)**	(0.060)**	(0.023)**
Lives alone	-6.989	-135.322	0.117	0.128	0.033	0.116	0.140	0.015
	(7.187)	(23.884)**	(0.026)**	(0.091)	(0.061)	(0.066)	(0.071)*	(0.026)
household size	1.684	30.174	-0.021	0.045	-0.022	-0.027	0.009	-0.002
	(1.819)	(4.913)**	(0.003)**	(0.013)**	(0.008)**	(0.008)**	(0.011)	(0.004)
Incomplete primary	15.318	56.082	-0.030	-0.233	0.072	-0.089	-0.192	-0.017
	(8.068)	(20.806)**	(0.015)*	(0.056)**	(0.040)	(0.040)*	(0.045)**	(0.017)
Primary	61.025	258.457	-0.051	-0.680	0.058	-0.320	-0.513	-0.014
	(23.866)*	(53.409)**	(0.022)*	(0.091)**	(0.057)	(0.060)**	(0.069)**	(0.025)
Couple	10.157	50.998	-0.032	0.018	-0.083	0.015	0.039	0.030

	(10.301)	(30.864)	(0.034)	(0.121)	(0.085)	(0.090)	(0.093)	(0.024)
Divorced/Separated	-4.787	53.830	-0.012	-0.124	0.023	-0.073	-0.054	0.088
	(10.476)	(40.843)	(0.046)	(0.175)	(0.128)	(0.125)	(0.132)	(0.056)
Widow	-0.270	69.822	-0.019	-0.209	-0.037	-0.047	-0.037	0.014
	(6.518)	(26.973)**	(0.033)	(0.121)	(0.083)	(0.089)	(0.092)	(0.025)
Constant	43.372	-336.349	-1.232	4.160	1.460	2.706	4.846	0.624
	(515.440)	(1,392.582)	(0.777)	(3.539)	(1.976)	(2.156)	(2.733)	(0.663)
Observations	3929	3028	3621	4002	4000	4002	4002	4003
R-squared	0.01	0.08	0.06	0.08	0.02	0.03	0.03	0.01
F-test education	3.61	12.54	3.24	28.64	1.64	14.14	28.27	0.49
Prob>F	0.027	0.000	0.039	0.001	0.194	0.965	0.671	0.610
F-test age	1.393	0.315	2.408	6.616	1.192	0.036	0.399	0.635
Prob>F	0.249	0.730	0.090	0.000	0.304	0.000	0.000	0.530
age parabola min/max	-2.264	78.511	84.908	265.935	163.678	100.926	81.855	87.726

Table 4i: Treatment regressions

	Worked for pay last month (yes-no [1-0])	Immediate recall (number of words)	Delayed recall (number of words)	Feel fear someone robbing you (never, sometimes, usually, always [1-4])	Feel fear someone close to you will take your money (never, sometimes, usually,	Money in a safe place (yes-no [1-0])	Feel verbally or physically abused (never, sometimes, usually, always [1-4])
Wave	0.002	-0.031	0.094	-0.186	-0.030	-0.006	-0.022
	(0.020)	(0.100)	(0.128)	(0.060)**	(0.045)	(0.013)	(0.029)
Valladolid	-0.021	0.121	0.210	-0.152	-0.068	-0.015	-0.028
	(0.016)	(0.075)	(0.090)*	(0.043)**	(0.029)*	(0.008)*	(0.020)
Valladolid wave 2	-0.043	0.244	0.547	-0.005	0.004	-0.006	-0.017
	(0.016)**	(0.089)**	(0.109)**	(0.053)	(0.037)	(0.010)	(0.028)
Age	-0.081	-0.096	-0.241	-0.035	-0.011	0.009	-0.004
	(0.015)**	(0.090)	(0.100)*	(0.059)	(0.044)	(0.008)	(0.023)
Age squared	0.000	0.000	0.001	0.000	0.000	-0.000	0.000
	(0.000)**	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
Gender (male=1)	0.203	-0.477	-0.545	-0.090	-0.045	-0.005	-0.053
	(0.013)**	(0.059)**	(0.070)**	(0.029)**	(0.021)*	(0.005)	(0.017)**
Speaks Maya	0.004	-0.306	-0.198	-0.046	0.003	-0.008	-0.039
	(0.018)	(0.084)**	(0.106)	(0.050)	(0.035)	(0.011)	(0.027)
Reads/writes Spanish	-0.022	0.445	0.415	-0.061	0.016	0.007	0.011
	(0.015)	(0.078)**	(0.091)**	(0.048)	(0.033)	(0.009)	(0.024)
Lives alone	0.048	0.008	-0.133	0.028	0.058	0.009	0.070
	(0.023)*	(0.103)	(0.121)	(0.055)	(0.038)	(0.011)	(0.029)*
household size	-0.000	-0.033	-0.032	-0.017	-0.005	-0.001	0.007
	(0.003)	(0.015)*	(0.018)	(0.008)*	(0.005)	(0.001)	(0.005)
Incomplete primary	0.010	0.467	0.527	0.054	-0.001	0.002	0.018
	(0.013)	(0.067)**	(0.080)**	(0.034)	(0.023)	(0.006)	(0.019)
Primary	0.015	1.152	1.167	0.043	-0.075	-0.009	-0.039

	(0.024)	(0.116)**	(0.136)**	(0.052)	(0.032)*	(0.008)	(0.022)
Couple	-0.050	0.082	0.008	0.023	-0.020	-0.017	0.041
	(0.032)	(0.140)	(0.173)	(0.078)	(0.047)	(0.014)	(0.030)
Divorced/Separated	-0.014	0.100	-0.167	-0.039	-0.073	-0.030	0.144
	(0.051)	(0.204)	(0.241)	(0.108)	(0.062)	(0.016)	(0.067)*
Widow	-0.072	-0.293	-0.345	-0.003	-0.051	-0.017	0.006
	(0.032)*	(0.138)*	(0.169)*	(0.078)	(0.047)	(0.014)	(0.030)
Constant	3.804	8.607	14.677	3.085	1.717	-0.316	1.304
	(0.635)**	(3.662)*	(4.071)**	(2.371)	(1.730)	(0.337)	(0.945)
Observations	4006	4011	4011	3253	3251	3250	3253
R-squared	0.14	0.16	0.14	0.02	0.01	0.01	0.01
F-test education	0.38	55.04	43.36	1.24	3.70	1.41	4.33
Prob>F	0.686	0.000	0.000	0.288	0.318	0.245	0.013
F-test age	60.141	101.326	96.068	1.158	1.146	0.965	0.048
Prob>F	0.000	0.000	0.000	0.314	0.025	0.381	0.954
age parabola min/max	92.335	297.618	121.168	72.234	64.524	84.089	89.527

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 5a: Interaction Effects

	Self-reported health (excellent, very good, good, fair, poor [1-5])	Subjective mortality expectation (chances to leave at least 10 years more [1-100	Feel sad, blue or depressed for 2 weeks or more during the last 3 months (yes-no	Satisfied relation fam. members (very satisfied-very unsatisfied [1-5])	Satisfied hh income (very satisfied-very unsatisfied [1-5])	Satisfied social contacts (very satisfied-very unsatisfied [1-5])	Satisfied with job (very satisfied-very unsatisfied [1-5])	Satisfied with health (very satisfied-very unsatisfied [1-5])
Wave	-0.230	0.414	-0.203	-0.097	-0.185	-0.068	-0.149	-0.060
	(0.045)**	(2.414)	(0.037)**	(0.047)*	(0.060)**	(0.051)	(0.052)**	(0.061)
Valladolid	0.088	-4.375	-0.080	-0.009	0.023	-0.015	-0.022	0.024
	(0.032)**	(1.577)**	(0.026)**	(0.034)	(0.044)	(0.036)	(0.039)	(0.045)
Valladolid wave 2	0.071	-2.242	-0.005	0.020	-0.063	0.051	0.070	-0.106
	(0.050)	(2.916)	(0.043)	(0.053)	(0.066)	(0.062)	(0.062)	(0.069)
Effect for income quartile 1	0.068	-1.592	0.005	0.121	0.067	0.088	0.017	0.040
	(0.065)	(4.061)	(0.054)	(0.066)	(0.080)	(0.073)	(0.076)	(0.078)
Effect for income quartile 2	0.033	-4.999	0.010	-0.042	0.044	-0.019	-0.020	0.063
	(0.072)	(3.623)	(0.058)	(0.074)	(0.084)	(0.071)	(0.080)	(0.086)
Effect for income quartile 3	0.055	3.148	-0.061	-0.006	0.010	-0.044	-0.117	0.021
	(0.072)	(3.988)	(0.059)	(0.073)	(0.085)	(0.067)	(0.083)	(0.085)
Effect for income quartile 4	0.042	-1.673	0.017	0.034	0.141	0.041	-0.017	0.191
	(0.071)	(3.589)	(0.058)	(0.071)	(0.085)	(0.071)	(0.076)	(0.091)*
Effect on males	-0.037	0.616	-0.020	0.009	-0.060	-0.071	-0.058	-0.075
	(0.047)	(2.521)	(0.038)	(0.048)	(0.056)	(0.048)	(0.052)	(0.058)
Constant	1.854	308.603	-0.817	3.306	6.013	1.816	2.677	4.392

	(1.500)	(78.959)**	(1.233)	(1.932)	(1.885)**	(1.711)	(2.108)	(2.286)
Observations	4007	2405	3271	3258	3253	3248	3257	3261
R-squared	0.03	0.03	0.06	0.04	0.03	0.03	0.03	0.03
F-test SES interactions	0.07	1.13	0.59	1.44	0.71	1.29	0.81	1.14
Prob>F	0.975	0.336	0.619	0.229	0.545	0.277	0.490	0.333

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 5b: Interaction Effects

	Satisfied life in general (very satisfied-very unsatisfied [1-5])	Number of acute conditions	Often pain (yes-no [1-0])	How strong is the pain (mild, moderate, severe [1-3])	Number of chronic conditions	Number of ADL's	Number of IADL's	Smokes now (yes-no [1-0])
Wave	-0.087	-0.032	-0.121	-0.281	-0.053	-1.609	-0.289	-0.008
	(0.049)	(0.026)	(0.031)**	(0.073)**	(0.062)	(0.236)**	(0.066)**	(0.009)
Valladolid	0.017	-0.021	-0.008	-0.083	0.131	0.293	-0.068	0.002
	(0.035)	(0.019)	(0.023)	(0.054)	(0.047)**	(0.176)	(0.047)	(0.008)
Valladolid wave 2	-0.065	-0.037	0.075	-0.005	-0.021	0.328	0.096	0.000
	(0.052)	(0.027)	(0.036)*	(0.083)	(0.063)	(0.251)	(0.073)	(0.009)
Effect for income quartile 1	0.101	0.008	0.039	0.139	0.132	-0.064	-0.039	0.001
	(0.057)	(0.034)	(0.048)	(0.110)	(0.084)	(0.322)	(0.088)	(0.013)
Effect for income quartile 2	0.014	0.013	0.045	0.113	0.011	0.204	-0.189	0.016
	(0.060)	(0.037)	(0.046)	(0.106)	(0.090)	(0.332)	(0.097)	(0.013)
Effect for income quartile 3	0.032	0.005	-0.045	-0.090	-0.038	-0.750	-0.137	0.002
	(0.059)	(0.039)	(0.053)	(0.117)	(0.101)	(0.333)*	(0.095)	(0.019)
Effect for income quartile 4	0.119	-0.001	0.034	0.114	-0.017	-0.040	-0.180	0.008

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	(0.064)	(0.040)	(0.050)	(0.113)	(0.095)	(0.341)	(0.089)*	(0.019)
Effect on males	-0.050	-0.006	-0.042	-0.069	0.065	-0.232	0.009	-0.001
	(0.042)	(0.025)	(0.033)	(0.075)	(0.061)	(0.231)	(0.064)	(0.011)
Constant	1.441	-1.894	-0.670	-2.642	-6.746	-13.168	-1.436	0.326
	(1.558)	(0.684)**	(0.996)	(2.235)	(1.965)**	(8.725)	(2.331)	(0.367)
Observations	3257	4011	4006	4003	4011	3769	4002	4008
R-squared	0.03	0.02	0.03	0.03	0.03	0.07	0.06	0.03
F-test SES interactions	1.10	0.03	0.96	1.24	1.03	2.32	0.92	0.35
Prob>F	0.347	0.993	0.410	0.294	0.377	0.074	0.433	0.787

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 5c: Interaction Effects

	Number of cigarettes in a day	Drink alcoholic beverages (yes-no [1-0])	Number of days a week drinks alcoholic beverages	Number of drinks per day	Visited a doctor (yes-no [1-0])	Number of doctor visits	Visited a folk healer (yes-no [1-0])	Number of folk healer visits
Wave	-0.124	0.114	0.031	0.112	0.084	0.114	-0.027	-0.043
	(0.062)*	(0.030)**	(0.056)	(0.088)	(0.034)*	(0.117)	(0.014)	(0.033)
Valladolid	0.119	0.034	-0.032	-0.113	0.058	0.209	-0.024	-0.051
	(0.061)	(0.022)	(0.036)	(0.052)*	(0.024)*	(0.105)*	(0.008)**	(0.023)*
Valladolid wave 2	0.065	-0.138	-0.055	-0.073	0.096	0.313	0.007	0.024
	(0.045)	(0.033)**	(0.053)	(0.068)	(0.038)*	(0.145)*	(0.015)	(0.045)
Effect for income quartile 1	0.095	-0.081	-0.032	-0.150	0.026	0.024	-0.010	0.005

