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Impact Evaluation Report: Egypt's Forsa Graduation Program

Baseline Report

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EXECUTIVE SUMMARY

1. **Forsa, which means "Opportunity" in Arabic, is a new economic inclusion program of the government of the Arab Republic of Egypt**. Implemented by the Ministry of Social Solidarity, the program aims to graduate beneficiaries of Takaful and Karama to economic self-reliance by enabling them to engage in wage employment or small productive enterprises.
2. **This impact evaluation of the Forsa program in Egypt is intended to contribute to the global evidence on effective graduation program design as well as provide immediate policy-relevant guidance for the Ministry of Social Solidarity.** The impact evaluation will measure the degree to which Forsa is successful at increasing household consumption and will investigate which participant groups and program features demonstrate the greatest improvements in household welfare and economic activity.
3. **The design of this evaluation relies on a cluster randomized controlled trial** to estimate the causal impact of the offer of access to the Forsa program on selected outcomes, using two rounds of data collection. The baseline household survey collected information on the main outcomes and key characteristics expected to be predictive of future outcomes prior to the start of the Forsa program. An endline survey will re-survey the same households two years later to measure the impact of Forsa and to test potential mechanisms in the causal chain.160 treatment sub-villages and 163 control sub-villages were included in the study. In each sub-village, 24 households were selected for inclusion in the study using simple random sampling in each of two main strata: 16 households from the list of current Takaful beneficiaries and 8 households from the list of Takaful registrants rejected from the program. This resulted to a total sample size of 7,754 households. The household survey data was collected by a survey firm, Athar from January 11- March 3, 2022.
4. **This report presents summary statistics on the sampled households and the identified potential Forsa participant in each household at baseline**. Each section shows balance tests between households in treatment and control communities to confirm that randomization was effective, tables showing the differences between the Takaful beneficiary and rejected household types within each community, tables showing the differences between the poorest households and moderately poor households, and tables showing differences by gender of the potential participants.
5. **The nominated Forsa participants are primarily (76 percent) female**. The nominated Forsa participants is also almost always the household head or spouse, rather than the son or daughter. Nominated female participants are somewhat younger (34.7 years) on average compared to male nominated beneficiaries (38.6 years). With respect to educational levels, females on average have a lower number of educational years successfully completed (5.9 years versus 7.6 years).
6. **Only 8 percent of potential Forsa participants have worked previously**. About 24 percent of individuals have made attempts to get a job at any time in the past. There are substantial differences by gender. Approximately 50 percent of males have made some attempts to find work in the past compared to only 15 percent of females and 20 percent of males have at least some work experiences, compared to only 5 percent of females.
7. **Approximately 25 percent of adults in Forsa eligible households are employed**, but most of these individuals participate in irregular wage employment (73 percent). Individuals work an average of 16 days per month and earn a wage income of about 1628 EGP per month. About 40 percent of individuals participate in unpaid work. Among those not currently employed, only 12 percent meet the formal criteria for willingness to work to so as be considered part of the labor force ("If there was a suitable job, would you be able to start work within two weeks?"). The main

reason listed by the unemployed about their unwillingness to work is housewife duties (86 percent).

8. **When asked a hypothetical question about the lowest wage they would accept for different job types, potential participants indicated that informal jobs are slightly preferred**, with an average wage requirement of about 120 EGP higher for a formal than for an informal job. This indicates a lack of value attached to having a written contract and formal benefits, which is a challenge as Egypt attempts to reduce the size of the informal sector. The potential participants also strongly prefer a job within or close to the local area over an outside job even if transportation is provided. The additional amount they require to accept formal employment outside their local area is on average 531 EGP.
9. **In terms of self-reported work skills, literacy skills are low, while management skills and interaction skills are medium-level.** Only about 8 percent of these individuals successfully completed bills or filled out government and application forms. Also, approximately 44 percent of these individuals measured and estimated various weights, sizes, and calculated distances. They were also able to compute prices and costs. That notwithstanding, only about 20 percent were able to calculate fractions, decimals, and percentages. In terms of advanced technological abilities, less than 2 percent of Forsa beneficiaries used a computer in the last 3 months. About 11 percent of them can drive a car or a tricycle while 3 percent are able to drive a truck.
10. **About 14 percent of potential Forsa participants suffer from chronic illness** such as diabetes, asthma, cancer, heart disease, high blood pressure, and hepatitis which makes them to miss about 5 workdays per month.
11. **Access to bank accounts or financial services is very low, though respondents generally answered basic financial literacy questions correctly.** The self-reported level of recording household expenses ranges between 0 to 4, where 0 indicates not keeping record of anything, while 4 indicates keeping recording of all earnings and finances. The potential Forsa participant on average reports a low value on this scale indicating relatively low information levels of the household's balance at a given time. Yet on average the potential participants' self-assessment of their skills in taking informed and reasonable decisions for the household's finances and money-management on a scale from 1 to 5 is approximately 3.3, which is between reasonably skilled and well-skilled.
12. **Consumption data cannot be directly compared to other surveys (such as the Takaful) as a modified, shorter module was used for the Forsa evaluation to save time and focus more on employment history and skills.** The consumption, asset, and debt and savings modules will serve an important role for comparison with post-program estimates during the end-line evaluation.
13. **Women reported less influence over decisions on major household expenditures, use of transfers or ration card, participating in wage employment, and household enterprise than on other domains**. On a 1-4 scale, women's average reported level of influence on decisions related to their household enterprise was 2.3. They also attach about 2.5 degree of importance for them to be able to influence decisions in this sphere.
14. **There is a small, but non-trivial share of household heads and working age sons and daughters that could be targeted as Forsa participants even in households that did not nominate them as the participant.** These alternative participants have less caretaking responsibilities and higher education levels than the wife of the household head.
15. **According to the key informants, in the targeted communities, casual labor is valued at about 80EGP/day, unemployment is very high, and more than 40 percent of household**

receive remittances. An estimated average of 44 percent of males are unemployed in comparison to approximately 60 percent of females.

16. **Rumors about discontinuity of Takaful transfers upon registration for the Forsa program created widespread fear and caused behavioral change session attendees to try to avoid mentioning that they had already signed up for Forsa** according to an additional verification survey conducted to understand a significant discrepancy between administrative data on behavioral change session attendance and self-reporting in the household survey.
17. **When asked a hypothetical question about whether they would prefer to enroll in Forsa or remain in Takaful, only approximately 35 percent of respondents preferred Forsa, compared to 58 who preferred Takaful** (the remainder gave inconsistent responses depending on the scenario of how long Takaful beneficiaries would continue receiving cash transfers after joining Forsa).

Policy recommendations:

18. **Define and communicate Takaful eligibility timeline.** The common belief that Takaful transfers are indefinite creates a large disincentive to enroll in Forsa. Inconsistent communication on this aspect of the program creates distrust and opens it up for rumors. The policy of Takaful eligibility lasting for 3 years and Forsa enrollees losing access to Takaful after the transition period (unless they successfully re-apply due to a change of circumstance in the future) needs not only to be defined legally but also credibly announced. Even after an official announcement, households that do not expect to make profits with the asset transfer may not be motivated to join Forsa. Thus, it may be worthwhile to allow self-selection into Forsa as we undescore below.
19. **Allow self-selection into Forsa.** Poor households that lack confidence in their ability to make profits from the asset transfers should be allowed to opt for the certainty of receiving Takaful transfers. When households are given the freedom to self-select between Forsa and Takaful, households with better non-cognitive skills and less risk aversion are more likely to enroll in entrepreneurship training (Iacovone et al. 2018; Dasguta et al. 2014). This implies that letting least confident households drop out can improve the average potential to benefit from Forsa.
20. **Maximize attractiveness of the Forsa Package for Takaful graduates.** Forsa needs to show a good probability of exceeding short-term benefits of cash transfers to avoid excessive drop-out. Without this, households may prefer to receive the Takaful transfers as opposed to Forsa which they (may)consider as a black box. To lessen this, it would be important to clearly communicate the benefits that will be offered and commitment to on-going mentoring. Also, it may be worthwhile to keep 12 months of cash transfers to be more in line with successful graduation programs in other countries (Banarjee et al. 2015) and allow beneficiaries more time for their projects to become profitable.
21. **Replace households that have dropped out.** To replace the households that have dropped out, there are two possibilities. In the first place, the program could consider expanding the share of households in the pilot from the Rejected group (e.g., currently 30% could increase to 50%). In the second place, the program may allow new sign-ups from among the Takaful beneficiary group given that the number of eligible households largely exceeds the number of households that attended behavioral training sessions.
22. **Continue with the current plan of keeping training sessions open to other household members.** The widespread nomination of a wife/mother as the potential Forsa participants is likely based on incomplete understanding of the Forsa program. It may thus be necessary to (re) advertise the wage-employment track towards husbands or older sons and daughters of enrolled

women who chose the asset-transfer track. Moreover, participation in training/ mentoring sessions should remain open to any household member rather than restricting it to specific participants.

23. **Meet participants where they are.** Forsa participants have limited literacy skills and business experience. Mentoring should be maximized to the extent possible, and training designed with this background in mind. Trainers should also promote the value of women's participation in Forsa with household heads to avoid conflicts on decision-making about employment and household production.

1. INTRODUCTION

How to graduate poor households from social protection programs, and from the poverty that makes them eligible, is a pressing issue facing policymakers that affects millions of people in national programs. Rigorous evidence in multiple contexts has shown that cash transfers increase consumption and food security for the poor in the short term, but evidence on long-term impacts is mixed with varied impacts on accumulation of productive assets (Hidrobo et al. 2018) and inter-generational transmission of poverty (Molina Millán et al. 2019). In Brazil, the *Bolsa Família* cash transfer program that covers 25% of the population of 199 million people claims to have graduated 1.7 million people (World Bank, 2014). However, in Mexico, a panel study of poverty dynamics for the *Oportunidades* cash transfer program found that the number of eligible households remained relatively static, even as individual households transitioned in and out of eligibility (Villa and Nino-Zarazua, 2014). A review of the evidence found that only five out of nine social protection programs significantly reduced the headcount poverty rate (Bastagli et al 2016). Moreover, the reduction in the poverty rate for program participants ranged from 4 to 14 percentage points, except for the Benazir Income Support Programme (BISP) in Pakistan which recorded a 21-percentage point decline in poverty among households near the eligibility threshold (Cheema et al. 2014). While the contributions of social assistance programs to poverty alleviation are important, in most cases they are too small to lead to substantial graduation from the programs or to reduce the national prevalence of poverty substantially and sustainably.

In 2015, Egypt introduced a cash transfer program, Takaful and Karama, which currently covers about 9% of households with children at a cost equivalent to about 1% of the national budget (Breisinger et al. 2018b). According to IFPRI's 2018 evaluation report on the impacts of the first year of Takaful cash transfers, Takaful significantly decreased the prevalence of poverty (<USD1.90 per person per day) by 11.4 percentage points and increased household consumption levels by 8.4 percentage points for beneficiaries of the program. Despite these successes of the Takaful cash transfers, the program cannot lift all or even most of the households that it helps out of poverty, as it reaches only 20% of households in the poorest expenditure quintile. As in most cash transfer programs, targeting is usually not perfect. However, even if the program was perfectly targeted, reaching all poor households would pose a huge fiscal burden and would eventually displace more growth-enhancing investments (Breisinger et al. 2021). Thus, while cash transfers are a vital tool to protect the wellbeing of the poor, governments need to explore other forms of social protection or other types of direct interventions to achieve large, sustained reductions in poverty.

About 77 percent of working-age adults in Takaful beneficiary families are unemployed or underemployed and only 5 percent are self-employed. This high unemployment suggests the existence of a poverty trap or transaction costs in the labor market which could be overcome by a "big push" investment to change employment and earnings prospects for the poor. Workers may be unable to signal their potential productivity to employers or to work in more productive firms, relegating them to unemployment or low wages (Dasgupta 1997). Potential small-business owners may be unable to access training and credit, and households mired in poverty often exhibit present bias due to everyday stress, all of which may prevent poor households from saving and investing to push themselves out of poverty (Haushofer & Fehr, 2014).

Evidence is accumulating that a cohesive set of complementary interventions that include a transfer can have substantial long-term impacts on household wellbeing. This set of interventions is a bundle of short-term consumption support alongside a one-time transfer of a productive asset, technical training related to that productive asset, regular mentoring, and savings support. This model for poverty reduction,

originally promoted by the international non-governmental development agency, BRAC, as the basis for its 'Targeting the Ultra-poor program in Bangladesh', has become known as the graduation or economic inclusion model. Evidence from a rigorous multi-country impact evaluation of BRAC-inspired graduation programs in Ethiopia, Ghana, Honduras, India, Pakistan, and Peru (Banerjee et al. 2015), as well as additional evaluations in Bangladesh (Das and Misha 2010; Bandiera et al. 2017; Balboni et al. 2020), and of similar programs in Kenya (Gobin et al. 2017), Haiti (Greeley 2019), and Afghanistan (Bedoya et al. 2019) confirm large positive impacts of such programs on household consumption levels. This evidence is promising for the effectiveness of these programs, although it is still not demonstrated whether these programs lead to substantially higher rates of graduation from poverty or social assistance over time.

Forsa, which means "Opportunity" in Arabic, is a new economic inclusion program of the government of the Arab Republic of Egypt. Implemented by the Ministry of Social Solidarity, the program aims to graduate beneficiaries of the national cash transfer program, the Takaful & Karama Program (TKP), to economic self-reliance by enabling them to engage in wage employment or sustainable economic enterprises. The 2021 World Bank Economic Inclusion report (Andrews et al. 2021) highlights a recent increase globally in such graduation or economic inclusion programs, which now reaches around 92 million beneficiaries from 20 million households across more than 75 countries. This rapid growth has necessitated an increasing demand for evidence on best practices in graduation program implementation. The newly designed Forsa program is based on the graduation approach, but with innovations drawing from theories of behavioral economics as well as creating a network of active youth volunteers for economic empowerment to reduce costs compared to the standard BRAC-inspired model. Forsa also expands the graduation model to include the option of wage-employment, rather than only focusing on self-employment. Evidence on the impact of job training programs linked to wage employment on both job retention and future earnings is mixed (McKenzie 2017), although most such programs do not include cash assistance.

This impact evaluation of the Forsa program in Egypt is intended to contribute to the global evidence on effective graduation program design as well as provide immediate policy-relevant guidance for the Ministry of Social Solidarity. The impact evaluation will measure the degree to which Forsa is successful at increasing household consumption and will investigate which participant groups and program features demonstrate the greatest improvements in household welfare and economic activity.

The Forsa Program

The Forsa program has the strategic goal to promote economic inclusion by enabling TKP beneficiaries and other individuals with low income to better integrate into the economy and transition from poverty to prosperity through participation in new economic activities based on sustainable partnerships with NGOs and the public as well as private sectors. The program has two modalities: (1) an asset transfer modality, which includes the transfer of a significant productive asset for starting an income generating activity (IGA), financial literacy training, and business and technical training on how to start an IGA; and (2) a wage employment modality, which provides job matching and training for employment in the private sector. Both modalities include a behavioral change session, financial literacy and technical trainings, and ongoing mentoring.

The World Bank is funding a pilot of the Forsa program in eight governorates: Fayoum, Beni Suef, Assiut, Sohag, Luxor, Menia, Menoufiya, and Qalyoubia. The pilot aims to have 50,000 participants in 161 sub-villages. The selection of pilot communities is based on the prevalence and severity of poverty,

the prevalence of informal employment, the presence of a sufficient number of TKP beneficiary households, the share of TKP beneficiaries in the 19-to-35-year age range, the presence of industrial areas or other employment nodes, and the potential for self-employment activities in the community. 70 percent of the pilot program participant households will be selected from the pool of existing TKP beneficiaries, while the other 30 percent will be TKP applicants that did not qualify for the cash transfer program because their scores on the TKP application were just above the eligibility cutoff (i.e., they were deemed slightly too economically well-off). This element in the design of the selection of participants of the pilot Forsa program is to enable an easy assessment of the program based on these two populations. The selection process will also ensure that 50 percent of beneficiaries are youths between 19 and 35 years of age, and that 30 percent are females.

Target Population

The eligibility criteria to participate in the Forsa pilot stipulates that households must satisfy the following conditions:

- Have at least one member of working age (19 to 55 years).
- Have a household head without formal employment and, if present, a spouse also without formal employment.
- Own less than 0.5 feddan (0.52 acres) of agricultural land.
- Not be a participant in any other transfer or asset program of the Ministry of Social Solidarity or other local or international non-governmental organization (NGO).
- Own no more than four medium-sized livestock or one large animal.
- Own a house with no more than one floor.
- Have no access to remittance income from a household member working outside of Egypt.

Either be a:

- Takaful beneficiary household starting their second or third year in the program (at least 80% of targeted households).
- Or be an unsuccessful Takaful applicant household with a score on the Takaful application proxy means test used to determine program eligibility that falls within 2000 points of the eligibility cutoff.
- Greater priority in enrollment for the Forsa pilot is given to unsuccessful Takaful applicant households whose scores are within 1000 points of the eligibility cutoff, as well as to households with younger heads (up to 20% of targeted households).

Program staff prepared lists of eligible households in each targeted sub-village based on administrative data from the Takaful program. The potential eligible households listed in the treatment communities were contacted through an outreach and orientation campaign that involves door-to-door visits. This outreach campaign was organized and supervised by two NGOs, Al-Koura and CARE. These NGOs coordinated the in-person outreach that was conducted by a national volunteer network, “Daem”, which was created in collaboration with an active youth NGO, named Life Makers Foundation. Finally, local social unit employees provided additional support to the in-person visits.

The households contacted were invited to select one individual per their household to potentially participate in the program and to attend a behavioral change session organized in the community. The purpose of the behavioral change sessions was to encourage participation in the asset or wage employment programs by promoting a mindset of transitioning into productive income-generating activities. The

sessions included up to 40 participants, with separate sessions organized for different gender and age categories. Behavioral change sessions took place in the pilot villages from May 2021 to February 2022.

2. IMPACT EVALUATION DESIGN

The design of this evaluation relies on a cluster randomized controlled trial to estimate the causal impact of the offer of access to the Forsa program on selected outcomes, using two rounds of data collection. The baseline household survey collected information on the main outcomes and key characteristics expected to be predictive of future outcomes prior to the start of the Forsa program. An endline survey will re-survey the same households two years later to measure the impact of Forsa and to test potential mechanisms in the causal chain.

To estimate the impact of the Forsa program, we will rely on the variation in program participation driven by the random assignment of villages to treatment arms. The random assignment ensures that unbiased estimates of the offer of treatment can be calculated through simple differences, differences-in-differences, or analysis of covariance (ANCOVA) specifications. However, ANCOVA models, which control for a baseline measure of the outcome, will yield the most efficient treatment effect estimates (McKenzie 2012). Therefore, when a baseline measure of the outcome is available, we will rely on ANCOVA specifications of the form:

$$y_{ic1} = \beta_0 + \beta_1 Treatment_c + \beta_3 y_{ic0} + \delta_x X_{ic0} + \epsilon_{ic1}$$

with y_{ic1} being the outcome for household i in community c measured at endline, $Treatment_c$ is the Forsa treatment indicator, y_{ic0} is the baseline value of the outcome for household i, X_{ic0} is a vector of covariates measured at baseline, and ϵ_{ic1} is the error term, which we will cluster at the community level. The ordinary least squares (OLS) estimate of β_1 is an unbiased measure of the average impact of the offer of access to the Forsa program.

While random assignment ensures that β_1 will be unbiased, the inclusion of controls measured at baseline in X_{ic0} can improve model precision if these controls are predictive of the outcome. We will report estimates that control only for strata dummies but will additionally use the post-double selection Lasso (PDS) method of Belloni et al. (2014) to select what characteristics to include in X_{ic0}. The PDS lasso specifications will include first and second-order interactions between baseline characteristics deemed likely to be predictive of the outcome as potential controls.

Aside from the average intent-to-treat (ITT) estimate, we are also interested in exploring heterogeneity in the treatment effects along several dimensions, specifically gender, whether the household was a rejected Takaful applicant, and treatment modality. For the former two, we will estimate the above ANCOVA model after including an interaction between a female indicator and the main treatment indicator (to explore heterogeneity by gender) or an indicator for whether the household was a rejected Takaful applicant and the main treatment indicator. The main (non-interacted) measures of the interacted characteristics will also be included in X_{ic0}.

To explore heterogeneity by treatment modality, we will modify the above specification by including separate indicators for whether the household was included in the self-employment modality or in the wage employment modality:

$$y_{ic1} = \beta_0 + \beta_{SE} TSE_{ic} + \beta_{WE} TWE_{ic} + \beta_3 y_{ic0} + \delta_x X_{ic0} + \epsilon_{ic1}$$

Where TSE_{ic} and TWE_{ic} are indicators for whether household i was in the self-employment or the wage employment modality, respectively.

In addition to being interested in the impact of the access to the Forsa program, we are also interested in knowing what the impact of access to the program is on households induced to participate by the random offer of access. We will therefore estimate the local average treatment effects (LATE) for "compliers" of Forsa participation using specifications that instrument for receipt of the Forsa program using the community-level random treatment offer, $Treatment_c$.

As long as potential outcomes are independent of the random treatment assignment conditional on observed program participation and if Forsa participation decisions satisfy a monotonicity assumption,[1] instrumental variable estimation of the two-equation system will provide unbiased estimates of the LATEs for compliers. As with the ITT results, we will report two sets of estimates: one set that includes no controls beyond the strata dummies and another set that selects controls using the post-regularization lasso method of Chernozhukov et al. (2015).

We will explore heterogeneity of program impact on the following household and individual characteristics that are likely to influence ability to benefit from the intervention. In each case, we will test for heterogeneity by interacting the treatment dummy with a demeaned baseline value of the characteristic.

1. PMT score

2. Risk aversion

3. Uncertainty aversion

4. Score based on self-reported literacy and numeracy

5. Digit span and reverse digit span scores

6. Stated preference at baseline between self-employment and wage-employment (possibly also interacting with rural and urban if these are strong predictors of wage-employment or self-employment modality being offered in a community)

7. Score on grit (standard module adjusted to exclude negative questions due to cultural concerns)

8. External income sources

9. Duration of Takaful enrollment

10. Work motivation as proxied by recency of job search at baseline

[1] In the study context this will hold if households are at least as likely to participate in Forsa if they were randomly assigned to the treatment arm as opposed to the control arm.

3. SAMPLE AND SURVEY DATA

3.1 Community Sample

The communities for the Forsa evaluation sample were drawn from a listing of 740 potential sub-villages as locations for the Forsa pilot, prepared by the Ministry of Social Solidarity (MoSS). From this sampling frame, we limited our sample to only sub-villages with at least 500 Takaful beneficiaries as this was an important feasibility criterion for implementation. We then randomly sampled 165 treatment and 165 control sub-villages after stratifying on the number of Takaful beneficiaries and the district using randtreat command in STATA (Carrill, 2015).

During the preparation of the list of eligible households for Forsa in these sub-villages, it was discovered that some of the sub-village names were inaccurate. In addition, two villages, Belfia and Hakmna, that had been assigned to control and treatment, respectively, were mistakenly reversed in the implementation, causing behavioral change sessions to take place in the control village. These sub-villages were dropped from the sample, resulting in a final sample size of 160 treatment sub-villages and 163 control sub-villages. A final review was conducted to identify the actual status of control and treatment villages after the rollout of behavioral change sessions. The review highlighted inconsistencies in 10 control and 8 treatment villages. As behavioral change sessions were conducted in 10 of the control villages, simultaneously, there are 8 treatment villages where behavioral change sessions were not conducted in. These inconsistencies will be accounted for in our analysis and in the end line report.

