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The Syrian Refugee Life Study

First Glance

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Abstract

This paper presents descriptive statistics from the first wave of the Syrian Refugee Life Study (S-RLS), which was launched in 2020. S-RLS is a longitudinal study that tracks a representative sample of 2,500 registered Syrian refugee households in Jordan. It collects comprehensive data on socio-demographic variables as well as information on health and well-being, preferences, social capital, attitudes, and safety and crime perceptions. This study uses these novel data to document the socio-demographic characteristics of Syrian refugees in Jordan, and compare them to those of the representative Jordanian and non-Jordanian populations interviewed in the 2016 Jordan Labor Market Panel Survey. The findings point to lags in basic service access, housing quality, and educational attainment for the Syrian refugee population, relative to the non-refugee population. The impacts of the pandemic may serve to partially explain these documented disparities. The data also illustrate that most Syrian refugees have not recovered economically from the shock of COVID-19 and that this population has larger gender disparities in terms of income, employment, prevalence of child marriage, and gender attitudes than their non-refugee counterparts. Finally, mental health problems are common for Syrian refugees in 2020, with depression indicated among over 61 percent of the population.

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THE SYRIAN REFUGEE LIFE STUDY: FIRST GLANCE *

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INTRODUCTION

As the number of refugees worldwide continues to grow, research on displaced populations has become critically important for governments and implementing organizations alike. The onset of climate change will likely only exacerbate these issues, making the creation of strong data infrastructure all the more pressing. Generating high-quality, long-term data for refugee populations, however, is challenging. Refugee populations can be highly mobile, are often victims of political persecution and violence; and undergo difficult and long journeys. In many cases they are forced to migrate without full documentation, making many refugees reluctant to share their information. As such, sampling frames are rarely available to construct representative data for these populations in hosting locations.

The Syrian Refugee Life Survey (S-RLS) is one of the first longitudinal studies of a representative sample of refugees. The Syrian Arab Republic is the largest source of refugees worldwide, with over 6.8 million registered individuals displaced internationally as of mid-2021 (UNHCR, 2021). The survey examines the life characteristics of Syrian refugees in the Hashemite Kingdom of Jordan. Jordan hosts approximately 12 percent of registered Syrian refugees ($\sim$655,000 people), representing a migration shock equal to 6.8 percent of Jordan's total population. The survey sample is selected from the universe of registered households with the United Nations Refugee Agency (UNHCR), and includes approximately 2,500 Syrian refugee households residing in camps and in host communities of Jordan. The S-RLS aims to i) provide longitudinal data, allowing researchers and policymakers to track individuals and households over time, and ii) deepen the breadth of information collected on this population, including measures of risk and time preferences, detailed migration histories, and child outcomes, among others. This effort builds on the repeated cross-sectional data that UNHCR routinely collects on Syrian refugees in Jordan covering a relevant set of outcomes.[1]

[1]For example the 2019 Vulnerability Assessment Framework population study explores different types of vulnerability dimensions across multiple sectors from a representative sample of registered Syrian refugees in Jordan. This study provides information about vulnerabilities within the targeted population and contributes to reflection within UNHCR on how to interpret their home visit assessments.

Specifically, the S-RLS is collecting information on Syrian refugees' household characteristics and family life; consumption and expenditures; income, education, cognition and preferences; health and well-being; child outcomes, attitudes, and victimization. This document presents descriptive statistics on those variables, produced from two sources of data: a partial in-person wave of approximately 500 refugee households concentrated in urban areas (collected just before the beginning of the pandemic) and a complete representative wave using phone surveys (collected during the pandemic). Both waves were collected in 2020. In Section I, we present details on each wave of the S-RLS survey including modules, representativeness, and sampling frame. We then discuss the results of these surveys in three main sections: Section II compares Syrian refugees to Jordanian non-refugee residents, Section III analyzes the impact of COVID-19 on Syrian refugees, and Section IV presents novel data about this important population.

Section II uses the representative S-RLS phone survey data to compare basic socio-demographic characteristics of Syrian refugees in 2020 with that of non-refugees and Syrian refugees living in Jordan in 2016. The comparison data comes from the Jordanian Labor Market Panel Survey (JLMPS), which was the most recent comprehensive representative survey of residents in Jordan. We find that Syrian refugees in 2020 have larger households, are disproportionately younger, and face larger lags in terms of public service access (including education attainment and access) compared to non-refugee households in the 2016 JLMPS. Syrian refugees in 2020 also have worse housing quality and food security than 2016 non-refugees. Relative to refugees in the 2016 JLMPS, Syrian refugees in the 2020 S-RLS have less food security, worse housing quality, and less access to public services, except for the case of education, where an opposite trend is documented. These trends are driven by refugees residing outside of refugee camps and are presumably related to the impacts of the COVID-19 pandemic.