	(0.058)	(0.042)	(0.060)	(0.091)	(0.047)	(0.188)	(0.018)	(0.052)
Effect for income quartile 2	0.110	-0.038	-0.004	0.048	-0.041	-0.102	-0.020	-0.024
	(0.055)*	(0.043)	(0.054)	(0.114)	(0.049)	(0.183)	(0.019)	(0.048)
Effect for income quartile 3	0.022	-0.037	0.013	-0.071	-0.122	-0.284	-0.024	-0.054
	(0.079)	(0.047)	(0.063)	(0.089)	(0.055)*	(0.227)	(0.021)	(0.048)
Effect for income quartile 4	0.082	-0.051	0.015	-0.093	-0.004	-0.129	-0.039	-0.053
	(0.166)	(0.046)	(0.098)	(0.158)	(0.054)	(0.236)	(0.020)*	(0.050)
Effect on males	-0.099	0.023	-0.037	-0.044	0.010	0.070	-0.013	-0.085
	(0.060)	(0.029)	(0.048)	(0.075)	(0.034)	(0.143)	(0.014)	(0.034)*
Constant	-1.107	0.674	2.279	4.230	-0.406	-4.540	-0.296	-1.445
	(1.668)	(0.941)	(1.331)	(2.260)	(1.224)	(3.963)	(0.310)	(0.725)*
Observations	4011	4010	3983	3992	4008	4004	4009	4009
R-squared	0.03	0.20	0.04	0.05	0.04	0.03	0.02	0.01
F-test SES interactions	0.67	0.34	0.16	0.77	2.13	0.81	0.58	0.54
Prob>F	0.568	0.797	0.926	0.509	0.095	0.489	0.630	0.655

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 5d: Interaction Effects

	Visited a dentist (yes-no [1-0])	Number of dentist visits	Outpatient procedures (yes-no [1-0])	Consulted a pharmacist (yes-no [1-0])	Bought no medicines because they are too expensive (yes-no [1-0])	Pay out-of-pocket (oop) medical cost or medication (yes-no [1-0])	Oop expenses paid by relatives (yes-no [1-0])
Wave	0.025	0.043	-0.002	-0.085	-0.146	-0.047	-0.019
	(0.017)	(0.048)	(0.007)	(0.019)**	(0.029)**	(0.035)	(0.029)

Valladolid	-0.017	-0.061	-0.002	-0.025	-0.042	-0.046	-0.095
	(0.012)	(0.034)	(0.005)	(0.011)*	(0.019)*	(0.024)	(0.019)**
Valladolid wave 2	-0.030	-0.067	0.005	0.026	-0.027	0.062	-0.110
	(0.019)	(0.050)	(0.007)	(0.019)	(0.029)	(0.039)	(0.030)**
Effect for income quartile 1	0.011	0.040	-0.014	-0.005	-0.030	-0.063	-0.012
	(0.020)	(0.048)	(0.009)	(0.025)	(0.037)	(0.049)	(0.039)
Effect for income quartile 2	0.030	0.073	-0.015	0.005	0.009	-0.085	-0.033
	(0.024)	(0.051)	(0.009)	(0.029)	(0.038)	(0.049)	(0.036)
Effect for income quartile 3	0.049	0.063	-0.016	-0.059	0.010	-0.138	-0.030
	(0.029)	(0.058)	(0.010)	(0.019)**	(0.038)	(0.054)*	(0.035)
Effect for income quartile 4	0.034	0.120	-0.007	-0.035	0.026	-0.020	-0.011
	(0.033)	(0.091)	(0.009)	(0.019)	(0.034)	(0.052)	(0.035)
Effect on males	-0.010	-0.077	-0.001	-0.021	-0.057	-0.024	0.027
	(0.017)	(0.042)	(0.006)	(0.016)	(0.023)*	(0.033)	(0.024)
Constant	0.695	1.516	0.132	-0.027	-0.390	0.516	0.494
	(0.448)	(1.196)	(0.215)	(0.426)	(0.699)	(1.098)	(0.947)
Observations	4008	4006	4008	4003	4006	4007	4006
R-squared	0.02	0.02	0.01	0.03	0.04	0.02	0.07
F-test SES interactions	0.56	0.31	0.26	2.41	0.64	1.21	0.17
Prob>F	0.644	0.819	0.858	0.065	0.588	0.305	0.915

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth. The model for the number of outpatient procedures could not be estimated due to the few numbers of observations.

SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 5e: Interaction Effects

	Oop expenses paid by elderly eligible (yes-no [1-0])	Serious health problem but did not go to the doctor (yes-no[1-0])	Did not go to the doctor because of money (yes-no[1-0])	Relatives or friends pay your expenses (not true, sometimes true, often true, al	Feel a burden on your family or friends (not true, sometimes true, often true, a	Activities you used to do but can't do because of lack of money (yes-no[1-0])	Donation to the church but can't do due to money (yes-no[1-0])	Donation to family or friends parties but can't do due to money (yes-no[1-0])
Wave	-0.034	-0.106	-0.088	0.094	-0.344	-0.143	-0.015	-0.005
	(0.028)	(0.024)**	(0.020)**	(0.078)	(0.151)*	(0.036)**	(0.008)	(0.008)
Valladolid	0.042	-0.049	-0.020	-0.071	0.101	-0.098	-0.005	0.000
	(0.019)*	(0.017)**	(0.014)	(0.057)	(0.106)	(0.025)**	(0.006)	(0.007)
Valladolid wave 2	0.121	-0.023	0.000	-0.135	0.355	-0.039	-0.004	0.011
	(0.032)**	(0.025)	(0.020)	(0.093)	(0.198)	(0.040)	(0.010)	(0.011)
Effect for income quartile 1	-0.028	-0.023	-0.038	0.091	0.167	-0.012	0.015	-0.022
	(0.040)	(0.029)	(0.023)	(0.124)	(0.243)	(0.049)	(0.014)	(0.012)
Effect for income quartile 2	-0.034	-0.014	-0.033	0.167	-0.035	0.041		-0.003
	(0.042)	(0.033)	(0.025)	(0.125)	(0.260)	(0.051)		(0.013)
Effect for income quartile 3	-0.066	-0.023	-0.023	0.302	0.031	0.029	0.002	-0.022
	(0.047)	(0.032)	(0.024)	(0.132)*	(0.276)	(0.052)	(0.014)	(0.013)
Effect for income quartile 4	0.014	0.018	0.031	0.075	0.064	0.061	0.016	-0.010
	(0.047)	(0.030)	(0.021)	(0.121)	(0.282)	(0.047)	(0.011)	(0.011)
Effect on males	-0.037	0.011	-0.008	0.020	-0.248	0.003	-0.002	0.002
	(0.028)	(0.020)	(0.015)	(0.078)	(0.174)	(0.033)	(0.008)	(0.009)
Constant	0.001	0.373	0.439	-1.675	0.371	2.406	0.126	0.233
	(0.712)	(0.552)	(0.476)	(2.726)	(4.826)	(1.019)*	(0.202)	(0.224)
Observations	4006	3999	4011	3996	910	3254	4011	4011

R-squared	0.04	0.03	0.03	0.11	0.04	0.05	0.01	0.01
F-test SES interactions	0.64	0.68	4.04	1.02	0.18	0.58	0.52	0.78
Prob>F	0.586	0.566	0.007	0.381	0.913	0.628	0.594	0.506

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 5f: Interaction Effects

	Community activities but can't do due to money (yes-no[1-0])	Help out family members but can't do due to money (yes-no[1-0])	Help out non-relatives but can't do due to money (yes-no[1-0])	Travel to visit family or friends but can't do due to money (yes-no[1-0])	Sometimes do not have enough to eat (yes-no[1-0])	Often we do not have enough to eat (yes-no[1-0])	Sometimes or often we don't have enough to eat because of money (yes-no[1-0])	Often worried to run out of food last three months (never-always [1-4])
Wave	-0.002	-0.030	-0.034	-0.023	-0.163	-0.050	0.040	-0.411
	(0.007)	(0.023)	(0.012)**	(0.014)	(0.035)**	(0.019)**	(0.033)	(0.069)**
Valladolid	-0.015	-0.019	-0.012	-0.027	0.058	0.023	0.104	-0.014
	(0.005)**	(0.016)	(0.007)	(0.010)**	(0.025)*	(0.013)	(0.025)**	(0.049)
Valladolid wave 2	-0.010	-0.013	-0.006	-0.010	0.022	0.043	0.056	0.198
	(0.008)	(0.025)	(0.009)	(0.014)	(0.038)	(0.019)*	(0.038)	(0.080)*
Effect for income quartile 1	0.000	0.052	-0.019	-0.031	0.000	-0.041	-0.007	-0.071
	(0.008)	(0.033)	(0.012)	(0.018)	(0.045)	(0.026)	(0.046)	(0.102)
Effect for income quartile 2	0.013	0.031	0.018	-0.007	-0.015	-0.007	0.026	-0.019
	(0.012)	(0.035)	(0.016)	(0.016)	(0.047)	(0.025)	(0.048)	(0.105)
Effect for	-0.014	0.065	0.006	0.001	0.009	0.005	0.037	-0.045

income quartile 3								
	(0.012)	(0.039)	(0.013)	(0.015)	(0.051)	(0.023)	(0.053)	(0.105)
Effect for income quartile 4	0.010	0.084	0.006	0.010	-0.011	-0.003	0.006	-0.146
	(0.011)	(0.036)*	(0.009)	(0.017)	(0.042)	(0.020)	(0.043)	(0.090)
Effect on males	-0.001	0.003	0.000	-0.010	-0.066	-0.019	-0.067	-0.087
	(0.008)	(0.024)	(0.009)	(0.010)	(0.025)**	(0.013)	(0.026)*	(0.054)
Constant	0.178	0.932	0.043	-0.072	0.315	0.047	0.410	5.577
	(0.173)	(0.637)	(0.230)	(0.314)	(1.091)	(0.429)	(1.084)	(2.471)*
Observations	4011	4011	4011	4011	4011	4011	4011	3624
R-squared	0.01	0.02	0.02	0.02	0.05	0.02	0.04	0.05
F-test SES interactions	1.44	0.54	1.82	1.44	0.08	0.96	0.24	0.59
Prob>F	0.229	0.656	0.141	0.230	0.973	0.413	0.869	0.620

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 5g: Interaction Effects

	Run out of food and money not enough (never-always [1-4])	Skip or cut meals (never-always [1-4])	Often eat less than you felt you should (never-always [1-4])	Often hungry (never-always [1-4])	Not eat all day (never-always [1-4])	Food from charity (never-always [1-4])	Spend on food at home last week	Spend on food away from home
Wave	-0.253	-0.301	-0.237	-0.258	-0.161	-0.052	38.436	5.754
	(0.059)**	(0.058)**	(0.054)**	(0.049)**	(0.039)**	(0.025)*	(21.788)	(9.163)
Valladolid	-0.129	-0.074	-0.067	-0.093	-0.077	-0.037	-24.156	-10.400
	(0.041)**	(0.041)	(0.038)	(0.033)**	(0.024)**	(0.015)*	(17.506)	(8.841)
Valladolid wave 2	-0.031	0.018	-0.039	-0.052	-0.096	-0.048	-6.333	-5.692
	(0.065)	(0.064)	(0.059)	(0.047)	(0.034)**	(0.019)*	(26.385)	(22.701)
Effect for income quartile 1	-0.083	-0.086	-0.083	-0.082	-0.024	0.010	-3.953	-5.986
	(0.091)	(0.086)	(0.077)	(0.061)	(0.046)	(0.029)	(28.952)	(20.445)
Effect for income quartile 2	-0.044	-0.026	-0.004	0.085	0.064	-0.018	-0.198	-14.132
	(0.087)	(0.080)	(0.080)	(0.061)	(0.038)	(0.036)	(32.994)	(19.129)
Effect for income quartile 3	-0.023	-0.091	-0.003	0.024	0.013	0.016	1.204	-16.355
	(0.090)	(0.084)	(0.077)	(0.055)	(0.040)	(0.029)	(31.481)	(20.423)
Effect for income quartile 4	-0.070	-0.111	-0.029	0.082	0.037	0.009	20.384	5.000
	(0.074)	(0.070)	(0.065)	(0.045)	(0.032)	(0.024)	(41.748)	(28.950)
Effect on males	-0.166	-0.093	-0.091	-0.124	-0.042	-0.011	44.151	-2.530
	(0.046)**	(0.046)*	(0.042)*	(0.032)**	(0.023)	(0.017)	(19.261)*	(6.556)
Constant	6.510	4.145	6.613	5.564	3.252	1.182	-229.883	45.294
	(2.052)**	(2.064)*	(1.746)**	(1.653)**	(1.286)*	(0.666)	(935.847)	(538.746)