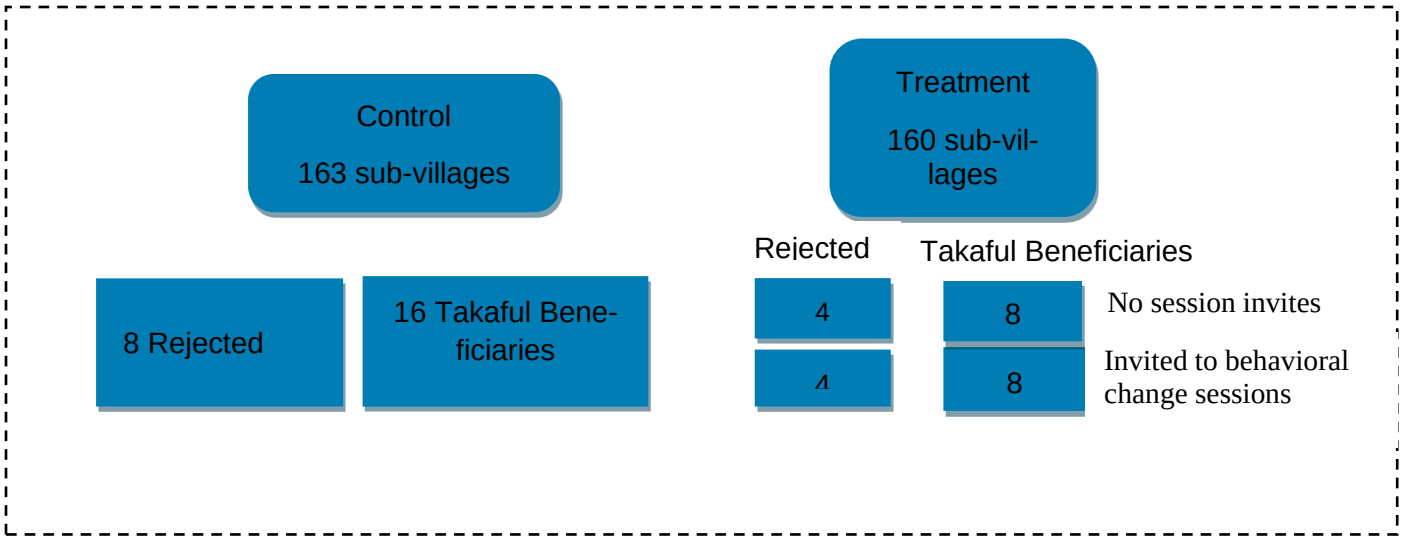
The overlap between Hayah Karima Phase 1 villages (375 villages) and treatment and control villages in our sample was investigated revealing an overlap of 41 villages from the initially listed 364 villages in the Forsa sample. The probability of Hayah Karima villages to overlap with treatment or control villages is balanced, with 19 villages in the treatment group and 22 villages in the control group.

3.2 Household Sample

The household sample was drawn from a list of eligible households for the Forsa intervention prepared by MoSS based on the eligibility criteria mentioned above and the administrative databases of the Takaful program showing all Takaful beneficiaries and registrant households.

In each sub-village, 24 households were selected for inclusion in the study using simple random sampling in each of two main strata: 16 households from the list of current Takaful beneficiaries and 8 households from the list of Takaful registrants rejected from the program. This resulted to a total sample size of 7,754 households, as shown in Figure 3.2.1.

Figure 3.2.1: Household Sampling Stratification



In treatment sub-villages, an additional layer of randomization was used at the household level with the goal of measuring the impact of the behavioral change sessions. The process of randomization differed slightly by governorate as it was not initially clear when the baseline data collection would take place relative to the behavioral change sessions. In four of the seven governorates: Luxor, Assuit, Beni-Suef and Menia, randomization was applied in two steps: in the first step, half of the eligible households were randomized into the control group. The other half (treatment list) was sent to the implementing NGOs so that they could be targeted in the first two weeks of implementation. After the first two weeks of implementation, more households were needed for treatment, so another randomization round was applied (the second step) and only 50 eligible households remained as the control group. In the remaining governorates, randomization was applied in one step by randomly selecting 50 eligible households for the control group. As a result of the two randomization processes, there were fewer potential replacement households in some villages in Luxor, Beni Suef and Menia, leading to some villages having fewer than half of the sample not invited to the behavioral change session prior to the survey.

3. 3 Survey

The household survey consisted of three sections and 12 modules that were meant for different members of the household. The first seven modules were addressed to any knowledgeable member of the household, in practice usually the female head or the wife of the male head. These modules covered general characteristics and economic situation of the households. These modules are:

- Household roster
- Household employment and time use
- Assets
- Debts and savings
- Food consumption
- Non-food consumption
- Income and Takaful expectations

The next four modules were specifically targeted to the potential Forsa participant. The enumerators described the Forsa program to the main respondent and asked if anyone in the household would be interested in participating in the program if they were to be eligible. The Forsa participant modules were then asked to the household member who was potentially interested in participating in Forsa. If this household member was not available at the time of the main interview, enumerators returned when the household member was available. In the case where the member was too far from the community, phone surveys were conducted. The Forsa participant modules are:

- Work history, skills, and aspirations, job search history, and training usefulness
- Preferences, locus of control, self-efficacy, and happiness
- Financial inclusion
- Skills assessment

Finally, the last section consisted of a single module on intra-household decision-making that was addressed only to women and the enumerators were instructed to ensure that the women were alone in a private setting before asking these questions.

3.4 Data Collection

The household survey data was collected by a survey firm, Athar from January 11- March 3, 2022. Because of an unexpected delay in receiving security authorization, initial training of enumerators took place in July 2021, and a refresher training was offered in January 2022. Different teams of enumerators were used in each governorate as the data collection plan was based on an in-parallel rollout approach across the 8 governorates. In four governorates, Beni-Suef, Sharqia, Qalyoubia and Luxor, the survey firm needed to hire additional new enumerators due to the unexpected gap between the initial training and data collection start date. In the remaining four governorates, Fayoum, Menia, Souhag, and Assuit, Athar fully depended on the previously trained enumerators, who attended the initial training. The refresher trainings took place either a week in the former governorates (in which they hired new enumerators) or 3 days in the later governorates (in which the full old team of enumerators was available). As anticipated, some households from the listing of eligible households were unable to be located based on inaccurate addresses and wrong phone numbers in the administrative data. In these cases, households in the main sample list were replaced sequentially by households in a reserve list sampled using the same approach as the main sample. 13.7% of sampled households were unable to be located. Of those that were located, however, survey participation was high. Only 51 households (0.7%) of those contacted declined to participate in the survey. The final sample size was 7,752 households due to two instances of an extra replacement household being accidently included. Table 3.4.1 summarizes the household types in the final sample.

Table 3.4.1: Final Sample Size

	Control	Treatment	Total
Rejected	1,310	1,317 (660 no session invite; 657 invited to session)	2,627
Takaful Beneficiary	2,606	2,521 (1,107 no session invite; 1,414 invited to session)	5,127
Total	3,916	3,838	7,752

3.5 Consistency of Sample with Eligibility Requirements

The list of potential beneficiaries for the Forsa program was developed by MoSS based on administrative data including the Takaful registrant database. According to the household survey results, many potential participants met these eligibility requirements. The only eligibility constraint that was not met by almost all potential beneficiaries was ownership of medium-sized livestock (goats and sheep). This is likely because of a lack of reliable administrative data on livestock ownership.

Table 3.5.1: Characteristics of Potential Participants by Treatment Status

Eligibility condition	Share of sample households reporting
Have at least one member of working age (19 to 55 years)	100%
Own less than 0.5 feddan of agricultural land	99.7%
Household head and spouse without formal employment	99.4%
Own no more than four medium-sized livestock	76.6%
Own no more than one large animal	95.3%
Own a house with no more than one floor	98.9%
No remittance income from outside Egypt	99.0%

3.6 Attrition in Potential Participant Modules

For analysis of the characteristics of potential Forsa beneficiaries, only households in which a household member was nominated as the potential Forsa participant and in which this potential participant was able to respond to the questionnaire were included. In our sample, 1,130 (17.1 percent) of households did not nominate any individual to potentially participate in Forsa. A further 1,047 households (13.5 percent) nominated a household member as a potential participant, but this member was either unreachable (628 households) or declined to participate in the survey (413 households). Thus, we have a sample size of only 5,376 for the potential participant modules. Because the behavioral change sessions had already started during the period of the baseline data collection, we test for differential attrition by treatment status. We do so by regressing the probability of response in these modules on the community treatment assignment variable. The results in Table 3.7.1 show that the probability of the household nominating any individual or having them respond to the survey was not generally statistically distinguishable in treatment and control communities. The only significant difference was found in the rejected subsample for the combined question of whether there was a nominated individual, and they were able to be surveyed: the total response rate for the potential beneficiary modules was about 7 percentage points higher among Takaful rejected households in treatment communities than among Takaful rejected households in control communities (significant at the 10 percent level).

Table 3.6.1: Impact of Treatment on Probability of Response

	(1)	(2)	(3)	(4)	(5)	(6)
	Potential participant nominated	Potential participant surveyed	Potential participant nominated	Potential participant surveyed	Potential participant nominated	Potential participant surveyed
	All households in sample		Takaful beneficiary subsample		Takaful rejected subsample	
Treatment	0.031	0.044	0.026	0.030	0.040	0.069*
	(0.0286)	(0.0370)	(0.0311)	(0.0387)	(0.0265)	(0.0373)
N	7754	7754	5127	5127	2627	2627
Mean Dep. Var.	0.828	0.693	0.816	0.683	0.853	0.713

Note: Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

4. BASELINE SUMMARY STATISTICS ON POTENTIAL PARTICIPANTS

The tables in this section present summary statistics specifically for the identified potential Forsa participant in each household. As described in section 3.6, the sample size for these modules is 5,376. In each sub-section, the first table presents the balance test between households in treatment and control communities, to confirm that randomization was effective in selecting a sample in which treatment and control households are generally similar. In each table, the first two columns show the means and standard errors by sub-group, while the third column shows the means and standard error by the full sample and the fourth column shows the p-value of a t-test for the equality of the means. We expect to find no statistically significant difference between the treatment and control households. However, it is not completely unexpected that we find some significant differences in means across between treatment and control by chance due to the limited sample size. This is referred to as sampling error. It is also helpful to keep in mind, that, at a 5 percent significance level, we would expect 1 out of every 20 tests to reject equality of the means. Additionally, we present tables showing the differences between the Takaful beneficiary and rejected household types within each community. In general, these tables show that the rejected households are better-off across various dimensions, which is expected given that they were evaluated with a high enough PMT score that warrants exclusion from the Takaful program. We also present tables showing differences by gender of the potential participants. In the final place, we show heterogeneity by poverty status where we use the median consumption level of households to classify households as very poor and moderately poor. The median consumption level was gotten from the total consumption level of households.

We also included another dimension of heterogeneity, based on the gender of household head for some dimensions such as current employment and attitudes towards work. The female-headed households represent a minor share of the sample with only 5 percent of the households listed as female-headed.

4.1 Demographic Characteristics of Potential Participants

In this section, we report on the demographic characteristics of potential Forsa participants. Table 4.1.1 shows that the potential participants in treatment and control communities are generally balanced across all demographic characteristics based on the p-values of the t-tests for the equality of the means.

In terms of summary characteristics, the nominated Forsa participant is primarily a female as males only represent 24 percent among the nominated Forsa sub-sample. The nominated Forsa participants is also almost always the household head or spouse, rather than the son or daughter. The household head, son, and daughter shares among the nominated Forsa sub-sample account for approximately 25 percent, 1.5 percent, and 1.2 percent respectively, with most potential participants being the spouse of the household head. The average age of the potential participant is 36 years old showing that most of the nominated Forsa beneficiaries are also relatively young compared to the eligible age cohort of the Forsa program. With respect to educational attainment, potential participants have on average 6.3 years of formal education. There is still a high percentage (36.5 percent) with no formal education at all. Approximately 14 and 35 percent have only completed primary and secondary education respectively. Higher education is highly limited as only 3.5 percent and 0.9 percent of potential participants have graduated from a university and or technical institute.

Table 4.1.2 highlights that there are significant differences in educational attainment between potential participants in the Takaful beneficiary and rejected sub-samples. Takaful beneficiaries' educational attainment is consistently lower than the non-Takaful beneficiaries and there is a higher share of illiteracy.

Table 4.1.3 shows that there are significant differences in the average age and in educational attainment between males and females among potential Forsa participants. Nominated female participants are somewhat younger (34.7 years) on average compared to male nominated beneficiaries (38.6 years). With respect to educational levels, females on average have a lower number of educational years successfully completed (5.9 years versus 7.6 years). This is congruently reflected in the higher percentage of females who have no formal education reaching 40 percent in the female nominated sub-sample versus 23 percent in the male nominated sub-sample. The same pattern is confirmed by educational levels completed.

Table 4.1.4 shows the existence of significant poverty differences based on the educational attainment of the potential Forsa participants. The nominated individuals in very poor households have lower educational attainment in comparison with individuals from moderately poor households. The very poor households have lower levels of education with lower substantive achievements as the educational ladder increases. There exists no statistical difference in both groups based on age.

Table 4.1.1: Characteristics of Potential Participants by Treatment Status

	(1)	(2)	(3)	(4)
	Control	**Treatment**	**Total**	**p-value**
Male	0.233	0.246	0.240	0.556
	(0.015)	(0.014)	(0.010)	
Is the household head	0.240	0.258	0.249	0.387
	(0.015)	(0.014)	(0.010)	
Is the household head spouse	0.730	0.715	0.722	0.486
	(0.016)	(0.015)	(0.011)	
Is the household head son	0.016	0.015	0.015	0.716
	(0.003)	(0.003)	(0.002)	
Is the household head the daughter	0.013	0.011	0.012	0.601
	(0.002)	(0.002)	(0.002)	
Age	35.565	35.780	35.675	0.472
	(0.211)	(0.211)	(0.149)	
Number of educational years	6.232	6.431	6.334	0.439
	(0.183)	(0.180)	(0.128)	
Highest education level completed:				
• **No formal education**	0.371	0.360	0.365	0.616
	(0.017)	(0.016)	(0.011)	
• **Primary**	0.139	0.135	0.137	0.691
	(0.009)	(0.008)	(0.006)	
• **Secondary**	0.339	0.356	0.347	0.389
	(0.014)	(0.013)	(0.010)	
• **Institute**	0.007	0.010	0.009	0.272
	(0.002)	(0.002)	(0.001)	
• **University**	0.035	0.030	0.032	0.340
	(0.004)	(0.003)	(0.003)	
Observations	2631	2745	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is conditional on households nominating a household member for the Forsa program.

Table 4.1.2: Characteristics of Potential Beneficiaries by Takaful Beneficiary Status

	(1) Rejected	(2) TKP Beneficiary	(3) Total	(4) p-value
Male	0.259	0.229	0.240	0.009***
	(0.013)	(0.011)	(0.010)	
Is the household head	0.277	0.234	0.249	0.000***
	(0.013)	(0.011)	(0.010)	
Is the household head spouse	0.709	0.730	0.722	0.085*
	(0.013)	(0.012)	(0.011)	
Is the household head son	0.005	0.021	0.015	0.000***
	(0.002)	(0.003)	(0.002)	
Is the household head daughter	0.009	0.014	0.012	0.101
	(0.002)	(0.002)	(0.002)	
Age	34.400	36.356	35.675	0.000***
	(0.218)	(0.167)	(0.149)	
Number of educational years	7.671	5.619	6.334	0.000***
	(0.157)	(0.140)	(0.128)	
Highest education level completed:				
-No formal education	0.270	0.416	0.365	0.000***
	(0.012)	(0.013)	(0.011)	
- Primary	0.128	0.142	0.137	0.105
	(0.008)	(0.007)	(0.006)	
- Secondary	0.423	0.307	0.347	0.000***
	(0.014)	(0.010)	(0.010)	
-Institute	0.015	0.005	0.009	0.002***
	(0.003)	(0.001)	(0.001)	
-University	0.054	0.021	0.032	0.000***
	(0.006)	(0.003)	(0.003)	
Observations	1873	3503	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program.

Table 4.1.3: Characteristics of Potential Beneficiaries by Gender

	(1) Male	(2) Female	(3) Total	(4) p-value
Age	38.600	34.753	35.675	0.000***
	(0.255)	(0.146)	(0.149)	
Number of educational years	7.689	5.907	6.334	0.000***
	(0.189)	(0.136)	(0.128)	
Highest education level:				
-No formal education	0.238	0.405	0.365	0.000***
	(0.015)	(0.013)	(0.011)	
- Primary	0.161	0.129	0.137	0.008***
	(0.011)	(0.007)	(0.006)	
-Secondary	0.448	0.316	0.347	0.000***
	(0.016)	(0.011)	(0.010)	
-Institute	0.010	0.008	0.009	0.597
	(0.003)	(0.002)	(0.001)	
-University	0.043	0.029	0.032	0.038**
	(0.006)	(0.003)	(0.003)	
Observations	1288	4088	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program.

Table 4.1.4: Characteristics of Potential Beneficiaries by Poverty status

	(1) Moderately poor	(2) Very poor	(3) Total	(4) p-value
Age	35.808	35.529	35.675	0.245
	(0.200)	(0.181)	(0.149)	
Number of educational years	6.563	6.083	6.334	0.001***
	(0.142)	(0.155)	(0.128)	
Highest education level:				
-No formal education	0.348	0.384	0.365	0.008***
	(0.013)	(0.014)	(0.011)	
- Primary	0.138	0.136	0.137	0.805
	(0.007)	(0.008)	(0.006)	
- Secondary	0.361	0.333	0.347	0.020**
	(0.011)	(0.012)	(0.010)	
-Institute	0.009	0.008	0.009	0.699
	(0.002)	(0.002)	(0.001)	
-University	0.036	0.029	0.032	0.174
	(0.004)	(0.004)	(0.003)	
Observations	2808	2568	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program.

4.2 Current Employment of Potential Participants

Table 4.2.1 shows employment characteristics of potential participants and the test of equality of means between treatment and control communities. Employment here is defined as participation in any employment in the last 7 days. This could range from job attachments to participating in any activities with the purpose of earning wages or helping in a family business. Approximately 25 percent of potential Forsa participants are employed, but most of these individuals participate in irregular wage employment (73 percent), are self-employed (14 percent), or work in the informal private sector (10 percent). Less than 1 percent of households are employed in the formal public or private sectors. Individuals work an average of 16 days per month and earn a wage income of about 1628 EGP per month. About 40 percent of individuals participate in unpaid work.

Among those not currently employed, only 12 percent are willing to work, that is they meet the formal criteria for willingness to work to be considered part of the labor force (“If there was a suitable job, would you be able to start work within two weeks?”). The main reasons listed by the unemployed about their unwillingness to work in order of magnitudes are housewife duties (86%), lack of desire to work (3.7%), lack of childcare (1.2%), and husband’s refusal (1.02%).

In terms of time use in various employment and household activities, we find that the greatest allocated time use is to household chores like cooking and cleaning, maintenance, and collecting water. Average total time on care activities, household chores, shopping is about 30 hours per week. Notably, females have a significantly higher time burden for household chores, shopping, and caretaking than males, with the average for females being 40 hours per week as shown in Table 4.2.3. Livestock production activities such as raising poultry and livestock and producing ghee, butter, or cheese take about 2 hours per week. Household economic activities like post-harvest and food processing, beekeeping, handicraft activities as well as trade and retail activities receive an insignificant amount of time and are not shown.

Table 4.2.1: Employment of Potential Participants by Treatment Status

	(1) Control	(2) Treatment	(3) Total	(4) p-value
Employment (1/0)	0.242	0.251	0.247	0.592
	(0.012)	(0.012)	(0.008)	
For unemployed individuals:				
Willing to work (1/0)	0.120	0.124	0.122	0.802
	(0.009)	(0.010)	(0.007)	
For employed individuals:				
• **Government job (1/0)**	0.009	0.008	0.008	0.847
	(0.004)	(0.003)	(0.002)	
• **Formal private sector (1/0)**	0.020	0.017	0.018	0.624
	(0.006)	(0.005)	(0.004)	
• **Informal private sector (1/0)**	0.109	0.145	0.128	0.103
	(0.014)	(0.017)	(0.011)	
• **Irregular wage employment (1/0)**	0.725	0.660	0.690	0.053*
	(0.021)	(0.027)	(0.017)	
• **Self-employment (1/0)**	0.135	0.169	0.153	0.186
	(0.015)	(0.021)	(0.013)	
• **Temporary employment (1/0)**	0.002	0.000	0.001	0.319
	(0.002)	(0.000)	(0.001)	
• **Days worked (days)**	16.10	16.13	16.12	0.945
	(0.40)	(0.38)	(0.27)	
• **Monthly wage income (EGP)**	1618.6	1636.5	1628.1	0.775
	(39.88)	(48.16)	(31.61)	
• **Income from all sources (EGP/month)**	1700.6	1736.1	1719.4	0.555
	(40.41)	(43.75)	(29.96)	
For all individuals:				
• **Employment (hours/week)**	9.084	9.356	9.223	0.723
	(0.543)	(0.540)	(0.383)	
• **Livestock production (hours/week)**	2.170	2.338	2.255	0.555
	(0.194)	(0.208)	(0.143)	
• **Shopping time (hours/week)**	3.075	3.316	3.198	0.298
	(0.161)	(0.165)	(0.116)	
• **Household activity (hours/week)**	0.544	0.603	0.574	0.666
	(0.093)	(0.100)	(0.069)	
• **Chores time (hours/week)**	14.367	13.812	14.084	0.435
	(0.505)	(0.500)	(0.355)	
• **Care time (hours/week)**	13.528	13.617	13.574	0.942
	(0.600)	(1.080)	(0.624)	
Observations	**2631**	**2745**	**5376**	

Note: Means are presented with standard errors in parentheses. Standard errors are clustered at village level. Column (4) shows the p-values of the t-tests for the equality of the means. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level. Government job, formal private sector, informal private sector, irregular wage employment, self-employment, temporary employment, self-employment, temporary employment, days worked, wage income and employment hours are based on employment participation (1327). Willingness to work is only reported for unemployed individuals (4022) based on whether they are willing and ready to start work.

Individuals earn income from different sources including wage employment, transfers and remittances from friends and family, rents, divorce allowance, contributory pensions and cash transfers and private insurance funds. Individuals have an average income of about 10,200 EGP per year. Moving to Table 4.2.2 which looks at the difference between the Takaful beneficiaries and the rejected beneficiaries, we observe considerable differences in the means for the potential Forsa and non-Forsa beneficiaries given the low p-values. The rejected Takaful beneficiaries participate more in employment than the Takaful beneficiaries. Consequently, they also report higher sectoral composition in the different types of employment. They have a higher wage income and are more likely to be less time strapped than their counterparts.