Section III presents evidence on the economic impacts of the COVID-19 pandemic for refugees. The pandemic had a devastating effect on the household income of Syrian refugees in Jordan. Syrian refugees experienced an 80 percent reduction in household income on average during the COVID-19 lockdown and the number of households with

a member working fell to a quarter of the pre-lockdown level during the lockdown. After the lockdown was lifted, Syrian refugee households only recovered 72 percent of income lost during the pandemic. The number of households with at least one member earning positive income declined by 12 percent from pre- to post-lockdown [2]. Pandemic-related income variation was more pronounced for households living outside of camps relative to those residing in camps. The former saw a larger reduction in their per capita income during lockdown, but also a larger recovery post lockdown.

Section IV reports a range of descriptive statistics that offer a richer understanding of the study participants' lives, with measures including child marriage, sources of aid, intentions to return, and mental health. The data for this section come from the in-person comprehensive survey collected for only 468 of the study sample households before the onset of the COVID-19 pandemic unexpectedly halted data collection. The in-person survey sub-sample is more urban than the full representative sample captured in the phone survey, because enumeration was geographically clustered to reduce costs and began in urban centers. The data illustrate large gender disparities in terms of employment access, prevalence of child marriage, and gender attitudes. Moreover, the data indicate that refugee populations are not fully integrated into the Jordanian society. For example, more than a quarter of Syrian refugee children living in Jordan host communities do not have any Jordanian friends and do not share recreational spaces with Jordanian children. Refugees also have negligible access to formal financial services and rely on friends and relatives for loans. Another important pattern is that the majority of refugees do not plan to return to Syria within two years of the conflict ending. Finally, a large share of refugees are experiencing mental health concerns – i.e., 61 percent of the sample meets the CES-D criteria for depression – and caregivers' mental health is highly correlated with their children's mental health.

Relation to the Literature: We advance the literature examining the economic, social, and political role of refugees in Jordan by presenting previously un-collected data about this

[2] A 12 percent decline follows from comparing the number of households with nonzero household income before the lockdown (2,062) and after the lockdown (1807). These figures are reported as the sample sizes of households with non-zero household income in Table 5.

population. While there is a growing literature studying topics related to the forced migration of Syrian refugees, there remains a significant gap in documenting the economic conditions of Syrian refugees themselves.

The existing literature has a significant focus on understanding refugees' relationships with their host communities, both economically and socially. Researchers have found evidence for meaningful economic impacts of refugee flows into the countries bordering Syria, including Jordan, Turkey, and Lebanon. Rozo and Sviatschi (2021) compare regions near and far from Jordanian refugee camps to show that refugee inflows increased rents due to fixed housing supply. Jordanian renters pay higher rents, and Jordanian owners earn more rental income. Using evidence from Turkey, Tumen (2016) finds that refugee flows reduce native employment, especially in the informal sector. He finds no wage effects, and documents declines in consumer prices. These price decreases were likely driven by declines in informal labor costs. In contrast to these labor market estimates, researchers have found null effects on educational and health outcomes of natives. Aygün, Kırdar and Tuncay (2021) find no effect of refugee arrivals on native health outcomes in Turkey after controlling for endogenous location choice, and Assaad, Ginn and Saleh (2018) find no effect of Syrian refugee concentration on Jordanian educational attainment. We advance this literature by moving beyond a focus on natives, for whom data are more readily available, and instead present new facts on the economic, educational and health status of Syrian refugees.

The literature also documents fairly mixed evidence regarding social relations between refugees and natives in host communities in the Syrian context. Barron et al. (2020) finds relatively little cross-ethnic bias among Syrian and Jordanian children (in either direction). In a study of Jordanian adults, Alrababa'h et al. (2021) find that anti-refugee sentiment is not higher among Jordanians more economically affected by the migration influx. Similarly, Altindag and Kaushal (2021) find that migrant flows in Turkey have no effect on native political preferences. On the other hand, Lehmann and Masterson (2020) document moderate rates of anti-refugee violence in Lebanon, but find no evidence that increases in aid to Syrian refugees in Lebanon increases the prevalence of this violence. Finally,

Bertoli, Ozden and Packard (2021) use cell phone data to document segregation patterns of refugees in Turkey, and show that segregation is decreasing in the share of refugees in an area. They also show that refugees choose to locate in places with low segregation and higher shares, while natives are indifferent. We contribute to these topics by presenting data on integration with the Jordanian community alongside gender and political attitudes.