Observations	3624	3619	3623	3624	3625	3630	3041	3929
R-squared	0.08	0.06	0.06	0.08	0.07	0.02	0.16	0.02
F-test SES interactions	0.16	0.36	0.36	2.62	1.17	0.25	0.09	0.28
Prob>F	0.926	0.779	0.783	0.049	0.321	0.863	0.964	0.839

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 5h: Interaction Effects

	Total food	Received free food (yes-no [1-0])	Eat diary products: milk, cheese, yogurt (at least once a day, at least once a w	Eat eggs, beans or lentil (at least once a day, at least once a week, several ti	Eat meat, poultry or fish (at least once a day, at least once a week, several ti	Eat fruit or vegetables (at least once a day, at least once a week, several time	Eat tortillas, bread, crackers or other cereals (at least once a day, at least o	Worked for pay last month (yes-no [1-0])
Wave	44.494	0.088	-0.165	0.175	0.092	-0.057	-0.114	-0.004
	(26.681)	(0.024)**	(0.089)	(0.070)*	(0.071)	(0.076)	(0.033)**	(0.020)
Valladolid	-38.485	-0.051	0.190	0.143	0.027	0.012	-0.028	-0.038
	(23.917)	(0.017)**	(0.067)**	(0.050)**	(0.051)	(0.058)	(0.021)	(0.015)*
Valladolid wave 2	-5.287	-0.017	0.020	-0.067	-0.177	-0.005	0.042	0.030
	(46.795)	(0.031)	(0.099)	(0.079)	(0.078)*	(0.089)	(0.038)	(0.021)
Effect for income quartile 1	-17.360	-0.036	-0.115	0.070	0.203	-0.048	-0.066	-0.093
	(45.605)	(0.042)	(0.131)	(0.097)	(0.098)*	(0.109)	(0.042)	(0.027)**
Effect for income quartile 2	-25.334	-0.049	0.163	0.105	0.209	0.011	-0.067	-0.099
	(45.764)	(0.043)	(0.126)	(0.092)	(0.101)*	(0.112)	(0.046)	(0.028)**
Effect for	-31.010	-0.035	-0.038	0.087	0.191	0.179	-0.007	0.011

income quartile 3								
	(45.926)	(0.045)	(0.149)	(0.108)	(0.110)	(0.121)	(0.052)	(0.035)
Effect for income quartile 4	34.350	-0.068	-0.212	0.180	0.340	0.183	-0.029	-0.066
	(59.201)	(0.036)	(0.133)	(0.100)	(0.102)**	(0.117)	(0.050)	(0.035)
Effect on males	41.736	-0.011	-0.003	-0.026	0.011	-0.107	-0.024	-0.070
	(21.856)	(0.023)	(0.085)	(0.064)	(0.065)	(0.072)	(0.032)	(0.021)**
Constant	-246.189	-1.327	4.136	1.434	2.958	5.113	0.687	3.372
	(1,374.469)	(0.777)	(3.532)	(1.985)	(2.136)	(2.716)	(0.665)	(0.627)**
Observations	3028	3621	4002	4000	4002	4002	4003	4006
R-squared	0.11	0.07	0.09	0.02	0.04	0.05	0.01	0.18
F-test SES interactions	0.22	0.28	2.26	0.36	0.65	1.55	0.63	2.74
Prob>F	0.881	0.838	0.079	0.785	0.580	0.200	0.597	0.042

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 5i: Interaction Effects

	Immediate recall (number of words)	Delayed recall (number of words)	Feel fear someone robbing you (never, sometimes, usually, always [1-4])	Feel fear someone close to you will take your money (never, sometimes, usually,	Money in a safe place (yes-no [1-0])	Feel verbally or physically abused (never, sometimes, usually, always [1-4])
Wave	-0.024	0.104	-0.191	-0.028	-0.006	-0.019
	(0.101)	(0.128)	(0.061)**	(0.045)	(0.014)	(0.029)
Valladolid	0.099	0.188	-0.168	-0.081	-0.018	-0.029
	(0.076)	(0.090)*	(0.043)**	(0.029)**	(0.008)*	(0.020)
Valladolid wave 2	0.106	0.488	0.033	-0.026	-0.011	-0.033
	(0.118)	(0.146)**	(0.069)	(0.050)	(0.014)	(0.039)
Effect for income quartile 1	0.058	-0.156	-0.045	0.076	0.008	-0.021
	(0.157)	(0.187)	(0.094)	(0.059)	(0.016)	(0.046)
Effect for income quartile 2	0.203	-0.077	0.048	0.026	0.003	-0.012
	(0.165)	(0.196)	(0.092)	(0.066)	(0.016)	(0.049)
Effect for income quartile 3	0.193	0.211	-0.116	-0.039	-0.001	0.067
	(0.175)	(0.212)	(0.092)	(0.066)	(0.019)	(0.059)
Effect for income quartile 4	0.323	0.069	-0.055	0.072	0.032	-0.019
	(0.180)	(0.212)	(0.089)	(0.061)	(0.018)	(0.044)
Effect on males	0.048	0.136	-0.033	0.003	-0.004	0.032
	(0.109)	(0.129)	(0.060)	(0.041)	(0.011)	(0.032)
Constant	8.086	13.891	2.957	1.658	-0.357	1.187
	(3.699)*	(4.061)**	(2.399)	(1.740)	(0.335)	(0.950)
Observations	4011	4011	3253	3251	3250	3253
R-squared	0.17	0.15	0.03	0.02	0.01	0.01
F-test SES interactions	0.59	0.93	0.83	0.99	0.79	0.80
Prob>F	0.620	0.424	0.480	0.398	0.500	0.492

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

	Self-reported health (excellent, very good, good, fair, poor [1-5])	Subjective mortality expectation (chances to leave at least 10 years more [1-100	Feel sad, blue or depressed for 2 weeks or more during the last 3 months (yes-no	Satisfied relation fam. members (very satisfied-very unsatisfied [1-5])	Satisfied hh income (very satisfied-very unsatisfied [1-5])	Satisfied social contacts (very satisfied-very unsatisfied [1-5])	Satisfied with job (very satisfied-very unsatisfied [1-5])	Satis... healt... satis... unsa... 5])
Wave	-0.410	0.401	-0.530	-0.188	-0.256	-0.139	-0.261	-0.08
	(0.075)**	(2.401)	(0.098)**	(0.086)*	(0.083)**	(0.093)	(0.083)**	(0.08
Valladolid	0.144	-4.302	-0.199	0.009	0.013	-0.013	-0.025	0.02
	(0.054)**	(1.575)**	(0.066)**	(0.062)	(0.061)	(0.064)	(0.061)	(0.05
Valladolid wave 2	0.146	-3.107	-0.045	0.095	-0.065	0.085	0.073	-0.10
	(0.062)*	(2.219)	(0.088)	(0.077)	(0.076)	(0.081)	(0.073)	(0.06
Age	0.079	-5.887	0.098	-0.021	-0.103	0.034	0.004	-0.0
	(0.060)	(1.973)**	(0.081)	(0.080)	(0.064)	(0.075)	(0.077)	(0.0
Age squared	-0.000	0.036	-0.001	0.000	0.001	-0.000	0.000	0.00
	(0.000)	(0.012)**	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.00
Gender (male=1)	-0.137	3.756	-0.350	0.037	0.047	-0.077	0.037	-0.15
	(0.041)**	(1.111)**	(0.049)**	(0.047)	(0.042)	(0.046)	(0.047)	(0.04
Speaks Maya	-0.072	0.850	-0.106	0.081	0.035	0.116	0.036	0.04
	(0.065)	(1.746)	(0.075)	(0.071)	(0.069)	(0.070)	(0.074)	(0.06
Reads/writes Spanish	0.004	-1.714	-0.131	-0.124	-0.006	-0.123	-0.107	0.00
	(0.056)	(1.759)	(0.072)	(0.064)	(0.065)	(0.068)	(0.063)	(0.06
Lives alone	-0.071	1.122	0.079	0.164	0.137	0.085	0.065	-0.06
	(0.073)	(2.072)	(0.088)	(0.088)	(0.080)	(0.085)	(0.086)	(0.0
household size	-0.006	-0.265	0.001	0.004	0.013	0.031	0.019	0.00
	(0.010)	(0.279)	(0.012)	(0.012)	(0.012)	(0.012)*	(0.012)	(0.0
Incomplete primary	0.007	1.432	0.047	-0.108	-0.035	0.003	-0.109	0.10
	(0.045)	(1.339)	(0.057)	(0.050)*	(0.052)	(0.054)	(0.052)*	(0.05
Primary	-0.233	0.987	-0.164	-0.671	-0.156	-0.472	-0.396	-0.0
	(0.073)**	(1.926)	(0.088)	(0.091)**	(0.079)*	(0.089)**	(0.086)**	(0.0
Couple	0.160	4.545	0.220	-0.076	0.109	-0.008	0.008	-0.04
	(0.109)	(2.644)	(0.124)	(0.101)	(0.096)	(0.090)	(0.092)	(0.10

Divorced/Separated	-0.093	1.146	0.201	0.152	0.198	0.006	-0.067	0.17
	(0.162)	(3.914)	(0.174)	(0.165)	(0.129)	(0.144)	(0.155)	(0.14
Widow	0.108	1.233	0.283	-0.078	0.137	-0.022	0.063	-0.0(
	(0.110)	(2.704)	(0.125)*	(0.103)	(0.095)	(0.090)	(0.092)	(0.10
Constant		299.185	-3.684					
		(79.642)**	(3.253)					
Observations	4007	2405	3271	3258	3253	3248	3257	3261
F-test education	12.53	0.57	7.14	54.19	3.97	33.56	21.26	9.07
Prob>F	0.002	0.565	0.028	0.000	0.137	0.417	0.001	0.13
F-test age	3.958	5.093	4.550	0.124	2.677	1.749	13.037	3.95
Prob>F	0.138	0.006	0.103	0.940	0.262	0.000	0.000	0.01
age parabola min/max	86.971	82.265	87.089	77.440	80.456	94.670	-29.506	66.1
R-squared		0.02						

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 6b: Treatment regressions

	Satisfied life in general (very satisfied-very unsatisfied [1-5])	Number of acute conditions	Often pain (yes-no [1-0])	How strong is the pain (mild, moderate, severe [1-3])	Number of chronic conditions	Number of ADL's	Number of IADL's	Smokes now (yes-no [1-0])
Wave	-0.167	-0.142	-0.323	-0.270	-0.044	-0.421	-0.364	-0.102
	(0.093)	(0.100)	(0.083)**	(0.071)**	(0.069)	(0.066)**	(0.078)**	(0.137)
Valladolid	0.047	-0.053	-0.019	-0.075	0.157	0.078	-0.074	0.022
	(0.065)	(0.071)	(0.061)	(0.053)	(0.052)**	(0.050)	(0.056)	(0.122)
Valladolid wave 2	-0.056	-0.142	0.179	0.028	0.021	0.024	0.030	0.049
	(0.080)	(0.081)	(0.072)*	(0.061)	(0.052)	(0.049)	(0.067)	(0.092)
Age	0.075	0.241	0.088	0.092	0.249	0.132	0.100	-0.089
	(0.076)	(0.086)**	(0.066)	(0.054)	(0.062)**	(0.061)*	(0.063)	(0.160)

Age squared	-0.000	-0.001	-0.001	-0.001	-0.002	-0.001	-0.000	0.000
	(0.000)	(0.001)**	(0.000)	(0.000)	(0.000)**	(0.000)	(0.000)	(0.001)
Gender (male=1)	-0.061	-0.020	-0.100	-0.110	-0.296	-0.251	-0.242	0.958
	(0.046)	(0.059)	(0.048)*	(0.042)**	(0.044)**	(0.042)**	(0.044)**	(0.143)**
Speaks Maya	0.120	-0.073	-0.025	-0.022	0.043	-0.159	-0.142	-0.145
	(0.071)	(0.079)	(0.069)	(0.058)	(0.061)	(0.060)**	(0.064)*	(0.140)
Reads/writes Spanish	-0.088	0.002	-0.035	-0.045	-0.051	-0.191	-0.094	0.086
	(0.072)	(0.080)	(0.064)	(0.054)	(0.053)	(0.051)**	(0.059)	(0.128)
Lives alone	0.103	-0.118	0.001	-0.059	-0.062	-0.025	-0.023	0.055
	(0.084)	(0.106)	(0.082)	(0.071)	(0.073)	(0.071)	(0.076)	(0.183)
household size	0.002	0.020	-0.001	-0.003	-0.008	-0.006	-0.004	-0.031
	(0.012)	(0.014)	(0.012)	(0.010)	(0.010)	(0.010)	(0.011)	(0.027)
Incomplete primary	0.002	0.096	-0.076	-0.084	0.068	0.092	-0.028	0.066
	(0.053)	(0.070)	(0.052)	(0.044)	(0.047)	(0.043)*	(0.048)	(0.117)
Primary	-0.368	0.387	-0.394	-0.284	0.019	-0.105	-0.195	0.266
	(0.086)**	(0.095)**	(0.081)**	(0.075)**	(0.075)	(0.069)	(0.077)*	(0.167)
Couple	0.094	0.263	0.288	0.280	0.179	0.072	-0.039	0.286
	(0.103)	(0.142)	(0.110)**	(0.095)**	(0.097)	(0.099)	(0.102)	(0.288)
Divorced/Separated	0.104	0.584	0.350	0.365	0.317	0.100	-0.210	-0.271
	(0.150)	(0.198)**	(0.159)*	(0.138)**	(0.145)*	(0.136)	(0.151)	(0.487)
Widow	0.064	0.347	0.163	0.193	0.114	0.131	-0.011	0.240
	(0.103)	(0.142)*	(0.108)	(0.093)*	(0.097)	(0.098)	(0.102)	(0.280)
Constant			-3.366					1.253
			(2.691)					(6.537)
Observations	3257	4011	4006	4003	4011	3769	4002	4008
F-test education	22.43	17.00	24.39	14.41	2.29	11.46	6.66	2.60
Prob>F	0.000	0.000	0.169	0.001	0.319	0.000	0.036	0.272
F-test age	1.210	8.035	3.552	4.038	28.980	70.328	79.440	1.849
Prob>F	0.546	0.018	0.000	0.133	0.000	0.003	0.000	0.397
age parabola min/max	83.125	81.065	86.866	85.392	78.344	102.754	116.677	93.282