Table 4.2.2: Employment of Potential Beneficiaries by Takaful Beneficiary Status

	(1)	(2)	(3)	(4)
	Rejected	**TKP beneficiary**	**Total**	**p-value**
Employment (1/0)	0.265	0.237	0.247	0.026**
	(0.012)	(0.009)	(0.008)	
For unemployed individuals:				
• **Willingness to work (1/0)**	0.131	0.118	0.122	0.243
	(0.010)	(0.007)	(0.007)	
For employed individuals:				
• **Government job (1/0)**	0.011	0.006	0.008	0.429
	(0.005)	(0.003)	(0.002)	
• **Formal private sector (1/0)**	0.028	0.013	0.018	0.087*
	(0.008)	(0.004)	(0.004)	
• **Informal private sector (1/0)**	0.162	0.108	0.128	0.008***
	(0.019)	(0.012)	(0.011)	
• **Irregular wage employment (1/0)**	0.676	0.699	0.690	0.407
	(0.025)	(0.020)	(0.017)	
• **Self-employment (1/0)**	0.121	0.172	0.153	0.009***
	(0.016)	(0.016)	(0.013)	
• **Temporary employment (1/0)**	0.002	0.000	0.001	0.320
	(0.002)	(0.000)	(0.001)	
• **Days worked (days)**	16.56	15.85	16.12	0.160
	(0.40)	(0.35)	(0.27)	
• **Monthly wage income (EGP)**	1660.1	1609.2	1628.1	0.318
	(40.73)	(39.61)	(31.61)	
• **Income from all sources (EGP/month)**	1750.6	1701.0	1719.4	0.425
	(44.71)	(39.69)	(29.96)	
For all individuals:				
• **Employment (hours/week)**	10.350	8.620	9.223	0.006***
	(0.588)	(0.417)	(0.383)	

• **Livestock production (hours/week)**	2.256	2.255	2.255	0.998
	(0.188)	(0.159)	(0.143)	
• **Shopping time (hours/week)**	3.164	3.217	3.198	0.702
	(0.148)	(0.124)	(0.116)	
• **Household activity (hours/week)**	0.565	0.579	0.574	0.924
	(0.120)	(0.084)	(0.069)	
• **Chores time (hours/week)**	13.814	14.228	14.084	0.314
	(0.428)	(0.393)	(0.355)	
• **Care time (hours/week)**	13.726	13.492	13.574	0.796
	(0.574)	(0.839)	(0.624)	
Observations	**1873**	**3503**	**5376**	

Note: Means are presented with standard errors in parentheses. Standard errors are clustered at village level. Government job, formal private sector, informal private sector, irregular wage employment, self-employment, temporary employment, self-employment, temporary employment, days worked, wage income and employment hours are based on employment participation (1327). Willingness to work is only reported for unemployed individuals (4022) based on whether they are willing and ready to start work. Column (4) shows the p-values of the t-tests for the equality of the means. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

Table 4.2.3 presents the differences in employment of potential participants by gender. Male individuals are more likely to be employed than their female counterparts. When unemployed, they are much more likely to be willing to take up a job opportunity, with 53 percent of males responding positively to the labor force question, compared to only 10 percent of females. Males participate more in irregular wage employment but are also less self-employed than females. Females spend dramatically more time in taking care of the elderly, shopping and performing various household chores. Males on the other hand spend slightly more time in livestock production activities.

Table 4.2.3: Employment of Potential Beneficiaries by Gender

	(1)	(2)	(3)	(4)
	Male	**Female**	**Total**	**p-value**
Employment (1/0)	0.698	0.104	0.247	0.000***
	(0.013)	(0.007)	(0.008)	
For unemployed individuals:				
• **Willingness to work (1/0)**	0.493	0.083	0.122	0.000***
	(0.026)	(0.006)	(0.007)	
For employed individuals:				
• **Government job (1/0)**	0.006	0.015	0.008	0.182
	(0.002)	(0.007)	(0.002)	
• **Formal private sector (1/0)**	0.015	0.027	0.018	0.238
	(0.004)	(0.009)	(0.004)	
• **Informal private sector (1/0)**	0.119	0.153	0.128	0.147
	(0.012)	(0.022)	(0.011)	
• **Irregular wage employment (1/0)**	0.770	0.478	0.690	0.000***
	(0.016)	(0.033)	(0.017)	
• **Self-employment (1/0)**	0.090	0.322	0.153	0.000***
	(0.010)	(0.032)	(0.013)	
• **Temporary employment (1/0)**	0.000	0.003	0.001	0.319

	(0.000)	(0.003)	(0.001)	
• **Days worked (days)**	15.34	17.75	16.12	0.000***
	(0.32)	(0.49)	(0.27)	
• **Monthly wage income (EGP)**	1839.6	1062.2	1628.1	0.000***
	(29.37)	(43.52)	(26.32)	
• **Income from all sources (EGP/month)**	1918.1	1187.7	1719.4	0.000***
	(33.30)	(55.25)	(29.96)	
• **Unpaid work (1/0)**	0.035	0.656	0.390	0.000***
	(0.007)	(0.021)	(0.016)	
For all individuals:				
• **Employment (hours/week)**	26.377	3.818	9.223	0.000***
	(0.901)	(0.297)	(0.383)	
• **Livestock production (hours/week)**	2.715	2.111	2.255	0.078*
	(0.338)	(0.137)	(0.143)	
• **Shopping time (hours/week)**	1.266	3.807	3.198	0.000***
	(0.111)	(0.141)	(0.116)	
• **Household activity (hours/week)**	0.752	0.518	0.574	0.197
	(0.161)	(0.077)	(0.069)	
• **Chores time (hours/week)**	0.612	18.328	14.084	0.000***
	(0.101)	(0.427)	(0.355)	
• **Care time (hours/week)**	2.451	17.078	13.574	0.000***
	(0.314)	(0.788)	(0.624)	
Observations	**1288**	**4088**	**5376**	

Note: Means are presented with standard errors in parentheses. Standard errors are clustered at village level. Government job, formal private sector, informal private sector, irregular wage employment, self-employment, temporary employment, self-employment, temporary employment, days worked, wage income and employment hours are based on employment participation (1327). Willingness to work is only reported for unemployed individuals (4022) based on whether they are willing and ready to start work. Column (4) shows the p-values of the t-tests for the equality of the means. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

Table 4.2.4 presents the differences in employment of potential participants by severity of poverty based on total household consumption. Individuals in very poor households are less likely to be employed than individuals in moderately poor households. While the individuals in moderately poor households are more likely to be employed in the informal private sector, the individuals in very poor households are more likely to get involved in irregular wage employment. The very poor individuals work lesser days on average and spend less time on activities such as shopping.

Table 4.2.4: Employment of Potential Beneficiaries by Poverty Status

	(1) Moderately poor	(2) Very poor	(3) Total	(4) p-value
Employment (1/0)	0.267	0.225	0.247	0.001***
	(0.010)	(0.011)	(0.008)	
• **Government job (1/0)**	0.014	0.000	0.008	0.001***
	(0.004)	(0.000)	(0.002)	
• **Formal private sector (1/0)**	0.017	0.020	0.018	0.688
	(0.005)	(0.006)	(0.004)	
• **Informal private sector (1/0)**	0.169	0.077	0.128	0.000***
	(0.016)	(0.012)	(0.011)	
• **Irregular wage employment (1/0)**	0.630	0.768	0.690	0.000***
	(0.024)	(0.018)	(0.017)	
• **Self employment (1/0)**	0.169	0.133	0.153	0.127
	(0.019)	(0.015)	(0.013)	
• **Temporary employment (1/0)**	0.001	0.000	0.001	0.319
	(0.001)	(0.000)	(0.001)	
• **Days worked (days)**	16.63	15.46	16.12	0.021**
	(0.34)	(0.41)	(0.27)	
• **Monthly wage income (EGP)**	1629.4	1626.5	1628.1	0.959
	(38.06)	(46.89)	(31.61)	
• **Income from all sources (EGP/month)**	1731.6	1703.8	1719.4	0.646
	(39.85)	(45.47)	(29.96)	
• **Unpaid work (1/0)**	0.379	0.405	0.390	0.266
	(0.018)	(0.021)	(0.016)	
• **Willingness to work (1/0)**	0.127	0.117	0.122	0.304
	(0.008)	(0.008)	(0.007)	
For all individuals:				
• **Employment (hours/week)**	10.045	8.323	9.223	0.003***
	(0.462)	(0.504)	(0.383)	
• **Livestock production (hours/week)**	2.345	2.157	2.255	0.338
	(0.165)	(0.181)	(0.143)	
• **Shopping time (hours/week)**	3.537	2.828	3.198	0.000***
	(0.129)	(0.140)	(0.116)	
• **Household activity (hours/week)**	0.637	0.505	0.574	0.242
	(0.087)	(0.090)	(0.069)	
• **Chores time (hours/week)**	14.198	13.958	14.084	0.612
	(0.374)	(0.477)	(0.355)	
• **Care time (hours/week)**	14.019	13.087	13.574	0.414
	(0.475)	(1.114)	(0.624)	
Observations	2808	2568	5376	

Note: Means are presented with standard errors in parentheses. Standard errors are clustered at village level. Government job, formal private sector, informal private sector, irregular wage employment, self-employment, temporary employment, self-employment, temporary employment, days worked, wage income and employment hours are based on employment participation (1327). Willingness to work is only gotten for unemployed individuals (4022) based on whether they are willing and ready to start work. Column (4) shows the p-values of the t-tests for the equality of the means. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

Table 4.2.5 shows the main differences with respect to employment and time use between potential participants from male and female headed households. When comparing male and female headed households, there are no significant differences in the probability of being employed. The main differences emerge when looking at average monthly wage income and involvement in the informal private sector. The average monthly wage income of female headed households is lower amounting to 1311 EGP versus 1642 EGP in male-headed households. In addition, the potential participant from female-headed households shows a greater likelihood of working in the informal private sector reaching 23 percent versus 12 percent in the male-headed sample. Lastly, the potential participant in female-headed households seem to have on average greater caretaking responsibilities reflected in the significantly higher number of hours allocated to household shopping and chores.

Table 4.2.5: Employment of Potential Beneficiaries by the Gender of Household Head

	(1) Male-Headed Household	(2) Female-headed household	(3) Total	(4) p-value
Employment (1/0)	0.247	0.229	0.247	0.542
	(0.009)	(0.029)	(0.008)	
For unemployed individuals:				
• **Willing to work (1/0)**	0.121	0.151	0.122	0.246
	(0.007)	(0.027)	(0.007)	
For employed individuals:				
• **Government job (1/0)**	0.008	0.000	0.008	0.001***
	(0.003)	(0.000)	(0.002)	
• **Formal private sector (1/0)**	0.017	0.058	0.018	0.193
	(0.004)	(0.032)	(0.004)	
• **Informal private sector (1/0)**	0.124	0.231	0.128	0.081*
	(0.011)	(0.063)	(0.011)	
• **Irregular wage employment (1/0)**	0.695	0.577	0.690	0.118
	(0.017)	(0.076)	(0.017)	
• **Self-employment (1/0)**	0.154	0.135	0.153	0.671
	(0.014)	(0.046)	(0.013)	
• **Temporary employment (1/0)**	0.001	0.000	0.001	0.319
	(0.001)	(0.000)	(0.001)	
• **Days worked (days)**	16.104	16.509	16.121	0.748
	(0.281)	(1.265)	(0.279)	
• **Monthly wage income (EGP)**	1641.9	1311.5	1628.1	0.016**
	(31.6)	(137.4)	(31.6)	
• **Income from all sources (EGP/month)**	1730.2	1472.8	1719.4	0.086*
	(30.69)	(133.53)	(29.96)	
For all individuals:				
• **Employment (hours/week)**	9.288	7.833	9.223	0.276
	(0.393)	(1.299)	(0.383)	
• **Livestock production (hours/week)**	2.254	2.290	2.255	0.937

	(0.147)	(0.439)	(0.143)	
• **Shopping time (hours/week)**	3.162	3.981	3.198	0.038**
	(0.116)	(0.400)	(0.116)	
• **Household activity (hours/week)**	0.581	0.425	0.574	0.472
	(0.071)	(0.208)	(0.069)	
• **Chores time (hours/week)**	13.993	16.021	14.084	0.030**
	(0.360)	(0.938)	(0.355)	
• **Care time (hours/week)**	13.551	14.063	13.574	0.721
	(0.642)	(1.365)	(0.624)	
Observations	**5136**	**240**	**5376**	

Note: Means are presented with standard errors in parentheses. Standard errors are clustered at village level. Government job, formal private sector, informal private sector, irregular wage employment, self-employment, temporary employment, self-employment, temporary employment, days worked, wage income and employment hours are based on employment participation (1327). Willingness to work is only gotten for unemployed individuals (4022) based on whether they are willing and ready to start work. Column (4) shows the p-values of the t-tests for the equality of the means. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

Table 4.2.6 shows the barriers to work among the nominated sample. About 88 percent of the potential participants mentioened the roles as housewives as the barrier for them to participate in employment. 4 percent of the potential participants do not just want to work. Approximately 1 percent are busy with childcare and their husband does not want them to work. All the other barriers are less than 1 percent.

Table 4.2.6: Barriers to Work

	Freq.	Percent
Full time student	27	0.76
Housewife	3125	88.50
Does not believe women should work	9	0.25
Husband does not think women should work	36	1.02
Opposition of husband for another reason	18	0.51
Opposition of another family member	10	0.28
Lack of childcare	43	1.22
Health conditions do not allow	19	0.54
Does not want to work	133	3.77
Temporarily disabled	2	0.06
Permanently disabled	8	0.23
Household income is sufficient	1	0.03
Others	100	2.83
Observations	3531	3531

4.3 Work Experience of Potential Participants

Table 4.3.1 presents the work experience of potential Forsa participants by treatment status. Few individuals (less than 1 percent) have either a technical, vocational, and professional work certificate. About 24 percent of individuals have made attempts to get a job at any time in the past. The average

search time before getting a job was about 13 months. Only 8 percent of individuals have worked previously.

Tables 4.3.2 and 4.3.3 show the work experience of potential Forsa participants by Takaful beneficiary status and gender respectively. The rejected Takaful individuals are more likely to own a work certificate, make attempts to find a job and have some previous experience.

There are very substantial differences in work experience by gender. Approximately 50 percent of males have made some attempts to find work in the past compared to only 15 percent of females and 20 percent of males have at least some work experiences, compared to only 5 percent of females.

Table 4.3.1: Work Experience of Potential Beneficiaries by Treatment Status

	(1)	(2)	(3)	(4)
	Control	**Treatment**	**Total**	**p-value**
Work certification (1/0)	0.010	0.008	0.009	0.605
	(0.002)	(0.002)	(0.001)	
Attempts to work (1/0)	0.242	0.229	0.235	0.489
	(0.015)	(0.012)	(0.009)	
Previous experience (1/0)	0.084	0.087	0.085	0.768
	(0.008)	(0.007)	(0.005)	
Time to search for job (months)	13.841	12.357	13.070	0.900
	(9.160)	(7.481)	(5.852)	
Government job (1/0)	0.014	0.008	0.011	0.589
	(0.008)	(0.006)	(0.005)	
Formal private sector (1/0)	0.041	0.013	0.026	0.056*
	(0.013)	(0.007)	(0.007)	
Informal sector (1/0)	0.277	0.311	0.295	0.486
	(0.033)	(0.035)	(0.024)	
Self-employment in agriculture (1/0)	0.155	0.139	0.146	0.675
	(0.030)	(0.023)	(0.019)	
Other self-employment (1/0)	0.218	0.248	0.234	0.448
	(0.027)	(0.028)	(0.020)	
Observations	2631	2745	5376	

Note: Means are presented with standard errors in parenthesis. Standard errors are clustered at the village level. Column (4) shows the p-values of the t-tests for the equality of the means. Time to search for jobs, government job, formal private and informal sector, self-employment in agriculture and other self-employment are reported only for individuals with previous work experience (458). ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

Table 4.3.2: Work Experience of Potential Beneficiaries by Takaful Beneficiary Status

	(1) Rejected	(2) Beneficiary	(3) Total	(4) p-value
Work certification (1/0)	0.015	0.005	0.009	0.002***
	(0.003)	(0.001)	(0.001)	
Attempts to work (1/0)	0.258	0.223	0.235	0.006***
	(0.013)	(0.010)	(0.009)	
Previous experience (1/0)	0.097	0.079	0.085	0.023**
	(0.008)	(0.006)	(0.005)	
Time to search for job (months)	26.418	4.268	13.070	0.132
	(14.649)	(0.463)	(5.852)	
Government job (1/0)	0.011	0.011	0.011	0.991
	(0.008)	(0.006)	(0.005)	
Formal private sector (1/0)	0.033	0.022	0.026	0.486
	(0.013)	(0.009)	(0.007)	
Informal sector (1/0)	0.330	0.272	0.295	0.204
	(0.039)	(0.028)	(0.024)	
Self-employment in agriculture (1/0)	0.115	0.167	0.146	0.118
	(0.023)	(0.026)	(0.019)	
Other self-employment (1/0)	0.170	0.275	0.234	0.007***
	(0.028)	(0.026)	(0.020)	
Observations	1873	3503	5376	

Note: Means are presented with standard errors in parenthesis. Standard errors are clustered at the village level. Column (4) shows the p-values of the t-tests for the equality of the means. Time to search for jobs, government job, formal private and informal sector, self-employment in agriculture and other self-employment are reported only for individuals with previous work experience (458). ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

Table 4.3.3: Work Experience of Potential Beneficiaries by Gender

	(1)	(2)	(3)	(4)
	Male	**Female**	**Total**	**p-value**
Work certification (1/0)	0.013	0.007	0.009	0.085*
	(0.003)	(0.001)	(0.001)	
Attempts to work (1/0)	0.508	0.150	0.235	0.000***
	(0.017)	(0.008)	(0.009)	
Previous experience (1/0)	0.208	0.046	0.085	0.000***
	(0.014)	(0.004)	(0.005)	
Time to search for job (months)	12.672	13.632	13.070	0.937
	(7.545)	(9.380)	(5.852)	
Government job (1/0)	0.007	0.016	0.011	0.435
	(0.005)	(0.009)	(0.005)	
Formal private sector (1/0)	0.019	0.037	0.026	0.249
	(0.008)	(0.013)	(0.007)	
Informal sector (1/0)	0.257	0.347	0.295	0.042**
	(0.033)	(0.031)	(0.024)	
Self-employment in agriculture (1/0)	0.201	0.068	0.146	0.000***
	(0.027)	(0.019)	(0.019)	
Other self-employment (1/0)	0.198	0.284	0.234	0.034**
	(0.024)	(0.032)	(0.020)	
Observations	1288	4088	5376	

Note: Means are presented with standard errors in parenthesis. Standard errors are clustered at the village level. Column (4) shows the p-values of the t-tests for the equality of the means. Time to search for jobs, government job, formal private and informal sector, self-employment in agriculture and other self-employment are reported only for individuals with previous work experience (458). ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

Table 4.3.4 shows the work experience of potential beneficiaries by poverty status. Individuals in very poor households are observed to have fewer previous work experiences than the individuals in moderately poor households. Also, they are less likely to be either employed in a government job as well as in the informal sector.

Table 4.3.4: Work Experience of Potential Beneficiaries by Poverty Classification

	(1) Moderately poor	(2) Very poor	(3) Total	(4) p-value
Work certification (1/0)	0.009	0.009	0.009	0.891
	(0.002)	(0.002)	(0.001)	
Attempts to work (1/0)	0.246	0.224	0.235	0.073*
	(0.011)	(0.011)	(0.009)	
Previous experience (1/0)	0.099	0.070	0.085	0.000***
	(0.007)	(0.006)	(0.005)	
Time to search for job (months)	18.755	4.289	13.070	0.133
	(9.554)	(0.635)	(5.852)	
Government job (1/0)	0.018	0.000	0.011	0.023**
	(0.008)	(0.000)	(0.005)	
Formal private sector (1/0)	0.018	0.039	0.026	0.198
	(0.008)	(0.014)	(0.007)	
Informal sector (1/0)	0.331	0.239	0.295	0.028**
	(0.029)	(0.035)	(0.024)	
Self employment in agriculture (1/0)	0.126	0.178	0.146	0.111
	(0.021)	(0.029)	(0.019)	
Other self employment (1/0)	0.223	0.250	0.234	0.507
	(0.024)	(0.033)	(0.020)	
Observations	2808	2568	5376	

Note: Means are presented with standard errors in parenthesis. Standard errors are clustered at the village level. Column (4) shows the p-values of the t-tests for the equality of the means. Time to search for jobs, government job, formal private and informal sector, self-employment in agriculture and other self-employment are reported only for individuals with previous work experience (458). ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

4.4 Employment Preferences of Potential Participants

Tables in section 4.4 present the preferences of potential Forsa participants regarding employment characteristics, such as formality, distance, and wages.

We asked separately for the minimum acceptable wage for a formal sector job in the local area, an informal sector job in the local area, and a formal sector job one hour away by public transportation. The informal job is defined as a job without a contract or social insurance. As shown in Table 4.4.1, there is a noticeable share of respondents that have a lower reservation wage for an informal job than for a formal job amounting to approximately 28 percent of the nominated participants. Surprisingly, on average, informal jobs are slightly preferred, with an average wage requirement of about 120 EGP higher for a formal job than for an informal. This indicates a lack of value attached to having a written contract and formal benefits, which is a challenge as Egypt attempts to reduce the size of the informal sector.

With respect to valuation of jobs being within or close to the local area, the results reveal that on average the potential participants strongly prefer a job within or close to the local area over an outside job (50 KM away/1 hour with public transportation) even if transportation is provided. The additional amount they require to accept formal employment outside their local area is on average 531 EGP.

As presented in Table 4.4.2, Takaful beneficiaries have lower minimum wage requirements to accept employment (both formal and informal employment) compared to participants from rejected households. Yet Takaful beneficiaries' valuation of formal employment is relatively lower, which is reflected in the lower minimum wage they require to accept an informal job and in their significantly bigger difference between the formal job's minimum wage and the informal job's minimum wage.

Table 4.4.3 shows that the female nominated participants require on more than 20 percent lower wages for both formal and informal employment. Their valuation of informal employment and nearby jobs is not significantly different from the male nominated group.

Table 4.5.4 shows the valuation of job characteristics by the degree of poverty of potential beneficiaries.

Tables 4.4.5 and 4.4.6 summarize the potential participants preferences for Forsa modality self-employment activities. 77.2 percent of potential participants prefer self-employment over wage employment. Participants reporting a self-employment preference were asked to identify all their preferred activities by allowing them to choose multiple activities. The most common reported activities are ranked in ascending order, revealing that breeding sheep and goats, fattening sheep, goats, and calves and poultry (chicken-ducks/turkey), rabbits breeding, and table eggs production are generally the most selected.