Much of the evidence regarding refugees themselves is limited to migration decisions. Balcilar and Nugent (2019) and Beaman, Onder and Onder (2021) study the determinants of refugee's likelihood of returning to Syria. Both find somewhat intuitive results regarding push and pull factors. Balcilar and Nugent (2019) document that worse conflict in the Syrian place of origin and better quality services in Turkey decrease the likelihood of return. Similarly, Beaman, Onder and Onder (2021) find that better security and better availability of services in Syria predict return. We complement this literature by presenting statistics on intent to return among a representative sample of refugees in Jordan. These data and the data to be collected in future waves will advance research on how refugees make migration decisions, and how intent to return and actual return may vary across individuals and over time.

I THE SYRIAN REFUGEE LIFE PANEL SURVEY

The first wave of the S-RLS survey was collected in early 2020 and was initially planned to be an in-person interview. However, due to the arrival of the COVID-19 pandemic, only 468 in-person surveys (20 percent of the sample) were completed before in-person activities were halted. After that, the survey was shortened and carried out through a phone interview. The new, shortened phone survey was conducted during late 2020 and covered the full sample, including those households previously surveyed in-person. Table 1 describes in detail the modules included in the in-person and phone survey rounds to date.

I.A Sampling frame

The sampling frame for the S-RLS was constructed from the universe of 323,746 adult Syrian refugees registered with the United Nations Refugee Agency (UNHCR) in Jordan as observed up until early 2020. In Jordan, UNHCR manages the Syrian refugee presence in collaboration with the Jordanian government, and all international humanitarian actors are coordinated under the UNHCR umbrella. Because the majority of humanitarian support in Jordan is made available through UNHCR, registration rates are believed to be high.

The S-RLS was drawn from a random sample of UNHCR's registered refugees at the individual level. It was stratified by gender, age, governorate, and camp status, dimensions that the research team deemed as important in examining demographics of refugees in the region. Figure 1 illustrates the number of households registered with UNHCR in 2020 (the S-RLS sampling frame) and the number of households in the longitudinal S-RLS study. The majority of the S-RLS sample (85 percent) is concentrated in four governorates: Amman, Mafraq, Zarqa, and Irbid.

I.B The 2020 In-person Survey

Tables A-1 and A-2 of Appendix A illustrate the geographic and household's representativeness of the in-person survey—the survey round that was not completed due to the arrival of COVID-19 and which collects a richer set of modules as described in Table 1. As shown in Table A-1 of Appendix A, the in-person survey was concentrated in the governorates of Amman and Irbid, two highly populated governorates in Jordan. This is an artifact of the geographically clustered initial roll-out, which was designed to control costs. As such, the in-person survey is more urban than the representative phone sample.

Table A-2 of Appendix A reports average household characteristics for the representative phone survey (column 2) and the difference between the in-person survey and the representative phone survey (column 3). Panel A compares household characteristics as reported by the focus respondent and Panel B compares individual characteristics from

the complete household roster.[3] Individuals in the in-person survey generally have larger households, with more children, more education, and better access to public services (such as electricity, water or housing quality), relative to the phone survey sample. These characteristics are in line with their location in urban centers. There are also no individuals living in camps in the in-person survey, as data collection in the camps had not yet been launched when the survey was paused by the pandemic.

II SYRIAN REFUGEES RELATIVE TO THE JORDANIAN POPULATION

This section compares the socio-demographic characteristics of the Syrian refugees interviewed in the S-RLS phone survey of 2020 with the non-refugee Jordanian residents and registered Syrian refugee populations interviewed in the Jordan Labor Market Panel Survey of 2016 (JLMPS) and the Jordanian Population Census of 2015. The JLMPS is part of a nationally representative labor market panel survey collected in 2010 and 2016. It collected information on non-refugees and refugees, a status directly reported by the individuals who were interviewed. The 2016 JLMPS oversampled neighborhoods in Jordan that had high proportions of non-Jordanian households, including refugee camps, as ascertained by the 2015 Population Census. As such, it is the most recent comprehensive effort to collect longitudinal data on Jordanians and non-Jordanians alike in Jordan, present representative demographics for them, and make the data publicly available.[4]

II.A Household size

Syrian refugee households are larger in size than Jordanian headed households. Figure 2 reports the household size distribution of Syrian refugees in 2020 and Jordanian headed households in 2016, and indicates that on average Syrian refugee households have 5.96 members and non-refugee households have 4.61 members.

[3]The household roster collects basic information including age, gender, educational attainment, school attendance, and occupation for each individual in the household.