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 6c: Treatment regressions

	Number of cigarettes in a day	Drink alcoholic beverages (yes-no [1-0])	Number of days a week drinks alcoholic beverages	Number of drinks per day	Visited a doctor (yes-no [1-0])	Number of doctor visits	Visited a folk healer (yes-no [1-0])	Number of folk healer visits
Wave	-1.949	0.376	0.136	0.947	0.226	0.175	-0.183	-0.148
	(1.793)	(0.091)**	(0.118)	(0.622)	(0.088)*	(0.082)*	(0.167)	(0.160)
Valladolid	0.905	0.120	-0.176	-1.178	0.185	0.161	-0.321	-0.320
	(1.097)	(0.065)	(0.080)*	(0.400)**	(0.061)**	(0.056)**	(0.115)**	(0.116)**
Valladolid wave 2	1.153	-0.521	-0.300	-1.740	0.212	0.177	-0.170	-0.180
	(1.577)	(0.077)**	(0.092)**	(0.561)**	(0.074)**	(0.065)**	(0.154)	(0.152)
Age	-0.313	-0.022	0.027	0.149	0.036	0.058	0.134	0.163
	(1.374)	(0.071)	(0.110)	(0.498)	(0.078)	(0.067)	(0.118)	(0.117)
Age squared	0.001	0.000	-0.000	-0.002	-0.000	-0.000	-0.001	-0.001
	(0.009)	(0.000)	(0.001)	(0.003)	(0.000)	(0.000)	(0.001)	(0.001)
Gender (male=1)	8.731	1.023	0.353	1.940	-0.199	-0.188	0.262	0.248
	(1.288)**	(0.049)**	(0.060)**	(0.303)**	(0.046)**	(0.042)**	(0.080)**	(0.080)**
Speaks Maya	-1.749	-0.242	-0.107	-0.612	0.130	0.144	-0.188	-0.145
	(1.266)	(0.073)**	(0.088)	(0.449)	(0.071)	(0.068)*	(0.123)	(0.117)
Reads/writes Spanish	0.721	0.101	0.178	0.897	0.093	0.075	-0.283	-0.276
	(1.356)	(0.067)	(0.085)*	(0.472)	(0.063)	(0.058)	(0.123)*	(0.121)*
Lives alone	1.129	0.061	-0.030	0.056	-0.103	-0.103	0.047	0.045
	(1.412)	(0.091)	(0.105)	(0.497)	(0.081)	(0.075)	(0.144)	(0.143)
household size	-0.245	-0.001	-0.031	-0.103	-0.007	-0.003	-0.026	-0.025
	(0.216)	(0.012)	(0.015)*	(0.074)	(0.011)	(0.011)	(0.022)	(0.022)
Incomplete primary	0.734	0.221	0.299	1.563	0.131	0.084	-0.097	-0.098
	(1.028)	(0.056)**	(0.072)**	(0.363)**	(0.051)*	(0.045)	(0.089)	(0.087)
Primary	3.384	0.282	0.500	2.244	0.223	0.213	-0.502	-0.499
	(1.313)**	(0.095)**	(0.103)**	(0.489)**	(0.081)**	(0.072)**	(0.169)**	(0.165)**
Couple	4.120	0.096	0.173	0.709	0.208	0.203	0.142	0.064
	(2.407)	(0.120)	(0.143)	(0.668)	(0.105)*	(0.100)*	(0.194)	(0.199)
Divorced/Separated	-1.020	0.294	0.156	0.532	-0.002	0.094	-0.237	-0.302

	(4.102)	(0.179)	(0.196)	(0.987)	(0.155)	(0.152)	(0.342)	(0.341)
Widow	3.834	0.099	0.156	0.495	0.270	0.245	0.160	0.079
	(2.435)	(0.118)	(0.142)	(0.673)	(0.105)*	(0.099)*	(0.189)	(0.193)
Constant	-11.433	0.861		-8.075	-1.719		-6.630	
	(55.267)	(2.895)		(20.001)	(3.149)		(4.802)	
Observations	4011	4010	3983	3992	4008	4004	4009	4009
F-test education	3.84	17.72	27.21	12.54	9.98	9.10	8.90	9.20
Prob>F	0.022	0.000	0.000	0.000	0.007	0.011	0.012	0.376
F-test age	1.240	16.148	20.111	15.241	11.411	20.246	1.314	1.954
Prob>F	0.289	0.000	0.000	0.000	0.003	0.000	0.519	0.010
age parabola min/max	122.058	310.743	41.954	42.270	60.073	64.665	81.912	81.949

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 6d: Treatment regressions

	Visited a dentist (yes-no [1-0])	Number of dentist visits	Outpatient procedures (yes-no [1-0])	Consulted a pharmacist (yes-no [1-0])	Bought no medicines because they are too expensive (yes-no [1-0])	Pay out-of-pocket (oop) medical cost or medication (yes-no [1-0])	Oop expenses paid by relatives (yes-no [1-0])
Wave	0.254	0.233	-0.023	-0.593	-0.515	-0.116	-0.076
	(0.141)	(0.140)	(0.231)	(0.138)**	(0.102)**	(0.089)	(0.112)
Valladolid	-0.116	-0.123	-0.014	-0.180	-0.136	-0.112	-0.369
	(0.092)	(0.090)	(0.160)	(0.100)	(0.068)*	(0.060)	(0.071)**
Valladolid wave 2	-0.149	-0.156	-0.157	0.112	-0.189	0.016	-0.406
	(0.121)	(0.117)	(0.244)	(0.137)	(0.093)*	(0.078)	(0.095)**
Age	-0.114	-0.105	-0.105	0.063	0.110	0.004	0.024
	(0.090)	(0.095)	(0.158)	(0.119)	(0.084)	(0.070)	(0.078)
Age squared	0.001	0.001	0.001	-0.000	-0.001	-0.000	-0.000

	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)
Gender (male=1)	-0.153	-0.143	0.063	0.003	-0.112	-0.151	-0.275
	(0.068)*	(0.067)*	(0.131)	(0.066)	(0.052)*	(0.044)**	(0.052)**
Speaks Maya	-0.020	-0.026	-0.207	-0.455	-0.251	-0.039	0.095
	(0.107)	(0.107)	(0.182)	(0.098)**	(0.076)**	(0.070)	(0.081)
Reads/writes Spanish	0.255	0.247	0.255	-0.109	-0.149	-0.002	-0.158
	(0.106)*	(0.104)*	(0.190)	(0.107)	(0.073)*	(0.064)	(0.075)*
Lives alone	0.182	0.182	-0.235	0.073	-0.049	-0.181	-0.214
	(0.125)	(0.124)	(0.244)	(0.116)	(0.095)	(0.078)*	(0.094)*
household size	-0.022	-0.018	-0.048	-0.022	0.017	-0.006	0.037
	(0.022)	(0.022)	(0.034)	(0.018)	(0.014)	(0.011)	(0.013)**
Incomplete primary	0.182	0.188	-0.233	-0.239	-0.145	0.067	0.065
	(0.078)*	(0.075)*	(0.139)	(0.081)**	(0.059)*	(0.051)	(0.061)
Primary	0.409	0.431	-0.030	-0.482	-0.119	0.154	-0.016
	(0.109)**	(0.104)**	(0.203)	(0.142)**	(0.093)	(0.076)*	(0.098)
Couple	0.111	0.125	4.179	0.065	0.003	-0.200	-0.406
	(0.152)	(0.147)	(6.527)	(0.146)	(0.108)	(0.099)*	(0.117)**
Divorced/Separated	0.215	0.230	4.107	-0.206	0.301	0.238	0.120
	(0.208)	(0.203)	(6.473)	(0.243)	(0.164)	(0.141)	(0.174)
Widow	-0.070	-0.044	4.014	-0.035	-0.094	-0.107	-0.043
	(0.151)	(0.147)	(6.497)	(0.145)	(0.106)	(0.098)	(0.115)
Constant	3.475		-2.111	-2.952	-4.315	0.028	-1.632
	(3.682)		(0.000)	(4.816)	(3.385)	(2.830)	(3.202)
Observations	4008	4006	4008	4003	4006	4007	4006
F-test education	14.21	17.18	3.23	14.73	6.06	4.29	1.58
Prob>F	0.001	0.000	0.199	0.381	0.048	0.117	0.453
F-test age	6.124	6.349	1.086	1.932	5.522	0.141	16.883
Prob>F	0.047	0.042	0.581	0.001	0.063	0.932	0.000
age parabola min/max	90.797	91.767	77.461	72.699	75.511	122.690	274.805

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth. The model for the number of outpatient procedures could not be estimated due to the few numbers of observations.

SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 6e: Treatment regressions

	Oop expenses paid by elderly eligible (yes-no [1-0])	Serious health problem but did not go to the doctor (yes-no[1-0])	Did not go to the doctor because of money (yes-no[1-0])	Relatives or friends pay your expenses (not true, sometimes true, often true, al	Feel a burden on your family or friends (not true, sometimes true, often true, a	Activities you used to do but can't do because of lack of money (yes-no[1-0])	Donation to the church but can't do due to money (yes-no[1-0])	Donation to local parties but can't do due to money (yes-no[1-0])
Wave	-0.091	-0.590	-0.655	0.109	-0.365	-0.500	-0.489	-0.563
	(0.101)	(0.121)**	(0.135)**	(0.076)	(0.147)*	(0.111)**	(0.216)*	(0.424)
Valladolid	0.188	-0.213	-0.123	-0.116	0.154	-0.272	-0.119	-0.125
	(0.069)**	(0.074)**	(0.085)	(0.057)*	(0.105)	(0.070)**	(0.144)	(0.209)
Valladolid wave 2	0.314	-0.046	-0.044	-0.039	0.381	0.013	0.082	-0.001
	(0.087)**	(0.112)	(0.133)	(0.065)	(0.150)*	(0.100)	(0.236)	(0.429)
Age	0.047	0.030	-0.015	0.101	0.042	-0.145	0.108	-0.033
	(0.074)	(0.085)	(0.102)	(0.065)	(0.118)	(0.077)	(0.230)	(0.234)
Age squared	-0.000	-0.000	0.000	-0.000	-0.000	0.001	-0.001	0.000
	(0.000)	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)	(0.001)
Gender (male=1)	0.100	-0.171	-0.211	-0.210	-0.018	0.017	-0.443	0.219
	(0.049)*	(0.058)**	(0.067)**	(0.039)**	(0.080)	(0.050)	(0.116)**	(0.189)
Speaks Maya	-0.183	-0.123	-0.201	0.155	-0.163	-0.041	-0.232	-0.208
	(0.077)*	(0.084)	(0.093)*	(0.064)*	(0.121)	(0.078)	(0.148)	(0.205)
Reads/writes Spanish	0.128	-0.196	-0.144	-0.013	-0.047	-0.038	0.010	0.072
	(0.074)	(0.083)*	(0.098)	(0.056)	(0.114)	(0.077)	(0.172)	(0.246)
Lives alone	0.030	0.040	-0.051	-0.154	0.264	-0.053	0.238	0.204
	(0.090)	(0.101)	(0.119)	(0.074)*	(0.132)*	(0.089)	(0.171)	(0.329)
household size	-0.043	-0.001	0.003	0.058	0.030	0.024	-0.021	0.022
	(0.015)**	(0.014)	(0.016)	(0.012)**	(0.019)	(0.014)	(0.030)	(0.042)
Incomplete primary	0.050	0.121	-0.009	-0.079	-0.033	0.046	0.107	-0.223
	(0.057)	(0.069)	(0.081)	(0.046)	(0.093)	(0.060)	(0.141)	(0.247)