Table 4.4.1: Valuation of Job Characteristics by Treatment Status

	(1)	(2)	(3)	(4)
	Control	**Treatment**	**Total**	**p-value**
Prefers informal job over the formal job	0.284	0.272	0.278	0.486
	(0.012)	(0.011)	(0.008)	
Minimum wage to accept for an informal job	2331.0	2365.7	2348.7	0.673
	(56.79)	(59.56)	(41.18)	
Minimum wage to accept for a formal job	2435.7	2505.8	2471.5	0.461
	(59.80)	(73.86)	(47.76)	
Difference between a formal sector job minimum wage and an informal sector job minimum wage	104.7	140.0	122.7	0.312
	(14.01)	(32.01)	(17.72)	
Difference between a formal job (50 KM away) minimum wage and a local formal job minimum wage	571.6	504.1	537.1	0.273
	(43.58)	(43.58)	(30.83)	
Observations	**2631**	**2745**	**5376**	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program. The informal job is defined as a job with (no contract or social insurance) within or close to the local area. The formal job is defined as a non-governmental formal job within or close to the local area. All minimum wage variables represent the minimum monthly wage

Table 4.4.2: Valuation of Job Characteristics by Takaful Beneficiary Status

	(1)	(2)	(3)	(4)
	Rejected	**TKP Beneficiary**	**Total**	**p-value**
Prefers informal job over the formal job	0.267	0.284	0.278	0.197
	(0.011)	(0.009)	(0.008)	
Minimum wage to accept for an informal job	2395.1	2323.9	2348.7	0.056*
	(46.80)	(43.70)	(41.18)	
Minimum wage to accept for a formal job	2480.40	2466.77	2471.52	0.754
	(48.40)	(53.89)	(47.76)	
Difference between a formal sector job minimum wage and an informal sector job minimum wage	85.2	142.8	122.7	0.068*
	(20.28)	(24.63)	(17.72)	
Difference between a formal job (50 KM away) minimum wage and a local formal job minimum wage	554.5	527.8	537.1	0.571
	(39.51)	(37.36)	(30.83)	
Observations	**1873**	**3503**	**5376**	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program. The informal job is defined as a job with (no contract or social insurance) within or close to the local area. The formal job is defined as a non-governmental formal job within or close to the local area. All minimum wage variables represent the minimum monthly wage.

Table 4.4.3: Valuation of Job Characteristics by Gender

	(1)	(2)	(3)	(4)
	Male	**Female**	**Total**	**p-value**
Prefers informal job over the formal job- Higher minimum wage for the formal job	0.270	0.280	0.278	0.495
	(0.013)	(0.009)	(0.008)	
Minimum wage to accept for an informal job	2931.0	2165.2	2348.7	0.000***
	(45.81)	(43.10)	(41.18)	
Minimum wage to accept for a formal job	3043.9	2291.1	2471.5	0.000***
	(60.85)	(49.23)	(47.76)	
Difference between a formal sector job minimum wage and an informal sector job minimum wage	112.9	125.9	122.7	0.757
	(37.48)	(19.85)	(17.72)	
Difference between a formal job (50 KM away) minimum wage and a local formal job minimum wage	607.7	514.9	537.1	0.242
	(72.24)	(33.17)	(30.83)	
Observations	1288	4088	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program. The informal job is defined as a job with (no contract or social insurance) within or close to the local area. The formal job is defined as a non-governmental formal job within or close to the local area. All minimum wage variables represent the minimum monthly wage.

Table 4.4.4: Valuation of Job Characteristics by poverty status

	(1)	(2)	(3)	(4)
	Moderately poor	**Very poor**	**Total**	**p-value**
Prefers informal job over the formal job-Higher minimum wage for the formal job	0.280	0.275	0.278	0.702
	(0.010)	(0.010)	(0.008)	
Minimum wage to accept for an informal job	2359.5	2336.9	2348.7	0.619
	(42.62)	(51.36)	(41.18)	
Minimum wage to accept for a formal job	2481.7	2460.3	2471.5	0.720
	(47.75)	(64.46)	(47.76)	
Difference between a formal sector job minimum wage and an informal sector job minimum wage	122.2	123.3	122.7	0.976
	(21.32)	(29.10)	(17.72)	
Difference between a formal job (50 KM away) minimum wage and a local formal job minimum wage	559.6	512.6	537.1	0.361
	(38.49)	(41.78)	(30.83)	
Observations	2808	2568	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program. The informal job is defined as a job with (no contract or social insurance) within or close to the local area. The formal job is defined as a non-governmental formal job within or close to the local area. All minimum wage variables represent the minimum monthly wage.

Table 4.4.5: Employment Modality Preference

	(1)	(2)	(3)	(4)
	Control	**Treatment**	**Total**	**p-value**
Self-Employment modality preference (1=Self-employment)	0.777	0.768	0.772	0.690
	(0.014)	(0.015)	(0.010)	
Observations	1288	4088	5376	

Table 4.4.6: Preferred Self-Employment Activities

	(Mean)
Breeding sheep and goats	0.379
Fattening sheep, goats, and calves	0.271
Fattening poultry	0.246
Rabbit breeding	0.190
Egg production	0.121
Milk collection/ dairy processing	0.056
Slaughterhouse for poultry	0.044
Fish processing, freezing, and packing	0.033
Drying and packaging medicinal and aromatic plants	0.029
Basic commodity packaging (rice/sugar- legumes)	0.027
Palm baskets/ handbags/accessories side tables/chairs	0.021
Composting sugar cane waste	0.018
Clothing and linens	0.016
Leather products	0.014
Handmade rugs (looms)	0.012
Textile and hand embroidery	0.008
Manufacture of furniture and other wood products	0.006
Trade and retail: agricultural inputs	0.006
Trade and retail: poultry and rabbits	0.004
Trade and retail: food	0.004
Plumbing, carpentry, blacksmithing, electrician	0.004
Artisans' supplies (construction and painting materials)	0.003
Automobile and motorcycle maintenance and repair	0.003
Beekeeping	0.003
Growing vegetables- open fields	0.002
Growing vegetables- green houses	0.000
Observations	4856

Notes: The sample size is 4857. It is conditional on reporting a preference for self-employment over wage employment or reporting a neutral stance (not having a specific preference).

4.5 Work Skills of Potential Participants

The self-reported skills of the potential Forsa participants are presented in Table 4.5.1, 4.5.2, 4.5.3 and 4.5.4. Table 4.5.1 shows that balance is achieved between treatment and control, while Table 4.5.2 and 4.5.3 shows that potential participants from rejected households and males have systematically higher self-reported skills relative to Takaful beneficiaries and females, respectively. Table 4.5.4 shows the existence of significant heterogeneity in poverty status based on the reported skills of the potential Forsa participants.

In general, self-reported literacy skills are low (1.9/5), an insight which is in contrast with management skills and interaction skills which both seem to be high (above 3.0). About 40 percent of potential Forsa participants can read notes, emails, newspapers, forms, and bills. However, only about 8 percent of these individuals successfully completed bills or filled out government and application forms. Also, approximately 44 percent of these individuals measured and estimated various weights, sizes, and calculated distances. They were also able to compute prices and costs. That notwithstanding, only about 20 percent were able to calculate fractions, decimals, and percentages. In terms of advanced technological abilities, less than 2 percent of Forsa beneficiaries used a computer in the last 3 months. About 11 percent of them can drive a car or a tricycle while 3 percent are able to drive a truck.

In terms of physical ability, about 14 percent of potential Forsa participants suffer from chronic illness such as diabetes, asthma, cancer, heart disease, high blood pressure, and hepatitis which makes them to miss about 5 workdays per month. While about 8 percent of individuals have a hearing difficulty, 14 percent have eyesight problems. On the other hand, a great majority of the Forsa beneficiaries (89 percent) are able to walk for 50m without any assistance. 72 percent can lift or pull anything less than 25Kg.

Attendance in job search centers is limited (6 percent) with only 3 percent of individuals reporting to have attended counseling and coaching sessions.

In addition to collecting self-reported skills, we also conducted digit span tests of cognitive ability and a literacy test. Tables 4.5.5, 4.5.6, 4.5.7, and 4.5.8 present the digit span test scores, the reverse digit span test scores and literacy test scores by treatment status, Takaful beneficiary status, gender, and poverty status.

The digit span and the reverse digit span tests are standardized measures of cognitive ability based on the length of the sequences of numbers that the respondent could fully recall/retain. The generated sequences show a random combination of digits and the sequences become longer as the respondent successfully moves from one question to the next. Every sequence/question is given two trials. A point is given under the test score when the respondent can successfully recall the sequence in the first or the second trial. The digit span test instructs the respondent to recall the sequence in the same order, while the reverse digit span test instructs the respondent to recall the sequence in a reverse or a backward order. The digit span (forward) measures the subject's short-term memory, while the reverse digit span measures working memory, or the ability to hold information in memory and manipulate that information to produce a result. Both tests in this module start with 2-digit sequences and increase by one digit for each attempt, going up to a maximum of a 9-digit sequences. The test concludes and the score is recorded when the respondent fails to recall the number sequences for both the first and second trial for a given number of digits. The score achieved (0-9) is the maximum number of digits recalled successfully. Table 4.5.5 reveals that the nominated Forsa participant's scores in the digit span test average 2.4 out

of 9, which means that on average the nominated individuals could only recall up between 2–3-digit sequences. The average scores on the reverse digit span test were similar at 2.3 out of 9.

The literacy test asks the nominated Forsa participant to read the printed sign and imagine they see this at a large store, which states that "Announcement- Sale Tuesday to Friday this week on the following items: women's clothes 30% discount, shoes 10% discount, bedding 50% discount (not including mattresses)". The first question in the literacy tests asks if women's clothes at the store will be more expensive this week or next week. The second question asks if a pair of shoes usually costs 100 EGP, how much will it cost this week. The third question asks if a mattress usually costs 10,000 EGP, how much will it cost this week. Only 19% of respondents answered all three questions correctly.

Table 4.5.6 highlights that Takaful beneficiaries' cognitive tests scores are consistently and significantly lower than non-Takaful beneficiaries, which aligns with the educational attainment differences between Takaful and non-Takaful beneficiaries in the demographic characteristics section. The table shows that 22.4 percent in the Takaful group compared to 17.4 percent in non-Takaful group failed to answer the three literacy tests correctly. In parallel, 41 percent in the Takaful beneficiary group answered all literacy tests correctly versus 45 percent in the rejected group.

Significant differences also appear in Table 4.5.7 reporting on cognitive tests' scores by gender. The female nominated sub-sample has consistently and significantly lower scores across the digit span and reverse digit span tests and the three literacy tests, which aligns with their lower educational attainment levels. The female nominated sub-sample has an average of 2.1 for the highest reverse digit score versus 2.5 in the male nominated sub-sample. On average, the percentage of failing in all three literacy tests amounts to 37.4 percent in the female nominated sub-sample compared to 34.5 percent in the male nominated sub-sample. Correspondingly, the probability of answering all literacy tests correctly or having only 1 wrong is 8 percentage points lower in the female nominated sub-sample. Table 4.5.8 shows the reported skills by poverty status.

Table 4.5.1: Self-reported Skills by Treatment Status

	(1)	(2)	(3)	(4)
	Control	**Treatment**	**Total**	**p-value**
Paid apprenticeship (1/0)	0.008	0.008	0.008	0.760
	(0.002)	(0.002)	(0.001)	
Work certificate (1/0)	0.010	0.008	0.009	0.605
	(0.002)	(0.002)	(0.001)	
Literacy skills (0-5 scale (0=illiterate))	1.883	1.942	1.913	0.463
	(0.059)	(0.054)	(0.040)	
Money management skills (1-5 scale (1=Poor))	3.027	3.026	3.027	0.990
	(0.045)	(0.039)	(0.030)	
Interactive professional skills (1-5 scale (1=Poor))	3.156	3.160	3.158	0.960
	(0.050)	(0.042)	(0.033)	
Reads very short notes or instructions (1/0)	0.417	0.417	0.417	0.985
	(0.016)	(0.014)	(0.010)	
Reads Emails/Forms/Bills/Newspapers (1/0)	0.367	0.361	0.364	0.773
	(0.016)	(0.013)	(0.010)	
Reads Books (1/0)	0.127	0.133	0.130	0.637
	(0.010)	(0.008)	(0.006)	

Fills out bills or forms (1/0)	0.071	0.085	0.078	0.113
	(0.006)	(0.007)	(0.005)	
Writes notes and instructions (1/0)	0.200	0.201	0.201	0.966
	(0.013)	(0.011)	(0.008)	
Measures and estimates sizes (1/0)	0.448	0.426	0.437	0.453
	(0.022)	(0.020)	(0.015)	
Calculates prices or costs (1/0)	0.448	0.426	0.437	0.453
	(0.022)	(0.020)	(0.015)	
Calculates fractions and decimals (1/0)	0.197	0.193	0.195	0.818
	(0.012)	(0.012)	(0.008)	
Performs multiplication or divisions (1/0)	0.197	0.193	0.195	0.818
	(0.012)	(0.012)	(0.008)	
Computer use (1/0)	0.020	0.016	0.018	0.360
	(0.003)	(0.002)	(0.002)	
Ability to drive a car, tuk-tuk or tricycle (1/0)	0.115	0.123	0.119	0.513
	(0.009)	(0.009)	(0.006)	
Ability to drive a truck (1/0)	0.038	0.040	0.039	0.830
	(0.005)	(0.004)	(0.003)	
Proficiency in English (0-5 scale) (0=None)	0.392	0.405	0.399	0.650
	(0.021)	(0.018)	(0.014)	
Suffers from chronic illness (1/0)	0.132	0.142	0.137	0.404
	(0.008)	(0.010)	(0.006)	
Skipped workdays due to chronic illness*	5.516	5.353	5.430	0.698
	(0.318)	(0.274)	(0.208)	
Hearing difficulty level (0-5 scale) (0= No problem)	0.086	0.072	0.079	0.238
	(0.007)	(0.008)	(0.006)	
Having an eyesight problem (1/0)	0.141	0.137	0.139	0.796
	(0.010)	(0.008)	(0.006)	
Eyesight difficulty level (0-5 scale) *	0.347	0.330	0.338	0.636
	(0.028)	(0.022)	(0.017)	
Walks 50m without assistance	0.893	0.873	0.883	0.147
	(0.010)	(0.009)	(0.007)	
Lift weights above 25kg (1/0)	0.739	0.702	0.720	0.040**
	(0.013)	(0.013)	(0.009)	
Visited youth job search center (1/0)	0.069	0.064	0.066	0.548
	(0.005)	(0.006)	(0.004)	
Attended counselling or coaching session (1/0)	0.025	0.038	0.032	0.035**
	(0.003)	(0.005)	(0.003)	
Observations	2631	2745	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program. The sample size for variable: number of workdays skipped in the past 4 weeks due to chronic illness is 738 since it was only asked to households who reported having a chronic illness. The sample size for Self-reported eyesight difficulty level (0-5 scale) is 5337 as it excludes households who reported an eyesight problem without being able to rate it. Chronic illnesses include diabetes, asthma, cancer, heart disease, high blood pressure, hepatitis.

Table 4.5.2: Self-reported Skills by Takaful Beneficiary Status

	(1)	(2)	(3)	(4)
	Rejected	**TKP beneficiary**	**Total**	**p-value**
Paid apprenticeship (1/0)	0.014	0.005	0.008	0.003***
	(0.003)	(0.001)	(0.001)	
Work certificate (1/0)	0.015	0.005	0.009	0.002***
	(0.003)	(0.001)	(0.001)	
Literacy skills (0-5 scale (0=illiterate))	2.332	1.690	1.913	0.000***
	(0.050)	(0.044)	(0.040)	
Money management skills (1-5 scale (1=Poor))	3.154	2.959	3.027	0.000***
	(0.034)	(0.032)	(0.030)	
Interactive professional skills (1-5 scale (1=Poor))	3.269	3.099	3.158	0.000***
	(0.037)	(0.035)	(0.033)	
Reads very short notes or instructions (1/0)	0.516	0.364	0.417	0.000***
	(0.014)	(0.011)	(0.010)	
Reads Emails/Forms/Bills/Newspapers (1/0)	0.461	0.312	0.364	0.000***
	(0.015)	(0.011)	(0.010)	
Reads Books (1/0)	0.166	0.111	0.130	0.000***
	(0.010)	(0.006)	(0.006)	
Fills out bills or forms (1/0)	0.093	0.070	0.078	0.004***
	(0.007)	(0.005)	(0.005)	
Writes notes and instructions (1/0)	0.256	0.171	0.201	0.000***
	(0.012)	(0.009)	(0.008)	
Measures and estimates sizes (1/0)	0.461	0.424	0.437	0.010**
	(0.017)	(0.016)	(0.015)	
Calculates prices or costs (1/0)	0.461	0.424	0.437	0.010**
	(0.017)	(0.016)	(0.015)	
Calculates fractions and decimals (1/0)	0.237	0.173	0.195	0.000***
	(0.012)	(0.009)	(0.008)	
Performs multiplications or divisions (1/0)	0.237	0.173	0.195	0.000***
	(0.012)	(0.009)	(0.008)	
Advanced mathematical skills (1/0)	0.369	0.282	0.312	0.000***
	(0.015)	(0.011)	(0.011)	
Computer use (1/0)	0.028	0.013	0.018	0.001***
	(0.004)	(0.002)	(0.002)	
Ability to drive a car, tuk-tuk or tricycle (1/0)	0.137	0.110	0.119	0.006***
	(0.010)	(0.007)	(0.006)	
Ability to drive a truck (1/0)	0.056	0.030	0.039	0.000***
	(0.006)	(0.003)	(0.003)	
Proficiency in English (0-5 scale) (0=None)	0.555	0.315	0.399	0.000***
	(0.023)	(0.014)	(0.014)	
Suffers from chronic illness (1/0)	0.133	0.140	0.137	0.516
	(0.009)	(0.007)	(0.006)	
Skipped workdays due to chronic illness*	5.068	5.613	5.430	0.262
	(0.376)	(0.270)	(0.208)	
Hearing difficulty level (0-5 scale) (0= No problem)	0.068	0.085	0.079	0.133
	(0.009)	(0.007)	(0.006)	
Having an eyesight problem (1/0)	0.129	0.144	0.139	0.113

	(0.008)	(0.008)	(0.006)	
Eyesight difficulty level (0-5 scale) *	0.310	0.354	0.338	0.075*
	(0.021)	(0.021)	(0.017)	
Walks 50m without assistance	0.893	0.877	0.883	0.053*
	(0.008)	(0.008)	(0.007)	
Lift weights above 25kg (1/0)	0.731	0.713	0.720	0.146
	(0.012)	(0.010)	(0.009)	
Visited youth job search center (1/0)	0.088	0.055	0.066	0.000***
	(0.007)	(0.004)	(0.004)	
Attended counselling or coaching session (1/0)	0.033	0.031	0.032	0.798
	(0.004)	(0.004)	(0.003)	
Observations	1873	3503	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program. The sample size for variable: number of workdays skipped in the past 4 weeks due to chronic illness is 738 since it was only asked to households who reported having a chronic illness. The sample size for Self-reported eyesight difficulty level (0-5 scale) is 5337 as it excludes households who reported an eyesight problem without being able to rate it. Chronic illnesses include diabetes, asthma, cancer, heart disease, high blood pressure, hepatitis.

Table 4.5.3: Self-reported Skills by Gender

	(1)	(2)	(3)	(4)
	Male	**Female**	**Total**	**p-value**
Paid apprenticeship (1/0)	0.012	0.007	0.008	0.062*
	(0.003)	(0.001)	(0.001)	
Work certificate (1/0)	0.013	0.007	0.009	0.085*
	(0.003)	(0.001)	(0.001)	
Self-employment preference (1/0)	0.807	0.762	0.773	0.002***
	(0.014)	(0.011)	(0.010)	
Literacy skills (0-5 scale (0=illiterate))	2.308	1.789	1.913	0.000***
	(0.058)	(0.042)	(0.040)	
Money management skills (1-5 scale (1=Poor))	3.366	2.919	3.026	0.000***
	(0.036)	(0.032)	(0.030)	
Interactive professional skills (1-5 scale (1=Poor))	3.529	3.041	3.158	0.000***
	(0.036)	(0.035)	(0.033)	
Reads very short notes or instructions (1/0)	0.488	0.395	0.417	0.000***
	(0.015)	(0.012)	(0.010)	
Reads Emails/Forms/Bills/Newspapers (1/0)	0.423	0.345	0.364	0.000***
	(0.016)	(0.011)	(0.010)	
Reads Books (1/0)	0.138	0.127	0.130	0.367
	(0.010)	(0.007)	(0.006)	
Fills out bills or forms (1/0)	0.112	0.068	0.078	0.000***
	(0.009)	(0.005)	(0.005)	
Writes notes and instructions (1/0)	0.257	0.183	0.201	0.000***
	(0.013)	(0.009)	(0.008)	
Measures and estimates sizes (1/0)	0.467	0.427	0.437	0.031**
	(0.018)	(0.017)	(0.015)	
Calculates prices or costs (1/0)	0.467	0.427	0.437	0.031**
	(0.018)	(0.017)	(0.015)	
Calculates fractions and decimals (1/0)	0.268	0.172	0.195	0.000***
	(0.017)	(0.008)	(0.008)	
Performs multiplication or divisions (1/0)	0.268	0.172	0.195	0.000***
	(0.017)	(0.008)	(0.008)	

Computer use (1/0)	0.027	0.015	0.018	0.018**
	(0.005)	(0.002)	(0.002)	
Ability to drive a car, tuk-tuk or tricycle (1/0)	0.473	0.008	0.119	0.000***
	(0.015)	(0.002)	(0.006)	
Ability to drive a truck (1/0)	0.155	0.003	0.039	0.000***
	(0.010)	(0.001)	(0.003)	
Proficiency in English (0-5 scale) (0=None)	0.461	0.379	0.399	0.002***
	(0.026)	(0.015)	(0.014)	
Suffers from chronic illness (1/0)	0.116	0.144	0.137	0.006***
	(0.009)	(0.007)	(0.006)	
Skipped workdays due to chronic illness*	6.752	5.095	5.430	0.014**
	(0.637)	(0.210)	(0.208)	
Hearing difficulty level (0-5 scale) (0= No problem)	0.077	0.080	0.079	0.823
	(0.010)	(0.006)	(0.006)	
Having an eyesight problem (1/0)	0.120	0.145	0.139	0.031**
	(0.010)	(0.007)	(0.006)	
Eyesight difficulty level (0-5 scale) *	0.275	0.358	0.338	0.006***
	(0.025)	(0.020)	(0.017)	
Walks 50m without assistance	0.932	0.867	0.883	0.000***
	(0.007)	(0.008)	(0.007)	
Lift weights above 25kg (1/0)	0.867	0.673	0.720	0.000***
	(0.010)	(0.010)	(0.009)	
Visited youth job search center (1/0)	0.140	0.043	0.066	0.000***
	(0.010)	(0.003)	(0.004)	
Attended counselling or coaching session (1/0)	0.029	0.033	0.032	0.526
	(0.005)	(0.004)	(0.003)	
Observations	1288	4088	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program. The sample size for variable: number of workdays skipped in the past 4 weeks due to chronic illness is 738 since it is conditional on having a chronic illness. The sample size for Self-reported eyesight difficulty level (0-5 scale) is 5337 as it excludes households who reported an eyesight problem without being able to rate it. Chronic illnesses include diabetes, asthma, cancer, heart disease, high blood pressure, hepatitis.

Table 4.5.4: Self-reported Skills by poverty status

	(1)	(2)	(3)	(4)
	Moderately poor	**Very poor**	**Total**	**p-value**
Paid apprenticeship (1/0)	0.009	0.007	0.008	0.279
	(0.002)	(0.002)	(0.001)	
Work certificate (1/0)	0.009	0.009	0.009	0.891
	(0.002)	(0.002)	(0.001)	
Self-employment preference (1/0)	0.799	0.744	0.773	0.000***
	(0.011)	(0.013)	(0.010)	
Literacy skills (0-5 scale (0=illiterate))	2.011	1.806	1.913	0.000***
	(0.046)	(0.050)	(0.040)	
Money management skills (1-5 scale (1=Poor))	3.091	2.956	3.026	0.000***
	(0.034)	(0.036)	(0.030)	
Interactive professional skills (1-5 scale (1=Poor))	3.222	3.088	3.158	0.000***

	(0.036)	(0.039)	(0.033)	
Reads very short notes or instructions (1/0)	0.465	0.364	0.417	0.000***
	(0.012)	(0.014)	(0.010)	
Reads Emails/Forms/Bills/Newspapers (1/0)	0.411	0.313	0.364	0.000***
	(0.012)	(0.013)	(0.010)	
Reads Books (1/0)	0.137	0.123	0.130	0.202
	(0.008)	(0.009)	(0.006)	
Fills out bills or forms (1/0)	0.086	0.070	0.078	0.042**
	(0.006)	(0.006)	(0.005)	
Writes notes and instructions (1/0)	0.224	0.175	0.201	0.000***
	(0.011)	(0.011)	(0.008)	
Measures and estimates sizes (1/0)	0.471	0.399	0.437	0.000***
	(0.017)	(0.018)	(0.015)	
Calculates prices or costs (1/0)	0.471	0.399	0.437	0.000***
	(0.017)	(0.018)	(0.015)	
Calculates fractions and decimals (1/0)	0.212	0.176	0.195	0.006***
	(0.011)	(0.010)	(0.008)	
Performs multiplications or divisions (1/0)	0.212	0.176	0.195	0.006***
	(0.011)	(0.010)	(0.008)	
Computer use (1/0)	0.023	0.012	0.018	0.004***
	(0.003)	(0.002)	(0.002)	
Ability to drive a car, tuk-tuk or tricycle (1/0)	0.123	0.116	0.119	0.424
	(0.008)	(0.008)	(0.006)	
Ability to drive a truck (1/0)	0.045	0.033	0.039	0.036**
	(0.004)	(0.004)	(0.003)	
Proficiency in English (0-5 scale) (0=None)	0.450	0.342	0.399	0.000***
	(0.019)	(0.016)	(0.014)	
Suffers from chronic illness (1/0)	0.147	0.126	0.137	0.028**
	(0.008)	(0.008)	(0.006)	
Skipped workdays due to chronic illness*	5.290	5.608	5.430	0.461
	(0.267)	(0.335)	(0.208)	
Hearing difficulty level (0-5 scale) (0= No problem)	0.085	0.072	0.079	0.195
	(0.008)	(0.007)	(0.006)	
Having an eyesight problem (1/0)	0.147	0.130	0.139	0.123
	(0.009)	(0.008)	(0.006)	
Eyesight difficulty level (0-5 scale) *	0.370	0.304	0.338	0.024**
	(0.025)	(0.020)	(0.017)	
Walks 50m without assistance	0.884	0.882	0.883	0.828
	(0.008)	(0.008)	(0.007)	
Lift weights above 25kg (1/0)	0.706	0.734	0.720	0.033**
	(0.011)	(0.011)	(0.009)	
Visited youth job search center (1/0)	0.067	0.066	0.066	0.863
	(0.005)	(0.005)	(0.004)	
Attended counselling or coaching session (1/0)	0.032	0.032	0.032	0.974
	(0.004)	(0.004)	(0.003)	

Observations	2808	2568	5376

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program. The sample size for variable: number of workdays skipped in the past 4 weeks due to chronic illness is 738 since it is conditional on having a chronic illness. The sample size for Self-reported eyesight difficulty level (0-5 scale) is 5337 as it excludes households who reported an eyesight problem without being able to rate it. Chronic illnesses include diabetes, asthma, cancer, heart disease, high blood pressure, hepatitis.

Table 4.5.5: Tested Literacy and Cognitive Skills by Treatment Status

	(1) Control	(2) Treatment	(3) Total	(4) p-value
Highest digit score achieved (0-9)	2.371	2.449	2.411	0.425
	(0.064)	(0.073)	(0.049)	
Highest reverse digit score achieved (0-9)	2.231	2.310	2.272	0.413
	(0.063)	(0.073)	(0.048)	
Failed to answer the 3 literacy tests correctly	0.211	0.202	0.206	0.654
	(0.015)	(0.014)	(0.010)	
Failed to answer 2 of the 3 literacy tests correctly	0.359	0.376	0.367	0.316
	(0.012)	(0.012)	(0.008)	
Answered all three literacy tests correctly or got only 1 wrong	0.430	0.423	0.426	0.75
	(0.016)	(0.015)	(0.011)	
Answered all three literacy tests correctly	0.182	0.188	0.185	0.752
	(0.013)	(0.013)	(0.009)	
Observations	2631	2745	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program.

Table 4.5.6: Tested Literacy and Cognitive Skills by Takaful Beneficiary Status

	(1)	(2)	(3)	(4)
	Rejected	**TKP beneficiary**	**Total**	**p-value**
Highest digit score achieved (0-9)	2.514	2.356	2.411	0.003***
	(0.066)	(0.047)	(0.049)	
Highest reverse digit score achieved (0-9)	2.387	2.210	2.272	0.000***
	(0.065)	(0.047)	(0.048)	
Failed to answer the 3 literacy tests correctly	0.174	0.224	0.206	0.000***
	(0.011)	(0.011)	(0.010)	
Failed to answer 2 of the 3 literacy tests correctly	0.375	0.363	0.367	0.386
	(0.012)	(0.010)	(0.008)	
Answered all three literacy tests correctly or got only 1 wrong	0.451	0.413	0.426	0.008***
	(0.014)	(0.012)	(0.011)	
Answered all three literacy tests correctly	0.200	0.177	0.185	0.039**
	(0.012)	(0.010)	(0.009)	
Observations	1873	350	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program.

Table 4.5.7: Tested Literacy and Cognitive Skills by Gender

	(1)	(2)	(3)	(4)
	Male	**Female**	**Total**	**p-value**
Highest digit score achieved (0-9)	2.658	2.333	2.411	0.000***
	(0.087)	(0.045)	(0.049)	
Highest reverse digit score achieved (0-9)	2.505	2.198	2.272	0.000***
	(0.087)	(0.044)	(0.048)	
Failed to answer the 3 literacy tests correctly	0.166	0.219	0.206	0.000***
	(0.014)	(0.011)	(0.010)	
Failed to answer 2 of the 3 literacy tests correctly	0.345	0.374	0.367	0.081*
	(0.015)	(0.009)	(0.008)	
Answered all three literacy tests correctly or got only 1 wrong	0.488	0.407	0.426	0.000***
	(0.019)	(0.011)	(0.011)	
Answered all three literacy tests correctly	0.217	0.175	0.185	0.004***
	(0.016)	(0.009)	(0.009)	
Observations	1288	4088	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program.

Table 4.5.8: Tested Literacy and Cognitive Skills by poverty status

	(1)	(2)	(3)	(4)
	Moderately poor	**Very poor**	**Total**	**p-value**
Highest digit score achieved (0-9)	2.356	2.470	2.411	0.021**
	(0.045)	(0.063)	(0.049)	
Highest reverse digit score achieved (0-9)	2.243	2.304	2.272	0.207
	(0.045)	(0.062)	(0.048)	
Failed to answer the 3 literacy tests correctly	0.153	0.265	0.206	0.000***
	(0.009)	(0.015)	(0.010)	
Failed to answer 2 of the 3 literacy tests correctly	0.383	0.350	0.367	0.022**
	(0.011)	(0.011)	(0.008)	
Answered all three literacy tests correctly or got only 1 wrong	0.464	0.385	0.426	0.000***
	(0.012)	(0.016)	(0.011)	
Answered all three literacy tests correctly	0.195	0.174	0.185	0.105
	(0.011)	(0.012)	(0.009)	
Observations	2808	2568	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program.

4.6 Aspirations and Psychological Characteristics of Potential Participants

To understand the psychological characteristics of potential participants that may predict their success and interest in the Forsa program, we examined their grit and self-efficacy.

Grit is a non-cognitive personality trait that is a combination of effort and passion for achieving a goal. It was measured using two statements asking whether individuals perceive themselves to be hardworking or finish whatever they set out to do. Responses took the form of a 10-point Likert scale ranging from “not like me at all” to “very much like me”. Individuals are thus midway in their motivation to achieve their objectives as they have an average grit score of 4.8.

We also asked several questions taken from a standard self-efficacy module and questions developed for this context to measure life satisfaction. Regarding self-efficacy, individuals have a strong perception of their ability to achieve their stated goals and succeed in different endeavors. They also have a strong perception of their ability to overcome negative feelings. Individuals report different levels of life satisfaction regarding income, assets, food availability, health, and children’s clothes. The highest levels are reported for health and cloths for their children and food availability.

Tables 4.6.1, 4.6.2, 4.6.3, and 4.6.4 compare these characteristics by the treatment assignment status, Takaful beneficiary, gender, and poverty status respectively. For some of the psychological constructs, we observe differences based on the Takaful beneficiary status and gender. Females have a higher grit score than males, but males tend to have a greater self-efficacy and are more likely to feel successful. Men also tend to feel more worried than women. In terms of life satisfaction, women are observed to report higher satisfaction about income and assets than men. Table 4.6.4 shows the psychological characteristics by poverty status.

Table 4.6.1: Aspirations and Psychological Characteristics by Treatment Status

	(1) Control	(2) Treatment	(3) Total	(4) p-value
Grit score (out of 10)	4.788	4.672	4.729	0.205
	(0.070)	(0.059)	(0.046)	
Ability to achieve goals (1-5)	3.472	3.456	3.464	0.718
	(0.031)	(0.030)	(0.022)	
Ability to succeed in any endeavor (1-5)	3.488	3.499	3.494	0.810
	(0.032)	(0.029)	(0.021)	
Networks matter for opportunities (1-5)	3.721	3.692	3.706	0.511
	(0.031)	(0.032)	(0.022)	
Ability to overcome negative feelings (1-5)	3.392	3.387	3.390	0.921
	(0.033)	(0.033)	(0.023)	
Feeling appreciated (1-5)	3.706	3.713	3.710	0.888
	(0.038)	(0.034)	(0.025)	
Feeling successful (1-5)	3.489	3.515	3.502	0.600
	(0.036)	(0.034)	(0.025)	
Level of satisfaction- Income (1-5)	2.972	3.046	3.010	0.085*
	(0.030)	(0.031)	(0.021)	
Level of satisfaction- House (1-5)	3.080	3.129	3.105	0.271
	(0.029)	(0.033)	(0.022)	
Level of satisfaction- Food Availability (1-5)	3.315	3.344	3.330	0.459
	(0.026)	(0.028)	(0.019)	
Level of satisfaction- Health (1-5)	3.506	3.518	3.512	0.771
	(0.029)	(0.030)	(0.021)	
Level of satisfaction- Child Clothes (1-5)	3.361	3.399	3.380	0.368
	(0.027)	(0.032)	(0.021)	
Frequency of Feeling Worried (0-4)	2.400	2.323	2.361	0.131
	(0.033)	(0.039)	(0.026)	
Observations	2631	2745	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program. The risk preference scores are increasing in terms of risk aversion. All the 5-point Likert scales are also increasing in importance (strongly disagree to strongly agree). For level of satisfaction, it ranges to 'excellently high'.

Table 4.6.2: Aspirations and Psychological Characteristics by Takaful Beneficiary Status

	(1) Rejected	(2) TKP Beneficiary	(3) Total	(4) p-value
Grit score (out of 10)	4.664	4.764	4.729	0.062*
	(0.058)	(0.049)	(0.046)	
Ability to achieve goals (1-5)	3.491	3.450	3.464	0.139
	(0.028)	(0.024)	(0.022)	
Ability to succeed in any endeavor (1-5)	3.526	3.476	3.494	0.070*
	(0.029)	(0.023)	(0.021)	
Connections is the source of opportunity (1-5)	3.719	3.699	3.706	0.454
	(0.029)	(0.024)	(0.022)	
Ability to overcome negative feelings (1-5)	3.412	3.378	3.390	0.225
	(0.029)	(0.025)	(0.023)	
Feeling appreciated (1-5)	3.732	3.698	3.710	0.244
	(0.030)	(0.028)	(0.025)	
Feeling successful (1-5)	3.537	3.484	3.502	0.061*
	(0.031)	(0.026)	(0.025)	
Level of satisfaction- Income (1-5)	2.970	3.031	3.010	0.091*
	(0.032)	(0.025)	(0.021)	
Level of satisfaction- House (1-5)	3.112	3.101	3.105	0.725
	(0.031)	(0.024)	(0.022)	
Level of satisfaction- Food Availability (1-5)	3.353	3.317	3.330	0.230
	(0.027)	(0.022)	(0.019)	
Level of satisfaction- Health (1-5)	3.557	3.488	3.512	0.011**
	(0.029)	(0.022)	(0.021)	
Level of satisfaction- Child Clothes (1-5)	3.411	3.364	3.380	0.106
	(0.028)	(0.023)	(0.021)	
Frequency of Feeling Worried (0-4)	2.310	2.388	2.361	0.003***
	(0.031)	(0.027)	(0.026)	
Observations	1873	3503	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program. The risk preference scores are increasing in terms of risk aversion. All the 5-point Likert scales are also increasing in importance (strongly disagree to strongly agree). For level of satisfaction, it ranges to 'excellently high'.

Table 4.6.3: Aspirations and Psychological Characteristics by Gender

	(1)	(2)	(3)	(4)
	Male	**Female**	**Total**	**p-value**
Risk aversion level (1-3)	2.836	2.864	2.858	0.097*
	(0.014)	(0.010)	(0.009)	
Time preferences (1-3)	2.753	2.774	2.769	0.336
	(0.021)	(0.012)	(0.012)	
Grit score (out of 10)	4.143	4.914	4.729	0.000***
	(0.054)	(0.052)	(0.046)	
Ability to achieve goals (1-5)	3.632	3.411	3.464	0.000***
	(0.032)	(0.024)	(0.022)	
Ability to succeed in any endeavor (1-5)	3.700	3.429	3.494	0.000***
	(0.033)	(0.023)	(0.021)	
Connections is the source of opportunity (1-5)	3.884	3.650	3.706	0.000***
	(0.035)	(0.024)	(0.022)	
Ability to overcome negative feelings (1-5)	3.655	3.306	3.390	0.000***
	(0.034)	(0.025)	(0.023)	
Feeling appreciated (1-5)	3.880	3.656	3.710	0.000***
	(0.037)	(0.027)	(0.025)	
Feeling successful (1-5)	3.664	3.451	3.502	0.000***
	(0.036)	(0.027)	(0.025)	
Level of satisfaction- Income (1-5)	2.947	3.029	3.010	0.048**
	(0.038)	(0.024)	(0.021)	
Level of satisfaction- House (1-5)	3.055	3.121	3.105	0.089*
	(0.036)	(0.024)	(0.022)	
Level of satisfaction- Food Availability (1-5)	3.321	3.332	3.330	0.732
	(0.029)	(0.022)	(0.019)	
Level of satisfaction- Health (1-5)	3.523	3.508	3.512	0.648
	(0.030)	(0.024)	(0.021)	
Level of satisfaction- Child Clothes (1-5)	3.407	3.372	3.380	0.321
	(0.031)	(0.024)	(0.021)	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program. The risk preference scores are increasing in terms of risk aversion. All the 5-point Likert scales are also increasing in importance (strongly disagree to strongly agree). For level of satisfaction, it ranges to 'excellently high'

Table 4.6.4: Aspirations and Psychological Characteristics by Poverty Status

	(1) Moderately poor	(2) Very poor	(3) Total	(4) p-value
Risk aversion level (1-3)	2.839	2.877	2.858	0.010***
	(0.012)	(0.011)	(0.009)	
Time preferences (1-3)	2.751	2.789	2.769	0.039**
	(0.015)	(0.015)	(0.012)	
Grit score (out of 10)	4.626	4.842	4.729	0.000***
	(0.056)	(0.053)	(0.046)	
Ability to achieve goals (1-5)	3.554	3.365	3.464	0.000***
	(0.026)	(0.027)	(0.022)	
Ability to succeed in any endeavor (1-5)	3.553	3.429	3.494	0.000***
	(0.024)	(0.029)	(0.021)	
Connections is the source of opportunity (1-5)	3.784	3.621	3.706	0.000***
	(0.025)	(0.031)	(0.022)	
Ability to overcome negative feelings (1-5)	3.439	3.336	3.390	0.002***
	(0.028)	(0.029)	(0.023)	
Feeling appreciated (1-5)	3.766	3.649	3.710	0.000***
	(0.028)	(0.032)	(0.025)	
Feeling successful (1-5)	3.569	3.428	3.502	0.000***
	(0.028)	(0.033)	(0.025)	
Level of satisfaction- Income (1-5)	3.014	3.005	3.010	0.798
	(0.029)	(0.028)	(0.021)	
Level of satisfaction- House (1-5)	3.144	3.062	3.105	0.018**
	(0.026)	(0.030)	(0.022)	
Level of satisfaction- Food Availability (1-5)	3.361	3.295	3.330	0.035**
	(0.023)	(0.027)	(0.019)	
Level of satisfaction- Health (1-5)	3.536	3.486	3.512	0.109
	(0.024)	(0.028)	(0.021)	
Level of satisfaction- Child Clothes (1-5)	3.407	3.350	3.380	0.074*
	(0.024)	(0.028)	(0.021)	
Frequency of Feeling Worried (0-4)	2.413	2.303	2.361	0.001***
	(0.028)	(0.034)	(0.026)	
Observations	2808	2568	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program. The risk preference scores are increasing in terms of risk aversion. All the 5-point Likert scales are also increasing in importance (strongly disagree to strongly agree). For level of satisfaction, it ranges to 'excellently high'

We also considered aspirations that have been shown to be associated with future-oriented behaviors. We use two variables to elicit the aspirations of households. The first measure is a variant of the Bernard and Taffesse (2014) scale where we asked households about their aspired income levels. Given that more is always better than less, we also ask households what income they need to feel financially secure. While the former looks more at 'wants', the latter examines to a greater extent the income 'needs' of Forsa participants. Individuals only aspire to have a monthly income of about 3800EGP whereas they need about 4300EGP to feel financially secure. These aspirations are significantly different in both groups

(Tables 4.6.5 and 4.6.6). Also as shown in Table 4.6.7, males have higher income aspirations than females. Table 4.6.8 shows poverty heterogeneity of both the want and needs aspiration outcome.

Table 4.6.5: Income Aspirations by Treatment Status

	(1)	(2)	(3)	(4)
	Control	**Treatment**	**Total**	**p-value**
Aspired income level (EGP)	3605.1	3989.4	3801.3	0.001***
	(64.83)	(100.49)	(61.31)	
Income to feel financially secured (EGP)	4028.4	4598.2	4319.4	0.000***
	(72.26)	(134.69)	(79.00)	
Observations	2630	2744	5374	

Note: the total sample size of the required (for financial security) and the aspired income levels is 5374 since 2 outliers were removed for records more than 100,0000 EGP.

Table 4.6.6: Income Aspirations by Takaful Beneficiary Status

	(1)	(2)	(3)	(4)
	Rejected	**TKP Beneficiary**	**Total**	**p-value**
Forsa participant aspired income level	3902.3	3747.4	3801.3	0.112
	(99.38)	(61.51)	(61.3)	
Forsa participant required income - financial security	4408.6	4271.6	4319.4	0.330
	(128.92)	(87.00)	(79.00)	
Observations	1872	3502	5374	

Note: the total sample size of the required (for financial security) and the aspired income levels is 5374 since 2 outliers were removed for records more than 100,0000 EGP.

Table 4.6.7: Income Aspirations by Gender

	(1)	(2)	(3)	(4)
	Male	**Female**	**Total**	**p-value**
Forsa participant aspired income level	4358.9	3625.6	3801.3	0.000***
	(109.03)	(62.11)	(61.31)	
Forsa participant required income level- financial security	4933.2	4125.9	4319.4	0.000***
	(181.80)	(78.97)	(79.00)	
Observations	1288	4086	5374	

Note: the total sample size of the required (for financial security) and the aspired income levels is 5374 since 2 outliers were removed for records more than 100,0000 EGP.

Table 4.6.8: Income Aspirations by Poverty

	(1) Moderately poor	(2) Very poor	(3) Total	(4) p-value
Forsa participant aspired income level	3942.9	3646.5	3801.3	0.003***
	(76.35)	(79.95)	(61.31)	
Forsa participant required income level- financial security	4550.7	4066.3	4319.4	0.001***
	(102.79)	(106.23)	(79.00)	
Observations	2808	2568	5374	

Note: the total sample size of the required (for financial security) and the aspired income levels is 5374 since 2 outliers were removed for records more than 100,0000 EGP.

4.7 Financial Literacy and Financial Inclusion of Potential Participants

Tables in section 4.7 report on the level of financial literacy and inclusion of potential Forsa participants by treatment status, Takaful beneficiary status, gender and by poverty status. In table 4.7.1, the results of the balancing tests confirm that financial literacy and inclusion levels are balanced over control and treatment communities. Table 4.7.1 highlights the low use of financial services, with only 1.4 percent of households having a bank account and with less than 1 percent using e-wallet services such as Vodafone cash and WE Pay. The self-reported level of recording household expenses ranges between 0 to 4, where 0 indicates not keeping record of anything, while 4 indicates keeping recording of all earnings and finances. The potential Forsa participant on average reports a low value on this scale indicating relatively low information levels of the household's balance at a given time. Yet on average the potential participants' self-assessment of their skills in taking informed and reasonable decisions for the household's finances and money-management on a scale from 1 to 5 is approximately 3.3, which is between reasonably skilled and well-skilled. The table also sheds light on the high frequency of monthly deficits (when household have more expenses than earnings at the end of the month), as households reported an average frequency of 1.2, which falls between few times or most of the year.

The performance of the potential Forsa participants in the financial literacy tests is relatively high or above average, with 63, 65, and 85 percent of individuals correctly answering the first, the second and the third tests, respectively. The first test asks whether the value of 1000 EGP will increase or decrease or stay the same at the end of the year if you put it today in a savings account leaving the sum on the account with interest. The second literacy test asks the nominated beneficiary about how the purchasing power of 100 EGP will change if you keep it as cash to spend it next year. The third test instructs the respondent to equally distribute 1000 EGP among four individuals. The perception of charging interest is fairly positive when dealing with financial institutions (banks or microfinance organizations), but their acceptance to interest payment noticeably drops for informal lending/borrowing transactions (between family and friends).

Table 4.7.2 shows that potential participants from the rejected group self-report higher skills in managing household finances and in the recording level of household earnings and expenses compared to Takaful beneficiaries. The frequency of savings is low in both groups, but potential participants from the rejected group report relatively higher frequency of savings at the end of the month. As for financial literacy test scores, both groups show similar results, except for the third test in which Takaful beneficiaries were less likely to answer correctly by approximately two percent. Finally, Takaful beneficiaries exhibit more reluctance/negative perception to interest payment even to banks and financial institutions.

As shown in table 4.7.3, significant differences between males and females among the nominated beneficiaries are only evident in few aspects: males self-reported higher recording levels for household finances and higher frequency of monthly savings in the last year, whiles females performed better in the first financial literacy test, but their performance was significantly lower in the second and the third financial literacy tests. Female potential participants are also less accepting of interest payment for both formal and informal borrowing. Finally, table 4.7.4 shows the financial literacy and inclusion characteristics by poverty status. Individuals in very poor households are less likely to own a bank account, visit banks frequently, possess an e-wallet, record low levels of household expenses than individuals in moderately poor households.