Primary	0.196	-0.094	-0.325	-0.183	-0.341	-0.111	-0.253	-0.131
	(0.087)*	(0.109)	(0.146)*	(0.077)*	(0.142)*	(0.094)	(0.254)	(0.312)
Couple	0.158	0.202	0.211	-0.351	-0.318	0.142	0.120	-0.006
	(0.109)	(0.126)	(0.157)	(0.102)**	(0.156)*	(0.110)	(0.252)	(0.373)
Divorced/Separated	0.208	0.162	0.059	0.035	-0.454	0.211		
	(0.164)	(0.194)	(0.237)	(0.154)	(0.219)*	(0.169)		
Widow	-0.086	0.095	0.109	0.060	-0.265	0.082	0.074	-0.204
	(0.109)	(0.125)	(0.155)	(0.099)	(0.149)	(0.109)	(0.248)	(0.356)
Constant	-2.547	-1.400	0.056			5.944	-5.094	-0.847
	(3.029)	(3.463)	(4.119)			(3.133)	(9.198)	(9.640)
Observations	4006	3999	4011	3996	910	3254	3888	3888
F-test education	5.08	6.60	5.79	6.41	6.56	3.69	2.87	0.82
Prob>F	0.079	0.028	0.177	0.040	0.038	0.067	0.050	0.979
F-test age	10.789	7.180	3.464	33.478	0.125	5.414	6.005	0.043
Prob>F	0.005	0.037	0.055	0.000	0.939	0.158	0.238	0.664
age parabola min/max	63.497	57.648	263.470	101.446	82.065	85.106	65.703	86.508

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 6f: Treatment regressions

	Donation to family or friends parties but can't do due to money (yes-no[1-0])	Community activities but can't do due to money (yes-no[1-0])	Help out family members but can't do due to money (yes-no[1-0])	Help out non-relatives but can't do due to money (yes-no[1-0])	Travel to visit family or friends but can't do due to money (yes-no[1-0])	Sometimes do not have enough to eat (yes-no[1-0])	Often we do not have enough to eat (yes-no[1-0])	Sometimes or often we don't have enough to eat because of money (yes-no[1-0])
Wave	-0.181	-0.018	-0.175	-0.809	-0.465	-0.454	-0.445	0.149
	(0.210)	(0.284)	(0.118)	(0.233)**	(0.198)*	(0.099)**	(0.153)**	(0.100)
Valladolid	0.003	-0.479	-0.088	-0.208	-0.312	0.181	0.161	0.293

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	(0.122)	(0.187)*	(0.079)	(0.133)	(0.111)**	(0.071)*	(0.106)	(0.071)**
Valladolid wave 2	0.112	-0.235	0.134	0.160	-0.078	-0.060	0.242	0.084
	(0.216)	(0.284)	(0.108)	(0.235)	(0.194)	(0.093)	(0.154)	(0.089)
Age	-0.030	-0.071	-0.065	0.113	0.131	0.027	0.013	-0.001
	(0.182)	(0.153)	(0.083)	(0.184)	(0.143)	(0.090)	(0.105)	(0.086)
Age squared	0.000	0.000	0.000	-0.001	-0.001	-0.000	-0.000	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Gender (male=1)	-0.123	0.120	0.072	0.092	0.019	0.026	0.003	-0.017
	(0.106)	(0.118)	(0.053)	(0.098)	(0.081)	(0.039)	(0.058)	(0.038)
Speaks Maya	0.140	-0.278	-0.052	-0.265	-0.158	-0.196	-0.077	0.378
	(0.146)	(0.165)	(0.086)	(0.135)	(0.112)	(0.076)**	(0.113)	(0.080)**
Reads/writes Spanish	0.244	0.251	-0.062	-0.121	0.117	-0.174	-0.066	-0.014
	(0.140)	(0.189)	(0.084)	(0.153)	(0.119)	(0.070)*	(0.105)	(0.069)
Lives alone	0.345	0.193	-0.075	0.081	0.040	0.026	0.221	0.153
	(0.172)*	(0.205)	(0.100)	(0.169)	(0.145)	(0.085)	(0.124)	(0.083)
household size	0.056	0.012	0.015	-0.004	0.034	0.007	0.007	0.013
	(0.022)*	(0.027)	(0.014)	(0.027)	(0.019)	(0.015)	(0.020)	(0.014)
Incomplete primary	-0.217	0.012	0.025	0.017	0.002	-0.148	-0.209	-0.164
	(0.119)	(0.144)	(0.063)	(0.123)	(0.104)	(0.054)**	(0.090)*	(0.054)**
Primary	-0.072	-0.090	-0.280	-0.070	0.065	-0.568	-0.304	-0.481
	(0.166)	(0.214)	(0.106)**	(0.200)	(0.148)	(0.097)**	(0.134)*	(0.091)**
Couple	0.303	0.169	-0.013	-0.282	-0.058	-0.189	0.097	-0.103
	(0.284)	(0.280)	(0.121)	(0.172)	(0.161)	(0.117)	(0.160)	(0.105)
Divorced/Separated	0.412	0.192	0.057	0.033	0.157	-0.177	0.183	-0.034
	(0.347)	(0.388)	(0.202)	(0.260)	(0.233)	(0.156)	(0.232)	(0.147)
Widow	0.219	-0.039	-0.078	-0.320	-0.174	-0.308	-0.074	-0.243
	(0.282)	(0.275)	(0.119)	(0.177)	(0.164)	(0.113)**	(0.155)	(0.100)*
Constant	-0.372	1.512	2.218	-5.152	-6.108	-0.954	-2.137	-0.593
	(7.252)	(6.331)	(3.390)	(7.435)	(5.772)	(3.611)	(4.313)	(3.476)
Observations	4011	4011	4011	4011	4011	4011	4011	4011
F-test education	3.59	0.28	9.54	0.26	0.24	34.66	7.18	29.08
Prob>F	0.166	0.522	0.003	0.880	0.224	0.000	0.028	0.000
F-test age	7.748	1.300	11.858	3.360	2.993	2.893	0.022	4.034
Prob>F	0.021	0.869	0.008	0.186	0.885	0.235	0.989	0.133

age parabola min/max	436.586	96.270	106.636	71.660	75.200	63.343	78.910	-11.030

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 6g: Treatment regressions

	Often worried to run out of food last three months (never-always [1-4])	Run out of food and money not enough (never-always [1-4])	Skip or cut meals (never-always [1-4])	Often eat less than you felt you should (never-always [1-4])	Often hungry (never-always [1-4])	Not eat all day (never-always [1-4])	Food from charity (never-always [1-4])	Spend on food at home last week
Wave	-0.509	-0.371	-0.468	-0.382	-0.583	-0.491	-0.302	34.036
	(0.085)**	(0.088)**	(0.090)**	(0.091)**	(0.106)**	(0.122)**	(0.144)*	(24.454)
Valladolid	-0.001	-0.175	-0.082	-0.086	-0.213	-0.253	-0.207	-21.176
	(0.061)	(0.061)**	(0.063)	(0.062)	(0.070)**	(0.081)**	(0.112)	(15.137)
Valladolid wave 2	0.168	-0.233	-0.122	-0.195	-0.217	-0.427	-0.358	19.624
	(0.079)*	(0.083)**	(0.087)	(0.088)*	(0.103)*	(0.122)**	(0.162)*	(22.521)
Age	-0.134	-0.187	-0.118	-0.219	-0.217	-0.173	0.014	14.357
	(0.077)	(0.081)*	(0.085)	(0.074)**	(0.092)*	(0.109)	(0.118)	(18.337)
Age squared	0.001	0.001	0.001	0.001	0.001	0.001	-0.000	-0.090
	(0.000)	(0.001)*	(0.001)	(0.000)**	(0.001)*	(0.001)	(0.001)	(0.113)
Gender (male=1)	0.069	0.081	0.071	0.099	0.147	0.105	-0.002	-17.678
	(0.035)*	(0.036)*	(0.036)	(0.037)**	(0.044)**	(0.052)*	(0.067)	(11.733)
Speaks Maya	-0.130	-0.152	-0.083	-0.074	-0.135	-0.133	-0.313	13.314
	(0.066)*	(0.067)*	(0.069)	(0.071)	(0.075)	(0.084)	(0.111)**	(17.906)
Reads/writes Spanish	-0.153	-0.151	-0.219	-0.108	-0.151	-0.189	-0.177	23.641
	(0.062)*	(0.061)*	(0.063)**	(0.062)	(0.074)*	(0.081)*	(0.109)	(17.439)

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Lives alone	-0.060	-0.088	-0.103	-0.103	0.086	0.109	0.331	-134.979
	(0.075)	(0.077)	(0.079)	(0.080)	(0.091)	(0.101)	(0.137)*	(19.573)**
household size	0.014	-0.003	0.017	0.009	0.001	-0.009	-0.013	28.061
	(0.012)	(0.012)	(0.012)	(0.012)	(0.015)	(0.017)	(0.024)	(2.840)**
Incomplete primary	-0.148	-0.231	-0.110	-0.171	-0.185	-0.219	-0.106	34.847
	(0.050)**	(0.051)**	(0.053)*	(0.052)**	(0.062)**	(0.067)**	(0.098)	(13.666)*
Primary	-0.523	-0.669	-0.547	-0.664	-0.691	-0.519	-0.334	178.675
	(0.081)**	(0.090)**	(0.088)**	(0.087)**	(0.110)**	(0.119)**	(0.170)*	(20.287)**
Couple	0.170	0.102	0.000	0.056	0.003	-0.120	0.231	43.576
	(0.110)	(0.092)	(0.106)	(0.104)	(0.119)	(0.129)	(0.196)	(25.752)
Divorced/Separated	0.176	0.236	0.130	0.116	0.252	0.361	-0.164	69.720
	(0.155)	(0.153)	(0.167)	(0.166)	(0.161)	(0.178)*	(0.285)	(39.318)
Widow	0.129	0.035	-0.090	-0.054	-0.042	-0.172	0.132	75.805
	(0.108)	(0.088)	(0.103)	(0.100)	(0.111)	(0.123)	(0.176)	(25.796)**
Constant								-259.730
								(742.484)
Observations	3624	3624	3619	3623	3624	3625	3630	3041
F-test education	42.14	58.02	38.80	58.85	39.93	21.89	4.01	40.65
Prob>F	0.000	0.053	0.377	0.012	0.027	0.092	0.261	0.686
F-test age	4.422	5.860	1.952	8.889	7.188	4.782	2.685	0.377
Prob>F	0.110	0.000	0.000	0.000	0.000	0.000	0.135	0.000
age parabola min/max	78.486	82.407	80.578	81.181	83.306	84.744	434.251	79.375

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 6h: Treatment regressions

	Spend on food away from home	Total food	Received free food (yes-no [1-	Eat diary products: milk, cheese,	Eat eggs, beans or lentil (at	Eat meat, poultry or fish (at least	Eat fruit or vegetables (at least once a	Eat tortillas, bread, crackers or

			0])	yogurt (at least once a day, at least once a w	least once a day, at least once a week, several ti	once a day, at least once a week, several ti	day, at least once a week, several time	other cereals (at least once a day, at least o
Wave	-51.567	38.118	0.473	-0.042	0.294	0.132	-0.022	-0.601
	(125.097)	(36.006)	(0.130)**	(0.070)	(0.082)**	(0.080)	(0.073)	(0.146)**
Valladolid	-65.655	-35.839	-0.252	0.145	0.223	0.055	0.017	-0.199
	(79.183)	(22.292)	(0.091)**	(0.053)**	(0.058)**	(0.058)	(0.057)	(0.099)*
Valladolid wave 2	-356.556	11.244	-0.257	-0.045	0.005	-0.002	-0.001	0.102
	(119.377)**	(33.166)	(0.116)*	(0.059)	(0.071)	(0.069)	(0.066)	(0.146)
Age	103.863	15.354	0.187	-0.044	0.002	0.002	-0.054	0.046
	(102.730)	(26.994)	(0.103)	(0.074)	(0.056)	(0.061)	(0.066)	(0.087)
Age squared	-0.721	-0.100	-0.001	0.000	0.000	-0.000	0.000	-0.000
	(0.638)	(0.166)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)
Gender (male=1)	42.153	-22.273	0.038	0.280	-0.155	0.118	0.175	0.001
	(61.599)	(17.282)	(0.051)	(0.040)**	(0.036)**	(0.038)**	(0.036)**	(0.070)
Speaks Maya	136.874	26.699	0.196	0.245	0.109	0.256	0.113	-0.311
	(94.790)	(26.405)	(0.100)	(0.057)**	(0.066)	(0.065)**	(0.061)	(0.096)**
Reads/writes Spanish	-221.788	4.146	0.115	-0.300	0.080	-0.209	-0.184	-0.298
	(90.773)*	(25.690)	(0.088)	(0.054)**	(0.062)	(0.058)**	(0.057)**	(0.101)**
Lives alone	-2.564	-149.879	0.290	0.093	0.028	0.130	0.142	0.070
	(105.834)	(28.862)**	(0.103)**	(0.074)	(0.068)	(0.073)	(0.069)*	(0.119)
household size	6.258	30.389	-0.144	0.039	-0.024	-0.026	0.012	-0.008
	(14.500)	(4.179)**	(0.026)**	(0.010)**	(0.010)*	(0.009)**	(0.010)	(0.019)
Incomplete primary	123.515	54.544	-0.140	-0.191	0.066	-0.105	-0.188	-0.128
	(73.877)	(20.114)**	(0.069)*	(0.045)**	(0.045)	(0.043)*	(0.042)**	(0.080)
Primary	538.477	257.247	-0.233	-0.568	0.047	-0.403	-0.564	-0.098
	(100.552)**	(29.959)**	(0.111)*	(0.078)**	(0.064)	(0.071)**	(0.073)**	(0.125)
Couple	-102.796	52.529	-0.160	0.015	-0.044	0.027	0.056	0.027
	(126.459)	(38.145)	(0.141)	(0.097)	(0.097)	(0.103)	(0.093)	(0.145)
Divorced/Separated	-233.247	60.656	-0.061	-0.049	0.088	-0.056	-0.013	0.270
	(210.026)	(57.987)	(0.188)	(0.142)	(0.140)	(0.140)	(0.128)	(0.208)
Widow	-146.154	73.970	-0.084	-0.151	0.024	-0.030	-0.014	0.006
	(127.049)	(38.214)	(0.133)	(0.098)	(0.094)	(0.102)	(0.092)	(0.146)
Constant	-4,939.638	-251.117	-8.399					

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	(4,132.779)	(1,093.175)	(4.203)*					
Observations	3929	3028	3621	4002	4000	4002	4002	4003
F-test education	15.45	38.17	6.08	55.76	2.13	32.17	62.09	2.56
Prob>F	0.000	0.689	0.048	0.000	0.346	0.891	0.668	0.488
F-test age	3.649	0.372	4.414	14.328	2.874	0.231	0.806	1.435
Prob>F	0.026	0.000	0.110	0.001	0.238	0.000	0.000	0.278
age parabola min/max	71.992	76.956	84.281	115.006	-49.100	43.519	83.339	94.516

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 6i: Treatment regressions

	Worked for pay last month (yes-no [1-0])	Immediate recall (number of words)	Delayed recall (number of words)	Feel fear someone robbing you (never, sometimes, usually, always [1-4])	Feel fear someone close to you will take your money (never, sometimes, usually,	Money in a safe place (yes-no [1-0])	Feel verbally or physically abused (never, sometimes, usually, always [1-4])
Wave	-0.017	-0.020	0.063	-0.340	-0.211	-0.174	-0.140
	(0.101)	(0.064)	(0.071)	(0.093)**	(0.122)	(0.261)	(0.126)
Valladolid	-0.125	0.077	0.105	-0.214	-0.136	-0.276	-0.109
	(0.075)	(0.049)	(0.050)*	(0.065)**	(0.076)	(0.151)	(0.087)
Valladolid wave 2	-0.225	0.159	0.282	0.059	0.157	-0.033	-0.017
	(0.080)**	(0.057)**	(0.060)**	(0.085)	(0.108)	(0.228)	(0.125)
Age	-0.180	-0.007	-0.087	-0.060	-0.041	0.214	0.015
	(0.110)	(0.071)	(0.066)	(0.091)	(0.114)	(0.214)	(0.106)
Age squared	0.001	-0.000	0.000	0.000	0.000	-0.001	-0.000
	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)
Gender (male=1)	1.030	-0.310	-0.308	-0.150	-0.130	-0.105	-0.197
	(0.072)**	(0.038)**	(0.039)**	(0.046)**	(0.057)*	(0.108)	(0.070)**
Speaks Maya	-0.001	-0.198	-0.122	-0.088	-0.006	-0.153	-0.136

(0.087)	(0.053)**	(0.058)*	(0.070)	(0.089)	(0.162)	(0.098)
Reads/writes Spanish -0.126	0.283	0.250	-0.078	0.030	0.129	0.052
(0.078)	(0.051)**	(0.052)**	(0.070)	(0.085)	(0.160)	(0.101)
Lives alone 0.234	0.008	-0.070	0.041	0.162	0.142	0.260
(0.113)*	(0.066)	(0.067)	(0.083)	(0.097)	(0.179)	(0.110)*
household size -0.005	-0.022	-0.021	-0.029	-0.014	-0.033	0.028
(0.017)	(0.010)*	(0.010)*	(0.013)*	(0.015)	(0.035)	(0.018)
Incomplete primary 0.042	0.302	0.290	0.059	-0.023	0.051	0.085
(0.070)	(0.044)**	(0.045)**	(0.055)	(0.062)	(0.126)	(0.080)
Primary 0.053	0.745	0.637	0.048	-0.264	-0.216	-0.154
(0.111)	(0.073)**	(0.073)**	(0.083)	(0.105)*	(0.208)	(0.124)
Couple -0.263	0.053	0.016	0.042	-0.043	-0.263	0.147
(0.139)	(0.089)	(0.094)	(0.121)	(0.119)	(0.185)	(0.153)
Divorced/Separated -0.099	0.052	-0.080	-0.066	-0.143	-0.647	0.450
(0.203)	(0.127)	(0.127)	(0.174)	(0.177)	(0.402)	(0.201)*
Widow -0.398	-0.195	-0.181	-0.006	-0.143	-0.271	0.040
(0.138)**	(0.088)*	(0.093)	(0.121)	(0.119)	(0.181)	(0.152)
Constant 8.168					-10.177	
(4.391)					(8.593)	
Observations 4006	4011	4011	3253	3251	3250	3253
F-test education 0.41	111.05	85.44	1.16	6.92	2.05	5.01
Prob>F 0.813	0.000	0.000	0.559	0.325	0.359	0.082
F-test age 93.268	170.094	164.673	3.420	2.250	2.399	0.154
Prob>F 0.000	0.000	0.000	0.181	0.031	0.301	0.926
age parabola min/max 116.606	-15.407	169.817	71.979	68.310	84.657	70.739

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 7a: Interaction Effects

Self-reported health	Subjective mortality	Feel sad, blue or depressed	Satisfied relation fam.	Satisfied hh income (very	Satisfied social	Satisfied with job (very	Satisfied with health (very

	(excellent, very good, good, fair, poor [1-5])	expectation (chances to leave at least 10 years more [1-100	for 2 weeks or more during the last 3 months (yes-no	members (very satisfied-very unsatisfied [1-5])	satisfied-very unsatisfied [1-5])	contacts (very satisfied-very unsatisfied [1-5])	satisfied-very unsatisfied [1-5])	satisfied-very unsatisfied [1-5])
Wave	-0.412	0.414	-0.531	-0.183	-0.252	-0.145	-0.267	-0.085
	(0.076)**	(2.414)	(0.098)**	(0.086)*	(0.084)**	(0.093)	(0.084)**	(0.082)
Valladolid	0.144	-4.375	-0.209	-0.001	0.032	-0.017	-0.017	0.044
	(0.055)**	(1.577)**	(0.067)**	(0.063)	(0.062)	(0.065)	(0.062)	(0.059)
Valladolid wave 2	0.121	-2.242	-0.015	0.077	-0.076	0.111	0.150	-0.124
	(0.083)	(2.916)	(0.112)	(0.100)	(0.096)	(0.108)	(0.100)	(0.093)
Effect for income quartile 1	0.097	-1.592	0.013	0.187	0.104	0.199	0.063	0.061
	(0.108)	(4.061)	(0.141)	(0.123)	(0.118)	(0.130)	(0.124)	(0.109)
Effect for income quartile 2	0.084	-4.999	0.028	-0.146	0.015	-0.022	-0.045	0.081
	(0.115)	(3.623)	(0.148)	(0.134)	(0.124)	(0.126)	(0.127)	(0.120)
Effect for income quartile 3	0.079	3.148	-0.163	-0.043	-0.026	-0.053	-0.247	0.036
	(0.118)	(3.988)	(0.154)	(0.136)	(0.136)	(0.128)	(0.142)	(0.122)
Effect for income quartile 4	0.078	-1.673	0.041	0.042	0.161	0.108	-0.022	0.247
	(0.113)	(3.589)	(0.152)	(0.139)	(0.129)	(0.132)	(0.128)	(0.124)*
Effect on males	-0.061	0.616	-0.048	0.009	-0.065	-0.148	-0.085	-0.114
	(0.076)	(2.521)	(0.098)	(0.089)	(0.085)	(0.087)	(0.085)	(0.081)
Constant		308.603	-3.506					
		(78.959)**	(3.250)					
Observations	4007	2405	3271	3258	3253	3248	3257	3261
F-test SES	0.03	1.13	1.76	5.08	2.04	3.91	4.09	2.75

interactions

Prob>F	0.999	0.336	0.623	0.166	0.563	0.271	0.252	0.433
R-squared		0.03						

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.

SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 7b: Interaction Effects

	Satisfied life in general (very satisfied-very unsatisfied [1-5])	Number of acute conditions	Often pain (yes-no [1-0])	How strong is the pain (mild, moderate, severe [1-3])	Number of chronic conditions	Number of ADL's	Number of IADL's	Smokes now (yes-no [1-0])
Wave	-0.164	-0.144	-0.327	-0.273	-0.044	-0.424	-0.367	-0.103
	(0.093)	(0.100)	(0.084)**	(0.072)**	(0.070)	(0.067)**	(0.078)**	(0.139)
Valladolid	0.045	-0.061	-0.023	-0.078	0.147	0.081	-0.070	0.007
	(0.066)	(0.072)	(0.062)	(0.053)	(0.053)**	(0.051)	(0.056)	(0.123)
Valladolid wave 2	-0.074	-0.151	0.195	0.014	-0.026	0.075	0.128	-0.052
	(0.103)	(0.119)	(0.097)*	(0.082)	(0.072)	(0.072)	(0.089)	(0.208)
Effect for income quartile 1	0.176	0.065	0.105	0.125	0.155	-0.018	-0.035	0.040
	(0.119)	(0.154)	(0.128)	(0.108)	(0.095)	(0.094)	(0.107)	(0.240)
Effect for income quartile 2	0.004	0.061	0.123	0.102	0.018	0.067	-0.206	0.323
	(0.120)	(0.156)	(0.128)	(0.103)	(0.104)	(0.095)	(0.119)	(0.237)

	Number of cigarettes in a day	Drink alcoholic beverages (yes-no [1-0])	Number of days a week drinks alcoholic beverages	Number of drinks per day	Visited a doctor (yes-no [1-0])	Number of doctor visits	Visited a folk healer (yes-no [1-0])	Number of folk healer visits
Effect for income quartile 3	0.028	0.036	-0.122	-0.080	-0.066	-0.240	-0.148	0.057
	(0.126)	(0.175)	(0.138)	(0.117)	(0.120)	(0.104)*	(0.126)	(0.277)
Effect for income quartile 4	0.189	0.018	0.091	0.118	-0.027	0.004	-0.237	0.097
	(0.137)	(0.173)	(0.131)	(0.114)	(0.111)	(0.103)	(0.125)	(0.226)
Effect on males	-0.106	-0.048	-0.111	-0.072	0.061	-0.063	-0.017	0.024
	(0.088)	(0.108)	(0.089)	(0.074)	(0.071)	(0.069)	(0.081)	(0.177)
Constant			-3.151					1.010
			(2.671)					(6.575)
Observations	3257	4011	4006	4003	4011	3769	4002	4008
F-test SES interactions	2.74	0.08	3.09	3.13	3.72	7.52	2.75	1.50
Prob>F	0.433	0.994	0.378	0.372	0.293	0.057	0.432	0.682

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 7c: Interaction Effects

	Number of cigarettes in a day	Drink alcoholic beverages (yes-no [1-0])	Number of days a week drinks alcoholic beverages	Number of drinks per day	Visited a doctor (yes-no [1-0])	Number of doctor visits	Visited a folk healer (yes-no [1-0])	Number of folk healer visits
Wave	-1.906	0.371	0.141	0.970	0.220	0.166	-0.216	-0.187
	(1.800)	(0.092)**	(0.120)	(0.622)	(0.089)*	(0.083)*	(0.168)	(0.162)
Valladolid	0.923	0.101	-0.161	-1.152	0.150	0.132	-0.336	-0.333
	(1.103)	(0.065)	(0.080)*	(0.403)**	(0.061)*	(0.057)*	(0.116)**	(0.116)**