Table 4.7.1: Financial Literacy and Financial Inclusion by Treatment Status

	(1) Control	(2) Treatment	(3) Total	(4) p-value
Have Bank Account (1/0)	0.015	0.013	0.014	0.530
	(0.002)	(0.002)	(0.002)	
Frequency of bank visits (0-4)	0.025	0.023	0.024	0.738
	(0.005)	(0.005)	(0.003)	
Have mobile banking (1/0)	0.001	0.001	0.001	0.958
	(0.001)	(0.001)	(0.000)	
Have e-wallet (Vodafone cash or WE pay) (1/0)	0.008	0.005	0.006	0.239
	(0.002)	(0.001)	(0.001)	
Ability in managing household finance (1-5)	3.350	3.301	3.325	0.249
	(0.032)	(0.029)	(0.021)	
Level of recording household expenses (0-3)	0.174	0.184	0.179	0.678
	(0.016)	(0.016)	(0.011)	
Frequency of monthly deficits in the last year (0-3)	1.230	1.183	1.206	0.532
	(0.054)	(0.052)	(0.037)	
Frequency of monthly savings in the last year (0-3)	0.077	0.075	0.076	0.913
	(0.012)	(0.011)	(0.008)	
Passed financial literacy test 1	0.628	0.634	0.631	0.804
	(0.017)	(0.019)	(0.013)	
Passed financial literacy test 2	0.672	0.643	0.657	0.231
	(0.016)	(0.018)	(0.012)	
Passed financial literacy test 3	0.856	0.850	0.853	0.676
	(0.011)	(0.011)	(0.008)	
Positive perception of interest payment (Bank) (0/1)	0.328	0.339	0.334	0.639
	(0.015)	(0.017)	(0.012)	
Positive perception of interest payment (Financial institution) (0/1)	0.320	0.323	0.322	0.872
	(0.014)	(0.017)	(0.011)	
Positive perception of interest payment (informal) (0/1)	0.138	0.126	0.132	0.355
	(0.009)	(0.009)	(0.007)	
Observations	2631	2745	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 5376 as it is restricted only to households nominating a household member for the Forsa program. The sample size for frequency of monthly deficits and frequency of monthly savings in the last year variables is 5125 and 5218 respectively as they exclude households who reported not knowing the frequency. For frequency of bank visits variable, (0=None-no bank account" 1=less than once a trimester, 2=Between once a month and once a trimester, 3=More than once a month, 4=once a week). For ability in managing household finances variable, the household self-assesses their skills in taking informed and reasonable decisions for your and your household's finances and money-management? (1=Not skilled at all, 2=Not much skill, 3=reasonably skilled, 4=Good skills, 5=Excellent skills). For level of recording household expenses, the household self-assesses the level on a 0 to 3 scale that corresponds to the following (0=Do not keep record of anything, 1=Don't keep record but have a vague idea of the household balance, 2=Keep record of some of the expenses and earnings, 3= Keep record of all expenses and earnings. For frequency of deficits or savings, the 0 to 3 scale corresponds to the following: 0=Never, 1=Few times, 2=Most of the year, 3=Always. The financial literacy tests are binary variables indicating correctly answering each question.

Table 4.7.2: Financial Literacy and Financial Inclusion by Takaful Beneficiary Status

	(1) Rejected	(2) TKP Beneficiary	(3) Total	(4) p-value
Have Bank Account (1/0)	0.017	0.013	0.014	0.282
	(0.003)	(0.002)	(0.002)	
Frequency of bank visits (0-4)	0.026	0.023	0.024	0.680
	(0.005)	(0.004)	(0.003)	
Have mobile banking (1/0)	0.002	0.001	0.001	0.477
	(0.001)	(0.000)	(0.000)	
Have e-wallet (Vodafone cash or WE pay) (1/0)	0.009	0.005	0.006	0.081*
	(0.002)	(0.001)	(0.001)	
Ability in managing household finance (1-5)	3.379	3.297	3.325	0.001***
	(0.026)	(0.023)	(0.021)	
Level of recording household expenses (0-3)	0.227	0.153	0.179	0.000***
	[0.018]	[0.011]	[0.011]	
Frequency of monthly deficits in the last year (0-3)	1.197	1.210	1.206	0.651
	(0.039)	(0.040)	(0.037)	
Frequency of monthly savings in the last year (0-3)	0.093	0.067	0.076	0.005***
	(0.011)	(0.009)	(0.008)	
Passed financial literacy test 1	0.629	0.631	0.631	0.883
	(0.015)	(0.014)	(0.013)	
Passed financial literacy test 2	0.668	0.651	0.657	0.205
	(0.014)	(0.013)	(0.012)	
Passed financial literacy test 3	0.869	0.845	0.853	0.012**
	(0.009)	(0.009)	(0.008)	
Positive perception of interest payment (Bank) (0/1)	0.351	0.324	0.334	0.036**
	(0.015)	(0.012)	(0.012)	
Positive perception of interest payment (Financial institution) (0/1)	0.336	0.314	0.322	0.096*
	(0.014)	(0.012)	(0.011)	
Positive perception of interest payment (informal) (0/1)	0.136	0.130	0.132	0.533
	(0.010)	(0.007)	(0.007)	
Observations	1288	4088	5376	

Note: See table 4.7.1

Table 4.7.3: Financial Literacy and Financial Inclusion by Gender

	(1) Male	(2) Female	(3) Total	(4) p-value
Have Bank Account (1/0)	0.019	0.013	0.014	0.147
	(0.004)	(0.002)	(0.002)	
Frequency of bank visits (0-4)	0.031	0.022	0.024	0.261
	(0.007)	(0.004)	(0.003)	
Have mobile banking (1/0)	0.002	0.001	0.001	0.262
	(0.001)	(0.000)	(0.000)	
Have e-wallet (Vodafone cash or WE pay) (1/0)	0.014	0.004	0.006	0.005***
	(0.003)	(0.001)	(0.001)	
Ability in managing household finance (1-5)	3.522	3.263	3.325	0.000***
	(0.029)	(0.024)	(0.021)	
Level of recording household expenses (0-3)	0.187	0.177	0.179	0.612
	(0.020)	(0.011)	(0.011)	
Frequency of monthly deficits in the last year (0-3)	1.188	1.211	1.206	0.609
	(0.051)	(0.039)	(0.037)	
Frequency of monthly savings in the last year (0-3)	0.108	0.066	0.076	0.001***
	(0.015)	(0.007)	(0.008)	
Passed financial literacy test 1	0.609	0.637	0.631	0.118
	(0.018)	(0.014)	(0.013)	
Passed financial literacy test 2	0.688	0.648	0.657	0.014**
	(0.017)	(0.013)	(0.012)	
Passed financial literacy test 3	0.904	0.837	0.853	0.000***
	(0.012)	(0.008)	(0.008)	
Positive perception of interest payment (Bank) (0/1)	0.363	0.324	0.334	0.029**
	(0.017)	(0.012)	(0.012)	
Positive perception of interest payment (Financial institution) (0/1)	0.363	0.309	0.322	0.002***
	(0.017)	(0.012)	(0.011)	
Positive perception of interest payment (informal) (0/1)	0.152	0.125	0.132	0.036**
	(0.012)	(0.007)	(0.007)	
Observations	1288	4088	5376	

Note: See table 4.7.1

Table 4.7.4: Financial Literacy and Financial Inclusion by poverty status

	(1) Moder-ately poor	(2) Very poor	(3) Total	(4) p-value
Have Bank Account (1/0)	0.017	0.011	0.014	0.046**
	(0.003)	(0.002)	(0.002)	
Frequency of bank visits (0-4)	0.031	0.017	0.024	0.032**
	(0.005)	(0.004)	(0.003)	
Have mobile banking (1/0)	0.002	0.000	0.001	0.117
	(0.001)	(0.000)	(0.000)	
Have e-wallet (Vodafone cash or WE pay) (1/0)	3.385	3.260	3.325	0.000***
	(0.026)	(0.026)	(0.021)	
Ability in managing household finance (1-5)	0.215	0.140	0.179	0.000***
	(0.014)	(0.013)	(0.011)	
Level of recording household expenses (0-3)	0.010	0.002	0.006	0.000***
	(0.002)	(0.001)	(0.001)	
Frequency of monthly deficits in the last year (0-3)	1.281	1.123	1.206	0.000***
	(0.039)	(0.044)	(0.037)	
Frequency of monthly savings in the last year (0-3)	0.068	0.084	0.076	0.212
	(0.008)	(0.013)	(0.008)	
Passed financial literacy test 1	0.691	0.565	0.631	0.000***
	(0.013)	(0.016)	(0.013)	
Passed financial literacy test 2	0.683	0.629	0.657	0.001***
	(0.012)	(0.016)	(0.012)	
Passed financial literacy test 3	0.877	0.827	0.853	0.000***
	(0.008)	(0.011)	(0.008)	
Positive perception of interest payment (Bank) (0/1)	0.350	0.315	0.334	0.025**
	(0.015)	(0.013)	(0.012)	
Positive perception of interest payment (Financial in-stitution) (0/1)	0.344	0.298	0.322	0.002***
	(0.014)	(0.012)	(0.011)	
Positive perception of interest payment (informal) (0/1)	0.139	0.124	0.132	0.144
	(0.009)	(0.008)	(0.007)	
Observations	2808	2568	5376	

Note: See table 4.7.1

5. BASELINE SUMMARY STATISTICS ON FORSA ELIGIBLE HOUSEHOLDS

In this section, we present summary statistics from the full baseline sample (7754 households) describing the characteristics of the households, rather than focusing specifically on the nominated individual to participate in Forsa.

5.1 Household Assets

Table 5.1.1 summarizes household ownership of productive assets and livestock. The most owned productive asset is a motorcycle/ bicycle/ tricycle or tuk-tuk (14 percent of households). Only about 4 percent of households own any land, and it is primarily very small landholding. Other productive assets for agriculture or household enterprises are uncommon. This is not surprising as the expectation is to see significant increases in productive asset ownership as a result of participation in Forsa. For livestock, the most owned livestock is poultry, with an average of 3 animals per household.

For the balance checks, rather than looking at individual assets, we compare an asset-ownership index constructed as the first principal component from principal component analysis for three different asset types: household durable goods, productive assets, and livestock assets. As shown in tables 5.1.2 and 5.1.3, these asset indices are balanced between the treatment and control groups, and significantly higher among rejected households than among Takaful beneficiaries.

Table 5.1.1: Household Asset Ownership

Asset	(Mean)
Phone or a landline	0.966
Motorcycle/ bicycle/ tricycle/ tuk-tuk	0.135
Land area for growing vegetables/ green houses	0.037
Animal and poultry feed and additives, fertilizers, and seeds	0.034
• **Less than 5 feddans***	0.989
• **5 - 10 feddans***	0.010
• **More than 10 feddans***	<0.001
Ox/donkey cart	0.033
Furniture/ wood manufacturing equipment	0.029
Air conditioner	0.017
Mechanical water pump, animal/manual water pump or drip irrigation	0.015
Food or non-food retail stores (bakery- fresh vegetables and fruits	0.012
Have access to a car (owned or co-owned or rented or gifted)	0.009
Professional trade tools (carpentry blacksmithing/electrician/ plumb	0.008
Plowing equipment/machine	0.002
Milk Collection Center/ dairy processing equipment	0.001
Slaughterhouse for poultry	<0.001
Ready Garments and linens manufacturing equipment/ Looms	<0.001
Recycling palm and crop waste equipment	<0.001
Beehives	<0.001
Processing freezing/packing equipment	<0.001
Number of Buffaloes/Cattle owned	0.124
Number of Sheep, goats owned	0.0891
Number of Camels owned	0.002
Number of Donkeys/Mules owned	0.0698
Number of Horses owned	0.0036
Number of Egg-laying Chickens owned	0.957
Number of Non-Egg-Laying Chickens owned	0.527
Number of Geese/Pigeons/Ducks owned	1.428
Number of Turkeys owned	0.002

Number of Rabbits owned	0.076
Observations	7754

Note: Means are presented with the standard errors. The sample size of land size variables marked with an asterisk (*) is 279 as it is conditional on having a land for growing vegetables/green houses and reporting land size.

Table 5.1.2: Household Asset Index by Treatment Status

	(1)	(2)	(3)	(4)
	Control	**Treat-ment**	**Total**	**p-value**
Index of household owned durable assets (PCA)	0.014	-0.015	-0.000	0.507
	(0.030)	(0.031)	(0.022)	
Index of household owned productive assets (PCA)	-0.007	0.007	-0.000	0.775
	(0.036)	(0.03)	(0.026)	
Index of livestock assets (PCA)	-0.018	0.019	-0.000	0.252
	(0.016)	(0.02)	(0.01)	
Index of all assets (PCA) - Durables, productive and number of livestock assets	-0.009	0.009	0.000	0.756
	(0.039)	(0.03)	(0.028)	
Observations	3916	3838	7754	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means.

Table 5.1.3: Household Asset Index by Takaful Beneficiary Status

	(1)	(2)	(3)	t-test
	Rejected	**TKP Benefi-ciary**	**Total**	**p-value**
Index of household durable assets (PCA)	0.052	-0.027	-0.000	0.005***
	(0.029)	(0.023)	(0.022)	
Index of household productive assets (PCA)	-0.030	0.016	-0.000	0.162
	(0.031)	(0.029)	(0.026)	
Index of livestock assets (PCA)	0.004	-0.002	-0.000	0.872
	(0.037)	(0.014)	(0.016)	
Index of all assets (PCA) - Durables, productive and number of livestock assets	-0.010	0.005	0.000	0.667
	(0.035)	(0.031)	(0.028)	
Observations	2627	5127	7754	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means.

5.2 Household Debt and Savings

Table 5.2.1 reports on potential Forsa beneficiaries' total debt levels and household debt structure in the full sample showing no significant differences across treatment and control communities. The incidence of debt among the full sample is high, with 76 percent of the households in debt to formal (interest-charging institutions) or informal (family and friends) lenders with an average of 7811 EGP under total amount of debt at the household level. The table also presents that informal borrowing is more common than formal borrowing as 34 percent of households reported having informal debt versus 12 percent of households who reported having formal debt. The average size of informal debt is 3371.8 EGP, which is approximately 2 times higher than the monthly average wage income. Looking at the structure of household debt, household goods/clothes and future goods (such as marriage or holidays) have a substantial share out of the total debt (in terms of debt amounts) followed by food and medical debts. In terms of debt incidence, food, and household goods/clothes are the dominating categories as 50 percent and 45 percent of households are in food and household goods/clothes debt, respectively.

Table 5.2.2 shows that Takaful beneficiaries are more likely to have debt, as 77 percent of Takaful beneficiaries report a debt incidence (formal or informal) versus 71 percent of non-Takaful beneficiaries, but on average have lower total amounts of formal and informal debt. Yet when looking at sub-debt components, the size of food, household goods/clothes, future goods, medical debt is significantly higher among Takaful beneficiaries.

Table 5.2.3 shows that households in the full sample show a relatively low incidence of households' savings (12.8%), which is defined as the incidence of any household savings in the last year (whether saved in a bank or at home or invested in saving groups). The most common reported form of savings is participating in informal saving groups (Gameiya), as approximately 12 percent of all households reported participation in saving groups. The incidence of participation in several saving groups is even lower as only 8.9% of households who reported participation in savings groups are involved in more than one group. Among the households participating in one or more saving groups, the average total monthly contribution to the saving groups is 545.559, which represents on average 32 percent of household total income. Table 5.2.4 shows that there are no significant differences in the incidence of savings between Takaful and non-Takaful beneficiaries.

Table 5.2.1: Household Debt by Treatment Status

	(1)	(2)	(3)	(4)
	Control	**Treatment**	**Total**	**p-value**
Any food debt- installment plan/store credit (0/1)	0.5	0.5	0.5	0.968
	(0.01)	(0.01)	(0.01)	
Current amount of food debt (EGP)	323.5	314.0	319.0	0.695
	(18.32)	(17.63)	(12.70)	
Any clothes/goods debt- installment plan/store credit (0/1)	0.5	0.5	0.5	0.705
	(0.01)	(0.01)	(0.01)	
Current amount of clothes/goods debt (EGP)	960.4	926.3	943.5	0.681
	(53.09)	(63.88)	(41.40)	
Any future goods debt- installment plan (0/1)	0.1	0.1	0.1	0.406
	(0.01)	(0.01)	(0.01)	
Amount committed to be paid for the installment plan (EGP)	441.4	485.1	463.0	0.673
	(70.83)	(75.66)	(51.72)	
Any medical debt (0/1)	0.2	0.2	0.2	0.414
	(0.01)	(0.01)	(0.01)	
Current amount of medical debt (EGP)	340.5	376.7	358.4	0.541
	(40.96)	(42.72)	(29.55)	
Any informal debt (0/1)	0.346	0.349	0.347	0.866
	(0.011)	(0.011)	(0.008)	
Current amount of informal debt (EGP)	3192.7	3554.5	3371.8	0.289
	(208.63)	(269.65)	(170.08)	
Any formal debt (0/1)	0.1	0.1	0.1	0.282
	(0.01)	(0.01)	(0.01)	
Current amount of formal debt (EGP)	2105.2	2610.8	2355.4	0.247
	(208.12)	(384.26)	(217.44)	
Any debt (0/1)	0.8	0.8	0.8	0.812
	(0.01)	(0.01)	(0.01)	
Total amount of all debt currently owed	7364.1	8267.3	7811.2	0.122
	(340.45)	(473.76)	(291.44)	
Observations	3916	3838	7754	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. All debt amounts are recorded as zero for households not reporting having debt under the corresponding category.

Table 5.2.2: Household Debt by Takaful Beneficiary Status

	(1) Rejected	(2) TKP Beneficiary	(3) Total	(4) p-value
Any food debt- installment plan/store credit (0/1)	0.5	0.5	0.5	0.001***
	(0.01)	(0.01)	(0.01)	
Current amount of food debt (EGP)	306.9	325.2	319.0	0.316
	(17.84)	(13.93)	(12.70)	
Any clothes/goods debt- installment plan/store credit (0/1)	0.4	0.5	0.5	0.000***
	(0.0)	(0.011)	(0.01)	
Current amount of clothes/goods debt (EGP)	771.9	1031.5	943.5	0.001***
	(60.08)	(51.31)	(41.40)	
Any future goods debt- installment plan (0/1)	0.1	0.1	0.1	0.001***
	(0.01)	(0.01)	(0.01)	
Amount committed to be paid for the installment plan (EGP)	264.3	564.8	463.0	0.002***
	(65.80)	(69.73)	(51.72)	
Any medical debt (0/1)	0.2	0.2	0.2	0.498
	(0.01)	(0.01)	(0.01)	
Current amount of medical debt (EGP)	282.7	397.2	358.4	0.014**
	(30.86)	(39.59)	(29.55)	
Any informal debt (0/1)	0.3	0.3	0.3	0.771
	(0.01)	(0.01)	(0.01)	
Current amount of informal debt (EGP)	3681.9	3212.8	3371.8	0.162
	(288.33)	(198.07)	(170.08)	
Any formal debt (0/1)	0.1	0.1	0.1	0.912
	(0.01)	(0.01)	(0.01)	
Current amount of formal debt (EGP)	3361.9	1839.7	2355.4	0.003***
	(499.62)	(169.45)	(217.4)	
Any debt (0/1)	0.7	0.8	0.8	0.000***
	(0.01)	(0.01)	(0.01)	
Total amount of all debt currently owed	8669.6	7371.3	7811.2	0.039**
	(581.87)	(296.66)	(291.44)	
Observations	2627	5127	7754	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. All debt amounts are recorded as zero for households not reporting having debt under the corresponding category.

Table 5.2.3: Household Savings by Treatment Status

	(1)	(2)	(3)	t-test
	Control	Treatment	Total	p-value
Current participant in a saving group (Gameiya)	0.1	0.1	0.1	0.816
	(0.01)	(0.01)	(0.01)	
Current participant in more than one saving group (Gameiya)*	0.1	0.1	0.1	0.063*
	(0.01)	(0.02)	(0.01)	
Total monthly contribution to the saving group (1 or more) *	521.0	570.3	545.6	0.321
	(31.75)	(38.40)	(24.83)	
Household had any savings in the last year	0.1	0.1	0.1	1.000
	(0.01)	(0.01)	(0.01)	
Observations	3916	3838	7754	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The sample size for variables Household is a current participant in more than one saving group (Gameiya)* and Household total monthly contribution to the saving group (1 or more)* is 909 as it is conditional upon reporting participation in a saving group.

Table 5.2.4: Household Savings by Takaful Beneficiary Status

	(1)	(2)	(3)	(4)
	Rejected	TKPBeneficiary	Total	p-value
Current participant in a saving group (Gameiya)	0.1	0.1	0.1	0.433
	(0.01)	(0.01)	(0.01)	
Current participant in more than one saving group (Gameiya)*	0.1	0.0	0.1	0.209
	(0.002)	(0.001)	(0.001)	
Total monthly contribution to the saving group (1 or more) *	570.1	533.6	545.5	0.447
	(34.43)	(32.98)	(24.83)	
Household had any savings in the last year	0.1	0.1	0.1	0.849
	(0.01)	(0.01)	(0.01)	
Observations	2627	5127	7754	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The sample size for variables Household is a current participant in more than one saving group (Gameiya)* and Household total monthly contribution to the saving group (1 or more) * is 909 as it is conditional upon reporting participation in a saving group.

5.3 Household Consumption and Poverty Classification

We calculated household consumption based on aggregating responses to a series of questions about the value of food items consumed in the past week and non-food items purchased in the past month (for more frequently purchased items) or 12 months (for less frequently purchased items). As household consumption increases with the number of people in the household, we also show total household consumption per adult equivalent unit, using a weighting scheme where children are counted as 0.3 adults.

As shown in Table 5.3.1, total food spending (adjusted to be per month) was slightly higher in households in treatment sub-villages than in control sub-villages. This significant difference is likely due to random chance and the fact that it is one of only a few variables in our balance checks that show up as significant is reassuring that the randomization was effective. The endline impact evaluation will control for these baseline values to ensure that any differences at endline are attributable only the Forsa intervention.

Average total household consumption is approximately 1381 EGP per month. Comparing the Takaful rejected and beneficiary subsamples, food spending is quite similar, while non-food spending is higher among rejected households. Households also have an average income of 1734 EGP per month which is higher in the Takaful rejected households (1833 EGP). Total reported household wage income is equivalent to only about 54% of the value of monthly consumption, which indicates the degree to which the Takaful cash transfers are important to the household budget. (Some households have additional income from agriculture or household enterprises which is not captured here, but the majority do not).

We also considered the total consumption level of households both in per capita terms as well as in adult equivalent units. Households in treatment sub-villages have a higher consumption (both per capita and aeu) than households in the control sub-villages. From these consumption outcomes, we now construct some poverty indices to obtain more insights about the poverty level of potential participant households. We use both consumption outcomes (per capita and aeu) to construct poverty indices where we categorize households as poor and non-poor based on whether they fall below or above the 2020 Egyptian poverty line (10300 LE)[2]. Given this similarity in both consumption outcomes and the ensuing poverty incidence, we construct the remaining poverty indices using the per capita consumption as it is more standard and defined (Forster et al.,1984). We compute the poverty gap and the poverty gap square. While the poverty gap measures the normalized distance of households to this poverty line, the poverty gap squared is a more distributionally-sensitive measure that offers some insights into inequality and deprivations.

As shown in Table 5.3.1, households in treatment sub-villages are less poor than households in the control sub-villages for the two poverty outcomes. In terms of the poverty gap and the square of the poverty gap which reflects some aspects of inequality, households in control sub-villages have a greater gap than their counterparts in the treatment sub-villages. We also considered the median consumption level and used it to further categorize households as poor and non-poor. Again, we have results that show that households in the treatment sub-villages are poorer than households in the control villages. For the heterogeneity by Takaful status, we show that Takaful beneficiary households have lower consumption levels than the rejected group. They are also poorer with a larger gap to the poverty line than the rejected group.

[2] This is obtained from https://www.statista.com/statistics/1237041/poverty-headcount-ratio-in-egypt/#:~:text=Egypt's%20national%20poverty%20line%20stood,U.S.%20dollars)%20ten%20years%20prior.

Table 5.3.1: Household Consumption and Total Wage Income by Treatment Status

	(1) Control	(2) Treatment	(3) Total	(4) p-value
Monthly food spending	1755.4	1858.7	1806.5	0.015**
	(25.46)	(33.86)	(21.29)	
Monthly non-food spending	1355.8	1407.4	1381.4	0.167
	(25.04)	(27.62)	(18.65)	
Monthly spending per AEU (Winsorized)	895.5	930.8	913.0	0.014**
	(9.44)	(10.78)	(7.22)	
Adult equivalent units (aeu)	3.6	3.5	3.5	0.510
	(0.03)	(0.03)	(0.02)	
Household income (EGP/months)	1750.0	1716.8	1733.6	0.442
	(32.90)	(28.00)	(21.64)	
Consumption (per capita)	7312.1	7728.0	7518.0	0.005***
	(90.51)	(114.35)	(73.59)	
Consumption (per aeu)	10952.7	11635.0	11290.4	0.002***
	(133.91)	(176.90)	(112.11)	
Poverty (1/0)*	0.851	0.815	0.833	0.004***
	(0.008)	(0.009)	(0.006)	
Poverty (1/0)#	0.532	0.491	0.511	0.017**
	(0.012)	(0.012)	(0.009)	
Poverty gap (0-1)	0.342	0.324	0.333	0.059*
	(0.006)	(0.007)	(0.005)	
Poverty gap_squared (0-1)	0.169	0.162	0.166	0.252
	(0.004)	(0.005)	(0.003)	
Median poverty (1/0)	0.519	0.480	0.500	0.025**
	(0.012)	(0.012)	(0.009)	
Observations	3916	3838	7754	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The poverty outcome with * is computed based on the per capita consumption level of the household while the alternate outcome with # is obtained based on per adult equivalent consumption level.

Table 5.3.2: Household Consumption by Takaful Beneficiary Status

	(1)	(2)	(3)	t-test
	Rejected	**Beneficiary**	**Total**	**p-value**
Monthly food spending	1806.6	1806.5	1806.5	0.998
	(30.82)	(23.136)	(21.293)	
Monthly non-food spending	1414.2	1364.5	1381.4	0.040**
	(23.20)	(21.17)	(18.65)	
Monthly Spending per AEU (Winsorized)	991.8	872.6	913.0	0.000***
	(9.56)	(7.91)	(7.22)	
Adult equivalent units	3.262	3.693	3.547	0.000***
	(0.023)	(0.022)	(0.019)	
Household income (EGP/months)	1833.0	1682.6	1733.6	0.001***
	(48.84)	(21.05)	(21.64)	
Consumption (per capita)	8067.8	7236.3	7518.0	0.000***
	(105.21)	(81.79)	(73.58)	
Consumption (per aeu)	12260.6	10793.3	11290.4	0.000***
	(162.54)	(121.99)	(112.11)	
Poverty (1/0)*	0.798	0.851	0.833	0.000***
	(0.009)	(0.007)	(0.006)	
Poverty (1/0)#	0.426	0.555	0.511	0.000***
	(0.012)	(0.010)	(0.009)	
Poverty gap (0-1)	0.295	0.353	0.333	0.000***
	(0.006)	(0.005)	(0.005)	
Poverty gap_squared (0-1)	0.139	0.179	0.166	0.000***
	(0.004)	(0.004)	(0.003)	
Median poverty (1/0)	0.421	0.540	0.500	0.000***
	(0.012)	(0.010)	(0.009)	
Observations	2627	5127	7754	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The poverty outcome with * is computed based on the per capita consumption level of the household while the alternate outcome with # is obtained based on per adult equivalent consumption level.

We also grouped and compared the beneficiary status of households and their poverty status. As shown in Table 5.3.3, Takaful beneficiaries are generally more under the moderately poor category than the rejected households. These findings also hold true for the very poor category where we also show that more Takaful beneficiaries are in the very poor classification than the rejected households.

Table 5.3.3: Household Poverty and Takaful Beneficiary Status

Consumption<Median	Takaful Beneficiary Status	
	Rejected	**Beneficiary**
Moderately poor	1520	2357
Very Poor	1107	2770
Total	**2627**	**5127**

5.4 Women's Influence on Decision-Making

In the final section of the survey, we addressed questions to a female in the household, with instructions to the enumerator to interview her privately. We asked a standard series of questions used to

measure women's influence on decision-making across different spheres. Women were asked to rate their ability to influence household decision-making on a scale from 1 to 4 (1= not at all, 2=small extent of influence, 3=medium extent of influence, 4= great extent of influence) for each type of decision. These responses were combined into an index using the first principal component of a principal component analysis as well as a simple average score. Women were then subsequently asked to rate on a scale of 1-4 (1=not important at all, 2= a bit important, 3= somewhat important, 4=very important) how important it is to them to have influence over decisions in this sphere.

As shown in Table 5.4.1, the treatment and control samples are balanced on the response to these sets of questions. The average degree of influence over decisions is reported as a medium, with some variation by spheres. In general women have more influence over minor household expenditures, accessing medical care for herself or her child, purchasing clothes for herself, and family planning. They reported less influence over decisions on major household expenditures, use of transfers or ration card, participating in wage employment, and household enterprise. When comparing the importance of decision-making to women in these domains, it is also notable that generally the amount of importance assigned to the domain aligns very closely with the degree to which women feel they can influence decisions, with one exception: household enterprise. Women have influence degrees of 2.3 on the 1-4 scale for decisions related to their household enterprise. They also attach about 2.5 degree of importance for them to be able to influence decisions in this sphere. As the Forsa program expands the number of households where the women are engaged in a household enterprise, this relatively low level of decision-making influence and somewhat higher degree of desired influence may be an important issue to consider.

Tables 5.4.2 and 5.4.3 show the difference in the women decision making by both Takaful and the poverty status respectively. We obtain some significant differences on some of the questions capturing women's role in decision making under the poverty classification but only one variable is statistically different under the Takaful beneficiary status. For instance, we find women in Takaful beneficiary households to be more involved in the use of transfer and ration cards than their rejected counterparts. For the poverty status, we show that women in moderately poor households are more involved in decision making than women in very poor households. Also, these women have a greater influence on major household expenditures, use of transfers or ration card, participating in wage employment, and household enterprise, buying cloths, medical care, family planning and taking children to doctor appointments.

Table 5.4.1: Women's Influence on Decision-Making by Treatment Status

	(1) Control	(2) Treatment	(3) Total	(4) p-value
Woman's decision-making index	-0.165	-0.169	-0.167	0.927
	(0.029)	(0.028)	(0.020)	
Woman's decision-making avg. score (1-4)	3.017	3.011	3.014	0.800
	(0.018)	(0.017)	(0.012)	
Woman's degree on influence (1-4) on decisions related to:				
• **Household enterprise***	2.287	2.279	2.283	0.881
	(0.040)	(0.036)	(0.027)	
• **Participating in wage employment**	2.442	2.481	2.462	0.247
	(0.024)	(0.023)	(0.017)	
• **Major household expenditure**	2.904	2.895	2.899	0.770

	(0.020)	(0.019)	(0.014)	
• **Minor expenditures**	3.332	3.337	3.335	0.881
	(0.024)	(0.024)	(0.017)	
• **Use of transfers and ration card**	2.664	2.573	2.619	0.020*
	(0.027)	(0.028)	(0.020)	
• **Medical care for herself**	3.138	3.142	3.140	0.894
	(0.021)	(0.020)	(0.015)	
• **Buying clothes for herself**	3.220	3.226	3.223	0.841
	(0.022)	(0.021)	(0.015)	
• **Taking child to doctor**	3.278	3.298	3.288	0.531
	(0.024)	(0.023)	(0.017)	
• **Family planning**	3.159	3.135	3.147	0.423
	(0.023)	(0.021)	(0.015)	
Importance (1-4) for woman of being able to influence decisions on:				
• **Household enterprise***	2.523	2.468	2.494	0.180
	(0.028)	(0.030)	(0.020)	
• **Participating in wage employment**	2.462	2.493	2.478	0.320
	(0.023)	(0.021)	(0.016)	
• **Major household expenditures**	2.864	2.869	2.866	0.871
	(0.020)	(0.020)	(0.014)	
• **Minor expenditures**	3.288	3.281	3.285	0.857
	(0.025)	(0.025)	(0.018)	
• **Use of transfers and ration card**	2.635	2.565	2.600	0.071*
	(0.027)	(0.028)	(0.020)	
• **Medical care for herself**	3.100	3.115	3.108	0.665
	(0.024)	(0.024)	(0.017)	
• **Buying clothes for herself**	3.156	3.174	3.165	0.571
	(0.023)	(0.021)	(0.016)	
• **Taking child to doctor**	3.243	3.271	3.257	0.439
	(0.026)	(0.025)	(0.018)	
• **Family planning**	3.118	3.130	3.124	0.737
	(0.026)	(0.023)	(0.017)	
Observations	3503	3441	6944	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. *The sample size for influence and importance of decisions on household enterprise 1789 in treatment and 1898 in control as this question is limited to households engaged in agriculture or other productive activity.

Table 5.4.2: Women's Influence on Decision-Making by Takaful Beneficiary Status

	(1) Control	(2) Treatment	(3) Total	(4) p-value
Woman's decision-making index	-0.181	-0.160	-0.167	0.368
	(0.025)	(0.022)	(0.020)	
Woman's decision-making avg. score (1-4)	3.004	3.019	3.014	0.316
	(0.015)	(0.013)	(0.012)	

Woman's degree on influence (1-4) on decisions related to:				
• **Household enterprise***	2.246	2.301	2.283	0.139
	(0.035)	(0.030)	(0.027)	
• **Participating in wage employment**	2.457	2.464	2.462	0.749
	(0.024)	(0.018)	(0.017)	
• **Major household expenditure**	2.889	2.905	2.899	0.421
	(0.019)	(0.016)	(0.014)	
• **Minor expenditures**	3.329	3.338	3.335	0.644
	(0.020)	(0.018)	(0.017)	
• **Use of transfers and ration card**	2.559	2.649	2.619	0.000**
	(0.026)	(0.021)	(0.020)	
• **Medical care for herself**	3.133	3.143	3.140	0.608
	(0.019)	(0.016)	(0.015)	
• **Buying clothes for herself**	3.215	3.227	3.223	0.539
	(0.019)	(0.017)	(0.015)	
• **Taking child to doctor**	3.296	3.284	3.288	0.503
	(0.021)	(0.017)	(0.017)	
• **Family planning**	3.158	3.141	3.147	0.442
	(0.022)	(0.017)	(0.015)	
Importance (1-4) for woman of being able to influence decisions on:				
• **Household enterprise***	2.477	2.503	2.494	0.384
	(0.029)	(0.023)	(0.020)	
• **Participating in wage employment**	2.478	2.478	2.478	0.996
	(0.023)	(0.017)	(0.016)	
• **Major household expenditures**	2.872	2.863	2.866	0.665
	(0.019)	(0.016)	(0.014)	
• **Minor expenditures**	3.289	3.282	3.285	0.727
	(0.021)	(0.019)	(0.018)	
• **Use of transfers and ration card**	2.556	2.622	2.600	0.007**
	(0.026)	(0.021)	(0.020)	
• **Medical care for herself**	3.113	3.105	3.108	0.676
	(0.021)	(0.019)	(0.017)	
• **Buying clothes for herself**	3.163	3.166	3.165	0.904
	(0.020)	(0.017)	(0.016)	
• **Taking child to doctor**	3.267	3.252	3.257	0.448
	(0.022)	(0.019)	(0.018)	
• **Family planning**	3.133	3.119	3.124	0.535
	(0.023)	(0.019)	(0.017)	
Observations	3503	3441	6944	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. *The sample size for influence and importance of decisions on household enterprise 1220 for rejected and 2467 for beneficiaries as this question is limited to households engaged in agriculture or other productive activity.

Table 5.4.3: Women's Influence on Decision-Making by Poverty status

	(1) Moderately poor	(2) Very poor	(3) Total	(4) p-value
Woman's decision-making index	-0.060	-0.275	-0.167	0.000***
	(0.024)	(0.025)	(0.020)	
Woman's decision-making avg. score (1-4)	3.081	2.947	3.014	0.000***
	(0.015)	(0.015)	(0.012)	
Woman's degree on influence (1-4) on decisions related to:				
• **Household enterprise***	2.391	2.160	2.283	0.000***
	(0.032)	(0.034)	(0.027)	
• **Participating in wage employment**	2.506	2.417	2.462	0.001***
	(0.021)	(0.022)	(0.017)	
• **Major household expenditure**	2.964	2.835	2.899	0.000***
	(0.018)	(0.017)	(0.014)	
• **Minor expenditures**	3.420	3.249	3.335	0.000***
	(0.020)	(0.021)	(0.017)	
• **Use of transfers and ration card**	2.689	2.547	2.619	0.000***
	(0.024)	(0.024)	(0.020)	
• **Medical care for herself**	3.214	3.065	3.140	0.000***
	(0.017)	(0.019)	(0.015)	
• **Buying clothes for herself**	3.294	3.152	3.223	0.000***
	(0.018)	(0.019)	(0.015)	
• **Taking child to doctor**	3.359	3.217	3.288	0.000***
	(0.019)	(0.020)	(0.017)	
• **Family planning**	3.202	3.092	3.147	0.000**
	(0.019)	(0.020)	(0.015)	
Importance (1-4) for woman of being able to influence decisions on:				
• **Household enterprise***	2.572	2.407	2.494	0.000***
	(0.023)	(0.028)	(0.020)	
• **Participating in wage employment**	2.520	2.436	2.478	0.002***
	(0.020)	(0.020)	(0.016)	
• **Major household expenditures**	2.928	2.805	2.866	0.000***
	(0.018)	(0.017)	(0.014)	
• **Minor expenditures**	3.367	3.201	3.285	0.000***
	(0.020)	(0.022)	(0.018)	
• **Use of transfers and ration card**	2.667	2.534	2.600	0.000**
	(0.023)	(0.024)	(0.020)	
• **Medical care for herself**	3.180	3.035	3.108	0.000***
	(0.020)	(0.021)	(0.017)	
• **Buying clothes for herself**	3.223	3.106	3.165	0.000***
	(0.019)	(0.020)	(0.016)	
• **Taking child to doctor**	3.329	3.184	3.257	0.000***
	(0.020)	(0.021)	(0.018)	

• **Family planning**	3.172	3.075	3.124	0.000***
	(0.021)	(0.022)	(0.017)	
Observations	2808	2568	5376	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. *The sample size for influence and importance of decisions on household enterprise 1220 for rejected and 2467 for beneficiaries as this question is limited to households engaged in agriculture or other productive activity.

6. CHARACTERISTICS OF ELIGIBLE NON-NOMINATED MEMBERS

In response to the challenge that the majority in the current nominated sample have low levels of educational attainment, limited work experience, low work readiness, low cognitive and work skills and high caretaking responsibilities, this section will explore the prospects of other eligible household members as the potential Forsa participant by examining the educational attainment, current employment, willingness to work and the commonly listed work barriers of the eligible non-nominated members in Forsa households. We find that there is a small, but non-trivial share of households heads and working age sons and daughters that could be targeted as Forsa participants even in households that did not nominate them as the participant.

6.1 Non-Nominated Household Heads

The non-nominated household heads have on average similar educational attainment levels to the nominated sample (typically the spouse), yet they on average exhibit much higher willingness to work and higher employment rates. 76 percent of the non-nominated household heads have been employed as compared to 25 percent in the nominated sample. This finding may in part explain the low uptake of household heads to Forsa as a high percentage are already involved in current employment (mostly private irregular sector/casual labor). Among the unemployed non-nominated household heads (the remaining 24 percent), willingness to work is much higher reaching 43 percent compared to the average willingness to work among the unemployed from the current nominated sample (14 percent). In addition, household heads have a much lower likelihood of having obstructive high care-taking responsibilities as the average chores hours per week are 0.6 for males versus 18.3 hours per week for the females. Similarly, caretaking hours per week are 2.4 for males versus 17 hours for females. As for the unemployed non-nominated household heads who did not report willingness to work (56%), the main reason/barrier listed for their unreadiness to work is not related to jobs' availability but rather to not wanting to work.

6.2 Non-Nominated Working Age Sons and Daughters

The characteristics of the non-nominated children are even more promising, sons and daughters have on average much higher levels of educational attainment than the nominated sample. The percentage of sons/daughters with no education at all is 10 and 19 percent respectively, which is much lower compared to the average in the nominated sample (36 percent). Congruently, the percentage of sons and daughters with a university degree is relatively much higher reaching 11 and 20 percent versus 3.2 percent in nominated sample. This finding indicates that the educational level of the children within working age is much higher, and thus the likelihood of success should be more positive under both modalities. With respect to employment status, 9 percent and 11 percent of the non-nominated sons and daughters are involved in some type of work, implying there may be a high percentage of them who could be available to join Forsa. The Forsa opportunity could be relatively appealing even to the employed group since 78 percent of the employed sons work in irregular wage employment/casual day labor and the employed daughters are most commonly working in the informal private sector. With respect to the willingness to work, 14 percent of the unemployed non-nominated sons are ready to work- same percentage as in the current nominated sample. Only 7 percent of the unemployed (non-nominated) daughters are ready to work- which is lower than the average in the current nominated sample The three main reasons listed by the unemployed non-nominated sons, who are not ready to start work, are completing mandatory army service (40%), being

a full-time student (38%), and not wanting to work (10%). The reasons of unreadiness to work among the unemployed non-nominated daughters are being a full time student (36%), housewife (28%), and opposition from family members (8%).

Table 6.1: Breakdown of Forsa Sample

Variable	Number	Percentage
Households that did not nominate the household head	3848	71.6%
• **Of which: head is employed**	2931	76.3%
Unemployed household heads willing to work in households that did not nominate them	374	43% of unemployed non-nominated heads

7. COMMUNITY CHARACTERISTICS OF FORSA TARGETED SUB-VILLAGES

In this section, we present the community characteristics of Forsa Targeted sub-villages based on key informant interviews with village leaders.

Table 7.1 shows the community characteristics of Forsa villages by treatment status. According to the key informants, casual labor is valued at about 80EGP/day. Remittances are also common in these villages and households receive remittances both home and abroad. About 42 percent of households receive domestic remittances which almost doubles the percentage of households receiving remittances from abroad. In terms of unemployment, about 44 percent of males are unemployed in comparison to approximately 60 percent of females. Households are surrounded by various government facilities as they spend about 25 minutes walking for approximately 9km to access government facilities. Secondary schools exist in almost all Forsa communities. However, the number of these schools decrease as we move from lower through upper to technical secondary schools. There are more private-led vocational training than government training institutions. In terms of institutional and collective action characteristics, agricultural cooperatives abound in these communities (74 percent). Credit and saving groups also exist although at a much lower scale (30 percent).

There are some differences between treatment and control communities in terms of the participation of women in paid jobs and remittances. The frequency of government-led vocational training is also higher in treatment villages. It is possible that these last two characteristics are related to the presence of the behavioral change sessions in the community increasing the salience of female employment and vocational training.

Almost all (98.16 percent) of the villages are rural with only 1.86 percent listed as urban.

Table 7.1: Community characteristics of Forsa Villages by Treatment Status

	(1) Control	(2) Treatment	(3) Total	(4) p-value
Casual labor (EGP/day)	80.8	78.1	79.4	0.391
	(2.43)	(2.04)	(1.58)	
Domestic remittances (1/0)	0.383	0.444	0.414	0.028**
	(0.021)	(0.018)	(0.014)	
International remittances (1/0)	0.214	0.234	0.224	0.463
	(0.020)	(0.019)	(0.014)	
Women in paid jobs (1/0)	0.205	0.262	0.234	0.022**
	(0.018)	(0.017)	(0.012)	
Ability to find a job (1/0)	0.315	0.333	0.324	0.479
	(0.019)	(0.019)	(0.013)	
Unemployed males (1/0)	0.459	0.418	0.438	0.122
	(0.019)	(0.018)	(0.013)	
Unemployed females (1/0)	0.620	0.574	0.596	0.132
	(0.022)	(0.022)	(0.015)	
Distance to government facilities (Km)	10.767	7.443	9.062	0.325
	(3.332)	(0.523)	(1.644)	
Time to government facilities (minutes)	24.587	23.835	24.201	0.699
	(1.471)	(1.263)	(0.965)	
Lower secondary school (1/0)	0.973	0.987	0.981	0.380
	(0.013)	(0.009)	(0.008)	
Upper secondary school (1/0)	0.493	0.468	0.481	0.662
	(0.041)	(0.040)	(0.029)	
Technical secondary school (1/0)	0.153	0.171	0.162	0.677
	(0.030)	(0.030)	(0.021)	
Government-led vocational training (1/0)	0.027	0.076	0.052	0.049**
	(0.013)	(0.021)	(0.013)	
Private-led vocational training (1/0)	0.220	0.196	0.208	0.609
	(0.034)	(0.032)	(0.023)	
Access to microcredit loans (1/0)	0.520	0.487	0.503	0.568
	(0.041)	(0.040)	(0.029)	
Training for productive activities (1/0)	0.113	0.133	0.123	0.602
	(0.026)	(0.027)	(0.019)	
Agricultural cooperatives (1/0)	0.781	0.704	0.743	0.117
	(0.033)	(0.036)	(0.025)	
Credit and savings group (1/0)	0.313	0.296	0.304	0.744
	(0.037)	(0.036)	(0.026)	

Note: Means are presented with standard errors in parentheses. Column (4) shows the p-values of the t-tests for the equality of the means.