Valladolid wave 2	0.392	-0.411	-0.272	-1.239	0.249	0.208	0.083	0.082
	(2.761)	(0.098)**	(0.136)*	(0.758)	(0.097)*	(0.084)*	(0.192)	(0.190)
Effect for income quartile 1	1.062	-0.237	-0.090	-1.192	0.063	0.057	-0.107	-0.065
	(2.799)	(0.122)	(0.157)	(0.907)	(0.121)	(0.106)	(0.226)	(0.225)
Effect for income quartile 2	2.731	-0.106	-0.011	0.055	-0.108	-0.057	-0.220	-0.189
	(2.831)	(0.125)	(0.177)	(0.961)	(0.126)	(0.107)	(0.229)	(0.226)
Effect for income quartile 3	1.008	-0.124	0.040	-0.210	-0.316	-0.234	-0.288	-0.274
	(2.787)	(0.143)	(0.185)	(1.022)	(0.140)*	(0.127)	(0.257)	(0.250)
Effect for income quartile 4	1.433	-0.175	-0.046	-0.812	-0.012	-0.020	-0.535	-0.490
	(2.427)	(0.138)	(0.172)	(0.905)	(0.140)	(0.118)	(0.276)	(0.273)
Effect on males	-0.300	-0.026	-0.012	-0.204	0.028	0.012	-0.178	-0.245
	(2.394)	(0.086)	(0.116)	(0.646)	(0.087)	(0.075)	(0.167)	(0.162)
Constant	-13.057	0.707		-11.657	-2.314		-6.558	
	(55.302)	(2.907)		(20.140)	(3.191)		(4.748)	
Observations	4011	4010	3983	3992	4008	4004	4009	4009
F-test SES interactions	0.13	0.96	0.47	0.55	6.44	4.64	1.90	1.97
Prob>F	0.945	0.811	0.926	0.651	0.092	0.200	0.594	0.579

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 7d: Interaction Effects

	Visited a dentist (yes-no [1-0])	Number of dentist visits	Outpatient procedures (yes-no [1-0])	Consulted a pharmacist (yes-no [1-0])	Bought no medicines because they are too expensive (yes-no [1-0])	Pay out-of-pocket (oop) medical cost or medication (yes-no [1-0])	Oop expenses paid by relatives (yes-no [1-0])
Wave	0.243	0.215	-0.017	-0.612	-0.513	-0.121	-0.064
	(0.143)	(0.142)	(0.234)	(0.140)**	(0.103)**	(0.089)	(0.113)
Valladolid	-0.150	-0.155	-0.044	-0.204	-0.151	-0.118	-0.349
	(0.093)	(0.092)	(0.163)	(0.102)*	(0.069)*	(0.061)	(0.072)**
Valladolid wave 2	-0.269	-0.253	0.274	0.318	-0.088	0.162	-0.376
	(0.155)	(0.151)	(0.326)	(0.178)	(0.123)	(0.099)	(0.117)**
Effect for income quartile 1	0.084	0.091	-0.698	-0.075	-0.094	-0.163	-0.021
	(0.203)	(0.199)	(0.449)	(0.200)	(0.159)	(0.126)	(0.149)
Effect for income quartile 2	0.277	0.296	-0.737	-0.046	0.074	-0.221	-0.151
	(0.219)	(0.214)	(0.449)	(0.190)	(0.155)	(0.127)	(0.151)
Effect for income quartile 3	0.374	0.348	-0.719	-0.788	0.041	-0.363	-0.166
	(0.189)*	(0.181)	(0.443)	(0.303)**	(0.183)	(0.145)*	(0.175)
Effect for income quartile 4	0.259	0.274	-0.390	-0.488	0.067	-0.052	-0.063
	(0.196)	(0.186)	(0.481)	(0.288)	(0.187)	(0.133)	(0.166)
Effect on males	-0.093	-0.143	0.020	-0.162	-0.286	-0.061	0.038
	(0.131)	(0.125)	(0.275)	(0.142)	(0.108)**	(0.084)	(0.106)
Constant	3.020		-1.461	-2.901	-4.387	0.021	-1.443

	(3.620)		(6.637)	(4.995)	(3.386)	(2.829)	(3.214)
Observations	4008	4006	4008	4003	4006	4007	4006
F-test SES interactions	1.58	1.40	0.54	7.14	1.04	3.60	0.85
Prob>F	0.664	0.704	0.909	0.068	0.791	0.308	0.839

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth. The model for the number of outpatient procedures could not be estimated due to the few numbers of observations.

SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 7e: Interaction Effects

	Oop expenses paid by elderly eligible (yes-no [1-0])	Serious health problem but did not go to the doctor (yes-no[1-0])	Did not go to the doctor because of money (yes-no[1-0])	Relatives or friends pay your expenses (not true, sometimes true, often true, al	Feel a burden on your family or friends (not true, sometimes true, often true, a	Activities you used to do but can't do because of lack of money (yes-no[1-0])	Donation to the church but can't do due to money (yes-no[1-0])	Donation to family or friends parties but can't do due to money (yes-no[1-0])
Wave	-0.108	-0.577	-0.639	0.130	-0.375	-0.482	-0.477	-0.158
	(0.102)	(0.122)**	(0.136)**	(0.077)	(0.147)*	(0.111)**	(0.219)*	(0.208)
Valladolid	0.162	-0.224	-0.129	-0.081	0.151	-0.276	-0.124	-0.020
	(0.070)*	(0.075)**	(0.087)	(0.057)	(0.106)	(0.070)**	(0.145)	(0.123)
Valladolid wave 2	0.465	-0.036	0.109	-0.142	0.386	-0.068	-0.036	0.324
	(0.116)**	(0.145)	(0.168)	(0.089)	(0.197)*	(0.133)	(0.288)	(0.280)
Effect for income quartile 1	-0.099	-0.155	-0.383	0.073	0.185	-0.007	0.434	-0.487
	(0.145)	(0.187)	(0.222)	(0.117)	(0.232)	(0.156)	(0.318)	(0.341)
Effect for income quartile 2	-0.140	-0.033	-0.220	0.131	-0.033	0.146		-0.063

	(0.148)	(0.175)	(0.223)	(0.120)	(0.260)	(0.157)		(0.337)
Effect for income quartile 3	-0.249	-0.149	-0.248	0.305	0.119	0.103	0.056	-0.557
	(0.162)	(0.218)	(0.271)	(0.127)*	(0.280)	(0.171)	(0.387)	(0.435)
Effect for income quartile 4	-0.020	0.124	0.373	0.087	0.194	0.201	0.766	-0.374
	(0.144)	(0.195)	(0.233)	(0.127)	(0.277)	(0.162)	(0.442)	(0.423)
Effect on males	-0.151	0.042	-0.163	0.035	-0.170	0.018	-0.233	0.007
	(0.096)	(0.122)	(0.153)	(0.075)	(0.173)	(0.107)	(0.310)	(0.245)
Constant	-2.961	-1.095	0.425			5.921	-5.818	-0.399
	(3.001)	(3.465)	(4.125)			(3.136)	(9.211)	(7.383)
Observations	4006	3999	4011	3996	910	3254	3702	4011
F-test SES interactions	1.67	1.91	8.93	3.23	0.75	1.45	2.31	1.68
Prob>F	0.643	0.592	0.030	0.357	0.861	0.694	0.315	0.641

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 7f: Interaction Effects

	Community activities but can't do due to money (yes-no[1-0])	Help out family members but can't do due to money (yes-no[1-0])	Help out non-relatives but can't do due to money (yes-no[1-0])	Travel to visit family or friends but can't do due to money (yes-no[1-0])	Sometimes do not have enough to eat (yes-no[1-0])	Often we do not have enough to eat (yes-no[1-0])	Sometimes or often we don't have enough to eat because of money (yes-no[1-0])	Often worried to run out of food last three months (never-always [1-4])
Wave	-0.025	-0.157	-0.783	-0.455	-0.459	-0.440	0.157	-0.511
	(0.293)	(0.119)	(0.231)**	(0.196)*	(0.100)**	(0.154)**	(0.100)	(0.086)**
Valladolid	-0.535	-0.094	-0.187	-0.287	0.170	0.199	0.299	-0.009

	(0.199)**	(0.079)	(0.129)	(0.112)*	(0.071)*	(0.107)	(0.071)**	(0.061)
Valladolid wave 2	-0.284	-0.055	0.035	0.047	0.041	0.422	0.153	0.252
	(0.362)	(0.135)	(0.286)	(0.239)	(0.119)	(0.190)*	(0.115)	(0.103)*
Effect for income quartile 1	-0.019	0.267	-0.455	-0.331	0.016	-0.305	-0.013	-0.028
	(0.445)	(0.160)	(0.414)	(0.278)	(0.142)	(0.221)	(0.137)	(0.127)
Effect for income quartile 2	0.473	0.155	0.396	-0.083	-0.018	-0.050	0.088	-0.033
	(0.340)	(0.160)	(0.305)	(0.284)	(0.146)	(0.231)	(0.141)	(0.131)
Effect for income quartile 3	-0.388	0.303	0.210	0.006	0.046	0.040	0.119	-0.071
	(0.448)	(0.177)	(0.373)	(0.344)	(0.168)	(0.266)	(0.163)	(0.136)
Effect for income quartile 4	0.519	0.438	0.133	0.187	-0.178	-0.127	-0.074	-0.187
	(0.444)	(0.175)*	(0.426)	(0.257)	(0.179)	(0.301)	(0.170)	(0.135)
Effect on males	-0.035	0.009	0.077	-0.150	-0.199	-0.170	-0.202	-0.084
	(0.268)	(0.111)	(0.232)	(0.177)	(0.086)*	(0.132)	(0.084)*	(0.072)
Constant	1.904	2.320	-5.722	-6.448	-0.939	-1.869	-0.459	
	(6.705)	(3.426)	(7.638)	(5.938)	(3.635)	(4.393)	(3.484)	
Observations	4011	4011	4011	4011	4011	4011	4011	3624
F-test SES interactions	4.36	2.23	3.88	3.05	1.34	1.75	1.37	1.38
Prob>F	0.225	0.526	0.275	0.383	0.721	0.626	0.713	0.710

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 7g: Interaction Effects

	Run out of food and money not enough (never-always [1-4])	Skip or cut meals (never-always [1-4])	Often eat less than you felt you should (never-always [1-4])	Often hungry (never-always [1-4])	Not eat all day (never-always [1-4])	Food from charity (never-always [1-4])	Spend on food at home last week	Spend on food away from home
Wave	-0.374	-0.474	-0.379	-0.582	-0.483	-0.300	37.466	-21.925
	(0.088)**	(0.091)**	(0.091)**	(0.107)**	(0.123)**	(0.145)*	(23.899)	(125.735)
Valladolid	-0.180	-0.099	-0.091	-0.185	-0.242	-0.237	-23.690	-56.710
	(0.062)**	(0.063)	(0.062)	(0.071)**	(0.081)**	(0.110)*	(14.871)	(79.549)
Valladolid wave 2	-0.081	0.011	-0.105	-0.095	-0.457	-0.432	-3.455	-272.769
	(0.106)	(0.111)	(0.115)	(0.132)	(0.171)**	(0.216)*	(28.510)	(162.934)
Effect for income quartile 1	-0.085	-0.124	-0.092	-0.173	0.072	0.218	-9.592	-83.965
	(0.139)	(0.144)	(0.142)	(0.170)	(0.207)	(0.280)	(36.313)	(202.370)
Effect for income quartile 2	-0.082	0.008	-0.033	0.245	0.329	0.017	-4.040	-361.818
	(0.140)	(0.138)	(0.151)	(0.164)	(0.203)	(0.240)	(36.759)	(275.611)
Effect for income quartile 3	-0.048	-0.118	0.028	-0.018	0.034	0.254	-4.023	-16.272
	(0.156)	(0.151)	(0.155)	(0.185)	(0.229)	(0.296)	(39.585)	(241.070)
Effect for income quartile 4	-0.170	-0.308	-0.171	-0.057	-0.199	0.220	18.048	54.166
	(0.149)	(0.152)*	(0.160)	(0.205)	(0.284)	(0.294)	(37.711)	(196.711)
Effect on males	-0.226	-0.130	-0.117	-0.277	-0.098	-0.120	44.613	-85.944
	(0.079)**	(0.083)	(0.084)	(0.100)**	(0.131)	(0.157)	(25.642)	(149.858)
Constant							-177.757	-5,271.540

							(725.804)	(4,106.503)
Observations	3624	3619	3623	3624	3625	3630	3041	3929
F-test SES interactions	0.52	3.63	1.34	5.08	4.11	0.92	0.16	0.70
Prob>F	0.915	0.304	0.720	0.166	0.250	0.821	0.925	0.550

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 7h: Interaction Effects

	Total food	Received free food (yes-no [1-0])	Eat diary products: milk, cheese, yogurt (at least once a day, at least once a w	Eat eggs, beans or lentil (at least once a day, at least once a week, several ti	Eat meat, poultry or fish (at least once a day, at least once a week, several ti	Eat fruit or vegetables (at least once a day, at least once a week, several time	Eat tortillas, bread, crackers or other cereals (at least once a day, at least o	Worked for pay last month (yes-no [1-0])
Wave	43.527	0.478	-0.041	0.299	0.153	-0.007	-0.604	-0.021
	(35.410)	(0.131)**	(0.070)	(0.082)**	(0.081)	(0.074)	(0.146)**	(0.109)
Valladolid	-37.403	-0.268	0.149	0.230	0.068	0.023	-0.190	-0.221
	(22.051)	(0.093)**	(0.054)**	(0.059)**	(0.058)	(0.057)	(0.099)	(0.080)**
Valladolid wave 2	-1.245	-0.078	-0.026	-0.036	-0.165	-0.001	0.273	0.371
	(42.238)	(0.151)	(0.078)	(0.088)	(0.086)	(0.084)	(0.178)	(0.192)
Effect for income quartile 1	-26.461	-0.175	-0.100	0.047	0.208	-0.067	-0.319	-0.658
	(53.780)	(0.180)	(0.103)	(0.110)	(0.104)*	(0.102)	(0.219)	(0.200)**
Effect for income quartile 2	-32.000	-0.228	0.102	0.068	0.234	0.012	-0.346	-0.688
	(54.428)	(0.188)	(0.099)	(0.107)	(0.106)*	(0.105)	(0.224)	(0.196)**

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Effect for income quartile 3	-40.135	-0.202	-0.028	0.066	0.222	0.211	-0.045	-0.167
	(58.787)	(0.209)	(0.120)	(0.125)	(0.121)	(0.114)	(0.222)	(0.192)
Effect for income quartile 4	30.434	-0.478	-0.176	0.178	0.381	0.170	-0.274	-0.433
	(56.039)	(0.218)*	(0.110)	(0.115)	(0.117)**	(0.118)	(0.246)	(0.182)*
Effect on males	41.973	-0.053	0.018	-0.028	-0.003	-0.098	-0.065	-0.313
	(38.033)	(0.109)	(0.068)	(0.073)	(0.072)	(0.069)	(0.148)	(0.125)*
Constant	-166.936	-9.096						5.513
	(1,075.353)	(4.274)*						(4.754)
Observations	3028	3621	4002	4000	4002	4002	4003	4006
F-test SES interactions	0.48	1.93	5.89	1.24	2.06	6.37	1.76	10.15
Prob>F	0.694	0.586	0.117	0.743	0.559	0.095	0.624	0.017

NOTE: We do not show in this table all the control variables included in the regressions. The reference categories for the control variables are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, single, and the missing category for respondent income and wealth.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.

** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 8.- Pre-treatment Characteristics of Treatment and Control Towns

Variable	Treatment Town (Valladolid)	Control Town (Motul)
Illiterate population 15 years old or above (%)	10.95	11.23
Population 15 years old or above with incomplete primary	27.34	34.46
Households without sewage	9.60	23.76

or toilet (%)		
Households without electricity (%)	2.15	2.82
Households without piped water (%)	5.77	10.29
Households with floor of earth (%)	3.63	2.96
Households without fridge (%)	24.98	28.39
Level of poverty	Low	Medium
Poverty index	-1.10	-0.92
Inhabitants	45,868	21,508

NOTE: Estimations conducted by the Mexican National Population Council (CONAPO) based on the 2005 Mexican Census, INEGI, Mexico, 2005.
SOURCE: CONAPO (2005).

Table 9.- Difference-in-Differences using Parametric and Non-Parametric Methods

Variable (verbal scale [numeric codes])	Dif-in-dif of the means	Dif-in-dif Regressions	Dif-in-dif propensity score matching
Self-reported health (excellent, very good, good, fair, poor [1-5])	0.086 (0.037)**	0.085 (0.0037)*	0.104 (0.042)**
Subjective mortality expectation (chances to live at least 10 years more [0-100])	1.010 (2.380)	-3.107 (2.219)	0.306 (2.489)
Feel sad, blue or depressed for 2 weeks more during the past 3 months (yes-no[1-0])	-0.024 (0.033)	-0.018 (0.034)	-0.005 (0.033)
Satisfied relation fam. members (very satisfied-very dissatisfied [1-5])	0.037 (0.041)	0.046 (0.041)	0.015 (0.043)
Satisfied hh income(very satisfied-very dissatisfied [1-5])	-0.074 (0.052)	-0.049 (0.053)	-0.073 (0.056)*
Satisfied social contacts (very satisfied-very dissatisfied [1-5])	0.012 (0.043)	0.031 (0.044)	0.005 (0.047)
Satisfied with job (very satisfied-very dissatisfied [1-5])	0.002 (0.044)	0.021 (0.045)	0.018 (0.047)
Satisfied with health (very satisfied-very dissatisfied [1-5])	-0.095 (0.050)*	-0.092 (0.051)	-0.055 (0.052)
Satisfied life in general (very satisfied-very dissatisfied [1-5])	-0.041 (0.041)	-0.044 (0.041)	-0.027 (0.041)

Number of acute conditions	-0.039	-0.035	-0.027
	(0.019)**	(0.020)	(0.021)*
Often Pain (yes-no[1-0])	0.067	0.070	0.076
	(0.026)**	(0.027)*	(0.027)**
How strong is the pain (mild, moderate, severe [1,2,3])	0.003	0.012	0.031
	(0.060)	(0.061)	(0.061)
Number of chronic conditions	0.025	0.028	0.025
	(0.044)	(0.046)	(0.048)
Number of ADL's	-0.177	0.139	-0.152
	(0.164)	(0.171)	(0.171)
Number of IADL's	0.004	0.018	0.000
	(0.051)	(0.052)	(0.054)
Smoke now (yes-no [1-0])	0.004	0.004	0.002
	(0.006)	(0.006)	(0.006)
Number of cigarettes in a day	0.065	0.068	0.069
	(0.033)**	(0.035)	(0.033)**
Drink alcoholic beverages (yes-no[1-0])	-0.161	-0.161	-0.159
	(0.024)**	(0.025)**	(0.026)**
Number of days a week drinks alcoholic beverages	-0.052	-0.075	-0.063
	(0.036)	(0.042)	(0.034)**
Number of drinks per day	-0.138	-0.135	-0.125
	(0.060)**	(0.063)	(0.058)**
Visited doctor (yes-no[1-0])	0.088	0.083	0.082
	(0.027)**	(0.029)**	(0.029)**
Number of doctor visits	0.286	0.274	0.295
	(0.112)**	(0.115)*	(0.121)**
Visited a folk healer (yes-no[1-0])	-0.017	-0.013	-0.015

	(0.011)	(0.011)	(0.011)*
Number of folk healer visits	-0.044	-0.034	-0.029
	(0.030)	(0.030)	(0.030)
Visited a dentist (yes-no[1-0])	-0.015	-0.017	-0.022
	(0.015)	(0.016)	(0.015)*
Number of dentist visits	-0.050	-0.059	-0.066
	(0.039)	(0.040)	(0.041)*
Outpatient procedures (yes-no[1-0])	-0.003	-0.004	-0.003
	(0.006)	(0.006)	(0.007)
Number of outpatient procedures (ambulatory surgery)	-0.007	-0.004	-0.007
	(0.010)	(0.006)	(0.010)
Consulted a pharmacist (yes-no[1-0])	-0.001	0.004	-0.002
	(0.014)	(0.014)	(0.015)
Bought no medicines because they are too expensive (yes-no[1-0])	-0.060	-0.051	-0.049
	(0.022)**	(0.023)	(0.022)**
Pay out-of-pocket (oop) medical cost or medications (yes-no[1-0])	0.006	0.006	0.003
	(0.028)	(0.030)	(0.030)
OOP expenses paid by relatives (yes-no[1-0])	-0.111	-0.110	-0.106
	(0.022)**	(0.023)**	(0.025)**
OOP expenses paid by elderly eligible (yes-no[1-0])	0.085	0.086	0.083
	(0.024)**	(0.025)**	(0.026)**
Serious health problem but did not go to the doctor (yes-no[1-0])	-0.029	-0.024	-0.030
	(0.019)	(0.019)	(0.020)*
Did not go to the doctor because of money (yes-no[1-0])	-0.016	-0.014	-0.018
	(0.015)	(0.016)	(0.015)

Relatives or friends pay your expenses (not true, sometimes true, often true, always true [1-4])	-0.021	-0.030	-0.012
	(0.062)	(0.066)	(0.066)
Feel a burden on your family or friends (not true, sometimes true, often true, always true [1-4])	0.573	0.295	0.553
	(0.207)**	(0.149)*	(0.214)**
Activities you used to do but can't do because of lack of money (yes-no[1-0])	-0.038	-0.019	-0.039
	(0.031)	(0.031)	(0.032)
Donation to the church but can't do due to money (yes-no[1-0])	-0.001	0.000	-0.001
	(0.008)	(0.008)	(0.008)
Donation to local parties but can't do due to money (yes-no[1-0])	-0.003	-0.002	-0.001
	(0.004)	(0.004)	(0.004)
Donation to family or friends parties but can't do due to money (yes-no[1-0])	0.005	0.003	0.004
	(0.008)	(0.009)	(0.009)
Community activities but can't do due to money (yes-no[1-0])	-0.009	-0.009	-0.008
	(0.006)	(0.007)	(0.007)
Help out family members but can't do due to money (yes-no[1-0])	0.022	0.025	0.025

	(0.020)	(0.021)	(0.021)
Help out non-relatives but can't do due to money (yes-no[1-0])	-0.006	-0.004	-0.004
	(0.008)	(0.008)	(0.008)
Travel to visit family or friends but can't do due to money (yes-no[1-0])	-0.018	-0.020	-0.018
	(0.011)*	(0.012)	(0.011)*
Sometimes we do not have enough to eat (yes-no[1-0])	-0.021	-0.010	-0.019
	(0.026)	(0.031)	(0.027)
Often we do not have enough to eat (yes-no[1-0])	0.024	0.026	0.022
	(0.013)*	(0.016)	(0.014)*
Sometimes or often we don't have enough to eat because of money (yes-no[1-0])	0.038	0.035	0.026
		(0.030)	(0.026)
Often worried run out of food last three months (never-always [1-4])	0.067	0.116	0.060
	(0.053)	(0.061)	(0.056)
Often run out of food last three months (never-always [1-4])	-0.146	-0.139	-0.134
	(0.046) **	(0.052)**	(0.047)**
Skip or cut meals (never-always [1-4])	-0.075	-0.071	-0.072
	(0.045)*	(0.050)	(0.047)*

Often eat less than you felt you should (never-always [1-4])	-0.100	-0.099	-0.103
	(0.042)**	(0.047)*	(0.044)**
Often hungry (never-always [1-4])	-0.103	-0.092	-0.091
	(0.034)**	(0.038)*	(0.034)**
Not eat all day (never-always [1-4])	-0.121	-0.100	-0.113
	(0.025)**	(0.028)**	(0.027)**
Food from charity (never-always [1-4])	-0.057	-0.050	-0.055
	(0.018)**	(0.019)**	(0.020)**
Spend on food at home last week	8.730	18.869	9.154
	(20.600)	(22.229)	(20.823)
Spend on food away from home	-14.100	-11.726	-15.658
	(13.000)	(17.510)	(12.955)
Total Food	-15.100	11.128	-16.422
	(34.100)	(37.975)	(35.073)
Received free food (yes-no [1-0])	0.045	-0.051	0.058
	(0.021)**	(0.023)*	(0.023)*
Eat diary products: milk, cheese, yogurt (at least once a day, at least once a week, several times a month, once in a while, never [1-5])	-0.046	-0.010	-0.033
	(0.071)	(0.075)	(0.076)
Eat eggs, beans or lentil (at least once a day, at least once a week, several times a month, once in a while, never [1-5])	-0.044	-0.012	0.011
	(0.059)	(0.062)	(0.060)
Eat meat, poultry or fish (at least once a day, at least once a week, several	-0.043	-0.022	-0.062

times a month, once in a while, never [1-5])

	(0.060)	(0.064)	(0.063)

Eat fruit or vegetables (at least once a day, at least once a week, several times a month, once in a while, never [1-5])

	-0.041	-0.007	-0.025
	(0.064)	(0.069)	(0.069)

Eat tortillas, bread, crackers or other cereals (at least once a day, at least once a week, several times a month, once in a while, never [1-5])

	-0.011	0.002	-0.011
	(0.027)	(0.027)	(0.027)

Worked for pay, last month (yes-no[1-0])

		-0.043	
	-0.045		-0.043
	(0.016)**	(0.016)**	(0.015)**

Immediate recall (number of words)

	0.293	0.244	0.303
	(0.083)**	(0.089)**	(0.090)**

Delayed recall (number of words)

	0.609	0.547	0.608
	(0.102)**	(0.109)**	(0.099)**

Feel fear someone robbing you (never, sometimes, usually, always [1-4])

	-0.036	-0.005	-0.038
	(0.053)	(0.053)	(0.055)

Feel fear someone close to you will take your money (never, sometimes, usually, always [1-4])

	0.013	0.004	0.004
	(0.037)	(0.037)	(0.040)

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Money in a safe place (yes-no [1-0])	-0.004	-0.006	-0.004
	(0.010)	(0.010)	(0.010)
Feel verbally or physically abused (never, sometimes, usually, always [1-4])	-0.018	-0.017	-0.034
	(0.029)	(0.028)	(0.031)

NOTE: The reference categories are wave 1, Motul, female, do not speak Maya, do not read write a message in Spanish, no schooling, and single.
SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.
** = significant at 5% level of confidence. * = significant at 10% level of confidence

Table 10: Sample Baseline and Follow-up Valladolid and Motul

	Valladolid	Motul	Total
Baseline survey	1,264	956	2,220
First follow-up	1,159	859	2,018
Attrition			
Total	105	97	202
Died	64	57	121
Refused	9	12	21
Could not be contacted	32	28	60

SOURCE: Baseline and first follow-up ENCAHEY, 2008 and 2009.