Table 7.2 presents some of the sectors/industries for unskilled employment in the various communities. These refer to places where individuals in the communities can easily find casual unskilled work. The most common sectors to find these unskilled jobs are the agricultural and construction sectors. We report the top two important sectors reported by the community leaders. While approximately 74 percent of community leaders reported agriculture as the most important casual unskilled activity, about 43

percent mentioned construction. Other important sectors in decreasing order of importance include wholesale and retail services, transportation, and handicrafts

Table 7.2: Sectors for unskilled employment

	Mean
Agriculture (1/0)	0.74
Construction (1/0)	0.43
Wholesale and retail sales (1/0)	0.28
Transportation (1/0)	0.25
Handicrafts (1/0)	0.21
Food services (1/0)	0.18
Security and protection (1/0)	0.15
Fishing (1/0)	0.14
Education (1/0)	0.14
Housekeeping (1/0)	0.13
Laundry (1/0)	0.13
Electricity, water, and gas (1/0)	0.13
Healthcare (1/0)	0.12
Hair and beauty (1/0)	0.11
Accounting and bookkeeping (1/0)	0.09
Law, clergy (1/0)	0.09
Chemical production (1/0)	0.09
Business manager (1/0)	0.08
Music, Arts, Sports (1/0)	0.06
Food and beverage production (1/0)	0.06
Textile production (1/0)	0.04

We also examine the various ways individuals' source for employment opportunities in the communities. Table 7.3 show the various job matching nodes. Given that these responses were ranked in order of importance by the village leaders, we only consider the first two reported employment nodes and generate the share of communities mentioning the employment nodes. The most common reported employment node is recommendation from co-workers and recommendations from social networks. 35 percent of community leaders ranked recommendation from co-workers to be a crucial employment source while 32 percent ranked recommendations from social networks. Online job platforms and insights from experienced people in other firms are also important sources of employment information.

Table 7.3: Job matching nodes

	Mean
Recommendation from co-workers (1/0)	0.35
Recommendations from social networks (1/0)	0.32
Online job platforms (1/0)	0.23
Private employment services (1/0)	0.23
Offers from experienced people in other firms (1/0)	0.18
Public employment services (1/0)	0.15
Public education and training centers (1/0)	0.07
Private education and training centers (1/0)	0.06
Job fairs (1/0)	0.03

Households face several barriers in their attempts to work. Table 7.4 presents some of the common barriers that prevent individuals from working or establishing productive businesses. This question has multiple barriers and households were asked to rank the importance of each barrier (not at all, somewhat, moderate amount and great extent). 78 percent of the community leaders mentioned low wages as one barrier to productive employment. 77 percent also cited lack of training as an important barrier. Other barriers reported by more than 50 percent of the community leaders are poor health and disability, cultural norms about working especially pertaining to women, and the fear of losing existing social benefits.

Table 7.4: Barriers to Work

Barriers	Mean
Low wages (1/0)	0.78
Lack of training (1/0)	0.77
Poor health and disability (1/0)	0.61
Cultural norms (women) (1/0)	0.58
Losing social benefits (1/0)	0.55
Little appreciation for working (1/0)	0.54
Cultural norms (status) (1/0)	0.52
Family responsibilities (1/0)	0.49
Inadequate transportation (1/0)	0.41

Beyond barriers to work, households face a plethora of other problems and issues in their various communities. Table 7.5 presents some of the key issues and problems households are facing in their communities. Some of the problems relate to issues of water, hygiene, and sanitation. While 86 percent of the community leaders mentioned infrastructure and sewage problems, 69 and 40 percent mentioned

poor garbage collection systems and poor water accessibility respectively. An overwhelming majority of community leaders (99 percent) mentioned the issue of youth unemployment. 88 percent of community leaders indicated that the limited availability of technical and higher education facilities is a serious issue in their communities. Access to medical and health services seem to be other important issues households are facing. About 91 percent of community leaders mentioned limited medical personnel, 87 percent mentioned poor capacity and quality of health services and 72 percent mentioned limited availability of childcare services.

Table 7.5: Community Problems and Issues

	Mean
Youth unemployment rates (1/0)	0.99
Limited medical personnel (1/0)	0.91
Limited availability of technical and higher education facilities (1/0)	0.88
Poor capacity and quality of health facilities (1/0)	0.87
Infrastructure and sewage problems (1/0)	0.86
Limited availability of child-care services (1/0)	0.72
Poor garbage collection systems (1/0)	0.69
Poor capacity and quality of educational facilities (1/0)	0.66
Cultural norms against female empowerment (1/0)	0.65
Lack of adequate transportation (1/0)	0.57
Violence against women (1/0)	0.57
Availability of financial institutions and services (1/0)	0.77
Migration (1/0)	0.57
High crime rates (1/0)	0.55
Poor water accessibility (1/0)	0.40

8. ANALYSIS OF BEHAVIORAL CHANGE SESSION ATTENDANCE

While our survey and sampling were designed to allow the baseline estimation of the impacts of the behavioral change sessions on Forsa program knowledge and attitudes, this is challenged by the significant misreporting of attendance of these sessions. The records from the administrative data do not match with the reported attendance/nonattendance by households. In this section, we summarize what we know from the administrative data and survey data on behavioral change session attendance, program uptake, awareness of Forsa and willingness to enroll.

8.1 Uptake levels

The initial uptake lists shared by the Ministry of Social Solidarity at this stage was only for the Takaful beneficiaries' group. In theory, the uptake level of the rejected/non-Takaful beneficiaries is expected to be even higher. Based on the preliminary uptake lists of Takaful beneficiaries, on all governorates, the uptake level among the Takaful sample is calculated to be approximately 49 percent. It would not be surprising if some households in the invitation group had never received a behavioral change session invitation, as the implementing NGOs were not expected to reach 100% of the eligible households in the list. What is surprising, however, is that as shown in Table 7.1, households which enrolled in Forsa according to the administrative data often did not self-report awareness of Forsa (28 percent of households according to the survey data compared to 49 percent according to the administrative data).

To be sure that this issue is not caused by enumerators who may have interviewed a member of the household different from the one who attended, in column (4) we limited the sample to households identified as enrolling in Forsa by the administrative data. Here we find that of the individuals reported as enrolled in Forsa according to the administrative data, only 18 percent recalled being invited to or attending the behavioral change session.

Table 8.1.1a Uptake of Forsa among Takaful beneficiary households randomized to receive behavioral change session invitations before the household survey

	(1)	(2)		(3)		(4)	(5)	
	Administrative data					**Survey data**		
	Number of house-holds in invitation group	Number of house-holds en-rolling Forsa	%	Number of households that have heard of Forsa	%	Number up-take house-holds inter-viewed actual participant	Number recall at-tending	%
Fayoum	180	90	0.5	48	0.53	43	25	0.58
Sharkia	74	58	0.78	0	0	34	0	0
Souhag	153	88	0.58	46	0.52	17	7	0.41
Qalyoubia	135	97	0.72	22	0.27	79	3	0.04
Alkora Total	**542**	**333**	**0.61**	**116**	**0.35**	**173**	**35**	**0.20**
Assiut	231	109	0.47	23	0.21	44	2	0.05
Beni suef	264	165	0.63	26	0.16	128	16	0.13
Menia	285	75	0.26	24	0.32	26	9	0.35
Luxor	91	9	0.10	7	0.78	6	5	0.83
Care Total	**871**	**358**	**0.41**	**80**	**0.22**	**204**	**32**	**0.16**
Total- All Gover-norates	**1413**	**691**	**0.49**	**196**	**0.28**	**377**	**67**	**0.18**

Table 8.1.1b A Summary of Forsa Uptake Among Takaful Beneficiary Households - Randomized to Receive Behavioral Change Session Invitations Before the Household Survey

Households in BC Sample	**Enrolled in Forsa according to administrative data:**	**Reported knowing about Forsa program in household survey:**
1413	691 (49%)	196 (28%)
	Potential participant in survey same as enrolled participant:	**Recalled attending session in household survey:**
1413	377	67 (18%)

8.2 Verification Visits

In order to understand the discrepancy reported in section 7.1, MoSS and IFPRI organized a small verification survey. The implementing NGOs internally investigated potential reasons behind such discrepancy and suggested three possible reasons: 1) not understanding the survey question 2)

misreporting by the household due to fear of losing the Takaful transfers; 3) misreporting by the household due to female participants being unwilling to inform the rest of the household about their former attendance. These potential explanations were explored in the verification visits.

The verification visits took place in all governorates except Luxor and included the implementing NGOs' staff (the assigned trainer to implement the behavioral change session in the corresponding village), a representative from The Ministry of Social Solidarity (MoSS), and a representative the International Food Policy Research Institute (IFPRI). The sample for the verification visits was randomly selected from uptake households who did not report attendance. The sample consisted of 10 households in each governorate, extracted from 2-3 villages. The verification visits were conducted in May-June 2022.

The main findings of the in-person verifications visits reveal that the main discrepancy between registration records and the self-reported answers in the survey was a result of heightened uncertainty and rumors about (dis)continuity of Takaful transfers upon registration for the Forsa program. The visits confirmed that there is a widespread and a common fear of losing Takaful transfers leading to a revaluation about joining Forsa among the initial registrants.

8.3 Feedback on The Behavioral Change Sessions

Among the relatively small number of households who reported to have attended a behavioral change session, almost 76 percent reported a duration from 1-2 hours, and 17 and 6 percent indicated a duration of 3 and 4 hours, respectively. In case of attending multiple sessions, the respondents were asked about the longest session. With regards to the mode of delivery, only 14 percent reported a display of any videos in the session and 57 percent of those reported that it was on the presenters' phone rather than on a big screen. In the sessions that displayed videos, approximately 63 percent of the participants in the sample reported recalling the content of the videos. Lastly, the respondents exhibited a clear understanding and high retention of the sessions' main message, with 82 percent of the respondents indicating that the main message was on the importance of economic independence and not depending on transfers.

8.4 Work versus Transfers Preferences of Potential Beneficiaries

Because of the small number of households self-reporting attendance at the behavioral change sessions and our uncertainty about the reason for this, we do not attempt to compare behavioral change session attendees to non-attendees. However, we do present a simple comparison of the treatment and control groups, on the assumption that more than half of the treatment community households attended a behavioral change session if the administrative records are correct. The sample size in table 8.4.1 is 3503, restricted to Takaful Beneficiaries who nominated a household member to join Forsa.

Table 8.4.1 presents Forsa potential participants' attitudes towards work and their expectations about Takaful continuity. We asked households a hypothetical question about whether they would prefer a full-time job in the formal sector with a monthly salary of 2000 EGP or receiving Takaful transfers. Additionally, we asked about households' beliefs regarding the continuation of Takaful transfers into the future with choices: 1 year or less, 1-3 years, more than 3 years, forever, and no information. We also asked the potential Forsa participant about whether they would prefer to enroll in Forsa or remain in Takaful under 5 scenarios of different transfer duration conditions after joining Forsa, ranging from Takaful stopping immediately once Forsa starts to Takaful continuing for 3, 6, 9, and 12 months, respectively in parallel with Forsa. We coded the data to show the duration at which participants' preferences switched from receiving transfers to employment.

As shown in table 8.4.1, most of the results are balanced over treatment and control communities, in contrast to what might be expected if the behavioral change sessions created substantial changes in expectations about the indefinite continuance of the Takaful transfers. Another notable finding is that preferences between Forsa and receiving Takaful transfers (under the two extreme scenarios) are not balanced, which could be traced to the rollout of behavioral change sessions implemented in treatment communities only.

Overall, there is a strong preference towards Takaful transfers over the full-time job in the formal sector, as only 27 percent of households chose the employment option.

Looking at the related question addressed to Forsa potential participants regarding how their attitude to enrolling in Forsa would change based on the amount of time they would continue receiving transfers, it is notable that the duration after starting Forsa had limited impact on the potential participants' choice for Forsa. Responses were strongly concentrated in either the "Always choosing employment" category or in the "Always choosing Takaful" category. The "Always choosing employment" category captured approximately 35 percent of potential participants, while the "Always choosing Takaful" category captured 58 percent of potential participants. Expectations about the continuity of Takaful transfers reveal that most households nominating a Forsa participant either choose the indefinite continuity of Takaful or the "Don't know" option, amounting to 88 percent. (Note that approximately 35 percent of responses could not be coded due to logical inconsistencies in their responses which indicated they did not understand the question).

Expectations about the continuity of Takaful transfers reveal that almost 36 percent think that Takaful transfers would last indefinitely, while 53 percent of households said they did not know how long the Takaful transfers would last, while about 8 percent of respondents correctly responded that the transfers would last for more than 3 years but not forever.

Table 8.4.2 shows the difference in attitudes towards work and perception of Takaful continuity based on Takaful enrollment duration by comparing potential households who have been in the program for less than 4 years versus households who have been in the program for more than 4 years. There is some suggestive evidence that longer enrollment periods induce higher expectations that transfers would continue for more than 3 years or last indefinitely. There are no significant differences between both groups in their willingness to enroll in Forsa.

Table 8.4.3 shows the difference in attitudes towards work and perception of Takaful continuity based on the gender of household head. The findings show that there are no significant differences between female and male headed households.

Table 8.4.1: Attitudes Towards Work of Potential Beneficiaries by Treatment Status (Takaful Sub-Sample)

	(1)	(2)	(3)	(4)
	Control	**Treatment**	**Total**	**p-value**
Full-Time job versus Takaful transfers	0.287	0.261	0.274	0.204
	(0.014)	(0.014)	(0.010)	
Forsa with limited Takaful duration versus Takaful for 3 years preferences- 5 scenarios (different Takaful duration conditions):				
• **Always chose Forsa- no switch point to Takaful**	0.384	0.312	0.348	0.004***
	(0.019)	(0.017)	(0.013)	
• **Switch point to TKP -(When TKP=0 months)**	0.006	0.010	0.008	0.129
	(0.002)	(0.002)	(0.001)	
• **Switch point to TKP- (When TKP=3 months)**	0.011	0.012	0.012	0.686
	(0.003)	(0.003)	(0.002)	
• **Switch point to TKP- (When TKP=6 months)**	0.015	0.014	0.015	0.658
	(0.003)	(0.003)	(0.002)	
• **Switch point to TKP- (When TKP=9 months)**	0.025	0.020	0.022	0.364
	(0.004)	(0.004)	(0.003)	
• **Always Switch to Takaful-Always TKP**	0.544	0.616	0.580	0.005***
	(0.018)	(0.018)	(0.013)	
Expectations about the continuity of Takaful transfers variables:				
Expected Takaful duration <1 Year	0.010	0.015	0.012	0.275
	(0.003)	(0.003)	(0.002)	
• **Expected Takaful duration= 1-3 Years**	0.023	0.038	0.030	0.034**
	(0.004)	(0.006)	(0.004)	
• **Expected Takaful duration> 3 Years**	0.067	0.081	0.074	0.288
	(0.009)	(0.009)	(0.006)	
• **Expected Takaful duration= Forever**	0.343	0.371	0.357	0.314
	(0.020)	(0.020)	(0.014)	
• **Expected Takaful duration= No information**	0.557	0.495	0.526	0.043**
	(0.022)	(0.021)	(0.015)	
Observations	1742	1761	3503	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size of Preferences of full-Time Job (2000 EGP) versus Takaful Preference variable and Takaful expected duration variables is 3123 since it is also conditional on households self-reporting receiving Takaful transfers in the last two months.

Table 8.4.2: Attitudes Towards Work of Potential Beneficiaries by Takaful Enrollment Duration

	(1)	(2)	(3)	(4)
	< 4 years	**>4 years**	**Total**	**p-value**
Full-Time Job versus Takaful transfers	0.263	0.278	0.269	0.416
	(0.013)	(0.014)	(0.010)	
Forsa with limited Takaful duration versus Takaful for 3 years preferences- 5 scenarios (different Takaful duration conditions):				
• **Always chose Forsa- no switch point to Takaful**	0.330	0.330	0.330	0.990
	(0.015)	(0.016)	(0.013)	
• **Switch point to TKP -(When TKP=0 months)**	0.006	0.008	0.007	0.625
	(0.002)	(0.002)	(0.001)	
• **Switch point to TKP- (When TKP=3 months)**	0.012	0.010	0.011	0.651
	(0.003)	(0.003)	(0.002)	
• **Switch point to TKP- (When TKP=6 months)**	0.015	0.011	0.013	0.371
	(0.003)	(0.003)	(0.002)	
• **Switch point to TKP- (When TKP=9 months)**	0.022	0.024	0.023	0.762
	(0.003)	(0.005)	(0.003)	
• **Always Switch to Takaful-Always TKP**	0.570	0.578	0.574	0.689
	(0.016)	(0.017)	(0.013)	
Expectations about the continuity of Takaful transfers variables:				
• **Expected Takaful duration <1 Year**	0.012	0.011	0.012	0.843
	(0.003)	(0.003)	(0.002)	
• **Expected Takaful duration= 1-3 Years**	0.032	0.039	0.035	0.382
	(0.005)	(0.006)	(0.004)	
• **Expected Takaful duration> 3 Years**	0.066	0.093	0.078	0.025**
	(0.008)	(0.010)	(0.007)	
• **Expected Takaful duration= Forever**	0.342	0.380	0.358	0.074*
	(0.018)	(0.018)	(0.015)	
• **Expected Takaful duration= No information**	0.548	0.476	0.518	0.004***
	(0.020)	(0.019)	(0.016)	
Observations	1871	1400	3271	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size is 3271 as the heterogeneity analysis by Takaful duration is also conditional upon the availability of

admin data on date of Takaful enrollment date. For the variable Full-time job versus Takaful and Takaful expected duration, the sample size is 2927 since it is conditional upon households self-reporting receiving Takaful transfers in the last two months. The discrepancy between administrative data on Takaful enrollment with self-reported data is likely due to time lags and reporting errors.

Table 8.4.3: Attitudes Towards Work of Potential Beneficiaries by the Gender of Household Head (Takaful Sub-sample)

	(1) Male-Headed Households	(2) Female-Headed Households	(3) Total	(4) p-value
Full-Time Job versus Takaful transfers	0.274	0.270	0.274	0.917
	(0.011)	(0.040)	(0.010)	
Forsa with limited Takaful duration versus Takaful for 3 years preferences- 5 scenarios (different Takaful duration conditions):				
• **Always chose Forsa- no switch point to Takaful**	0.349	0.314	0.348	0.356
	(0.013)	(0.036)	(0.013)	
• **Switch point to TKP -(When TKP=0 months)**	0.008	0.013	0.008	0.592
	(0.002)	(0.009)	(0.001)	
• **Switch point to TKP- (When TKP=3 months)**	0.012	0.006	0.012	0.394
	(0.002)	(0.006)	(0.002)	
• **Switch point to TKP- (When TKP=6 months)**	0.015	0.006	0.015	0.173
	(0.002)	(0.006)	(0.002)	
• **Switch point to TKP- (When TKP=9 months)**	0.023	0.013	0.022	0.254
	(0.003)	(0.009)	(0.003)	
• **Always Switch to Takaful-Always TKP**	0.577	0.642	0.580	0.108
	(0.013)	(0.038)	(0.013)	
Expectations about the continuity of Takaful transfers variables:				
• **Expected Takaful duration <1 Year**	0.012	0.024	0.012	0.389
	(0.002)	(0.014)	(0.002)	
• **Expected Takaful duration= 1-3 Years**	0.031	0.024	0.030	0.616
	(0.004)	(0.013)	(0.004)	
• **Expected Takaful duration> 3 Years**	0.074	0.071	0.074	0.909
	(0.006)	(0.023)	(0.006)	
• **Expected Takaful duration= Forever**	0.355	0.413	0.357	0.166
	(0.014)	(0.043)	(0.014)	
• **Expected Takaful duration= No information**	0.529	0.468	0.526	0.193
	(0.015)	(0.048)	(0.015)	
Observations	3344	159	3503	

Note: Means are presented with standard errors clustered at the village level in parenthesis. Column (4) shows the p-values of the t-tests for the equality of the means. The total sample size of Preferences of full-Time Job (2000 EGP) versus Takaful Preference variable and Takaful expected duration variables is 3123 since it is also conditional on households self-reporting receiving Takaful transfers in the last two months.

9. CONCLUSIONS AND POLICY RECOMMENDATIONS

This report summarized the baseline characteristics of households targeted by the Forsa intervention and the most likely Forsa participants within these households. The potential Forsa participants nominated by households in the survey are primarily women with extremely limited work experience, substantial caretaking responsibilities, and low levels of education. The male likely participants, by contrast, have somewhat greater although still limited work experience and education. Notably, potential participants do not place a high value on work formality and have a relatively high minimum acceptable wage for work outside the home and for work distant from the local community. We also summarize reported work skills, self-assessed soft skills, financial literacy, and tested skills at literacy and cognitive ability as well as preferences for self-employment types of the potential participants as well as the characteristics of the communities they live in.

Additionally, the report summarizes baseline conditions at the household level for the purpose of eventual analysis of the impact of Forsa on household asset ownership, consumption, debt, savings, and women's empowerment within the household.

We flag that self-reported attendance at behavioral change sessions is inconsistent with administrative data. This inconsistency is due to the heightened uncertainty and rumors about (dis)continuity of Takaful transfers upon registration into the Forsa program. Verification visits confirmed that there is a widespread and a common fear of losing Takaful transfers leading to a revaluation about joining Forsa among the initial registrants. About 40 percent of surveyed households indicated they would prefer to receive Takaful transfers rather than enrolling in Forsa. This is likely related to the fact that approximately the same percentage of respondents believe that Takaful transfers will continue indefinitely, with no difference in beliefs between treatment and control communities.

Based on the findings from the baseline evaluation, a few immediate policy lessons emerge:

Define and communicate Takaful eligibility timeline. The common belief that Takaful transfers are indefinite creates a large disincentive to enroll in Forsa. Inconsistent communication on this aspect of the program creates distrust and opens it up for rumors. The policy of Takaful eligibility lasting for 3 years and Forsa enrollees losing access to Takaful after the transition period (unless they successfully re-apply due to a change of circumstance in the future) needs not only to be defined legally but also credibly announced. Even after an official announcement, households that do not expect to make profits with the asset transfer may not be motivated to join Forsa. Thus, it may be worthwhile to allow self-selection into Forsa.

Allow self-selection into Forsa. Truly poor households that lack confidence in their ability to make profits from the asset transfers should be allowed to opt for the certainty of receiving Takaful transfers. When households are given the freedom to self-select between Forsa and Takaful, households with better non-cognitive skills and less risk aversion are more likely to enroll in entrepreneurship training (Iacovone et al. 2018; Dasguta et al. 2014). This implies that letting least confident households drop out can improve the average potential to benefit from Forsa.

Maximize attractiveness of the Forsa Package for Takaful graduates. Forsa needs to show a good probability of exceeding short-term benefits of cash transfers to avoid excessive drop-out. Without

this, households may prefer to receive the Takaful transfers as opposed to Forsa which they (may)consider as a black box. To lessen this, it would be important to clearly communicate the benefits that will be offered and commitment to on-going mentoring. Also, it may be worthwhile to keep 12 months of cash transfers to be more in line with successful graduation programs in other countries (Banarjee et al. 2015) and allow beneficiaries more time for their projects to become profitable.

Replace households that have dropped out. To replace the households that have dropped out, there are two possibilities. In the first place, the program could consider expanding the share of households in the pilot from the Rejected group (e.g., currently 30% could increase to 50%). In the second place, the program may allow new sign-ups from among the Takaful beneficiary group given that the number of eligible households largely exceeds the number of households that attended behavioral training sessions.

Continue with the current plan of keeping training sessions open to other household members. The widespread nomination of a wife/mother as the potential Forsa participants is likely based on incomplete understanding of the Forsa program. It may thus be necessary to (re) advertise the wage-employment track towards husbands or older sons and daughters of enrolled women who chose the asset-transfer track. Moreover, participation in training/ mentoring sessions should remain open to any household member rather than restricting to specific participants.

Meet participants where they are. Forsa participants have limited literacy skills and business experience. Mentoring should be maximized to the extent possible and training designed with this background in mind. Trainers should also promote the value of women's participation in Forsa with household heads to avoid conflicts on decision-making about employment and household production.

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