[4]Other recent cross-sectional efforts include the Household Expenditure and Income surveys of 2017-2018.

II.B Gender and age distribution

The Syrian refugee population in Jordan has a similar gender distribution but is on average younger than the non-refugee Jordanian population. Figure 3 illustrates the gender and age distribution of the individuals in the S-RLS phone survey (Panel A) and that observed for Jordanian nationals in the Population Census of 2015 (Panel B). Although roughly 50 percent of each sample is female, the S-RLS sample is disproportionately composed of younger individuals. These trends are confirmed in Table 2. The table compares basic demographics for the individuals interviewed in the S-RLS phone survey (columns 1 through 3) with those observed for the 2016 JLMPS sample (columns 4 through 7). For each sample the table reports statistics for the sample of refugees, non-refugees, refugees based in camps, and refugees based outside of camps. The table illustrates that among adults 18-59 in each sample, approximately 50 percent of respondents are female for all population groups. The average age of Syrian refugees in the restricted S-RLS and JLMPS samples is approximately the same (32.78 and 32.98 years, respectively). The table also suggests that on average non-refugees in the 2016 JLMPS were slightly older (34.08 years) relative to Syrian refugees.

II.C Education access and attainment

Syrian refugees in 2020 have lower educational access and attainment relative to non-refugees in Jordan in 2016. Panel B of Table 2 shows that the average years of education for adults in the S-RLS was 8.0, relative to 10.8 for non-refugee adults in the JLMPS. A larger gap was observed in JLMPS between refugees (7.4 years) and non-refugees (10.8 years) in 2016. The large disparities across the Syrian refugee population and non-refugees in the JLMPS are also illustrated in Table 3, where individuals in the S-RLS and JLMPS were divided across educational attainment. The table shows that educational attainment is substantially lower for Syrian refugees in 2020 across every category of education, relative to non-refugees. In fact, in 2020 the majority of Syrian refugees (74.4 percent) had at most basic education.

Syrian refugees in 2020 have better educational attainment and access on average than the Syrian refugees interviewed in the 2016 JLMPS. The positive dynamic trend is observed for refugees

residing inside and outside of camps. As illustrated in Panel B of Table 2, when comparing refugees in the 2020 S-RLS phone survey with those refugees in the 2016 JLMPS, educational access and attainment is higher for refugee populations in 2020. These differences could be driven by differences in the S-RLS and JLMPS samples. However the fact that the trend holds in the camp sample, where sampling differences would be less likely, supports the idea that the data are capturing a dynamic trend.

II.D Food security, housing quality, and access to public services

Syrian refugee households are on average more vulnerable than the representative non-refugee Jordanian household. Table 4 illustrates that on average and relative to the non-refugee sample in the JLMPS, Syrian refugee households have more children (3.01 vs. 2.12), have a lower proportion of male headed households (0.77 vs. 0.91), and live in more crowded spaces (2.34 individuals per room vs. 1.5 individuals per room). Syrian refugee households also report higher levels of food insecurity, worse housing quality, and lower access to public services (such as access to piped water or the electrical grid), relative to the non-refugee households in the 2016 JLMPS.

Relative to refugees in the 2016 JLMPS, refugees in the 2020 S-RLS, have less food security, worse housing quality, and less access to public services. The trends in food security and public service access are driven by refugees residing outside of refugee camps and are presumably related to the impacts of the COVID-19 pandemic. On average and relative to the sample of refugees in the JLMPS (columns 1 and 5 of Table 4), Syrian refugees in the S-RLS sample have similar household sizes and number of children. Refugees in 2020 also report worse housing quality materials and lower access to public services relative to those interviewed in 2016. They also report consuming a lower number of meals. In fact, only 17 percent of the individuals in the S-RLS sample had three meals in the day prior to the survey, relative to 51 percent of individuals in the JLMPS sample.[5]

When comparing refugees in camps in both surveys (columns 2 and 6), we observe they also have similar basic demographics. Compared to refugees interviewed in the 2016 JLMPS, S-RLS refugees in 2020 report better access to toilets and piped water, although

[5]The JLMPS asks whether refugees have eaten three meals almost every day over the last 12 months.

public electricity provision appears to have declined slightly. We note that the definitions of permanent flooring and roofing differ dramatically between the S-RLS and the JLMPS with respect to prefabricated housing units. This makes interpreting building materials in refugee camps particularly difficult, and as a result, we do not place much weight on the large differences in these variables.

Refugees living outside of camps also show similar basic demographics (columns 3 and 7), but Syrian refugees in the 2020 S-RLS report having less permanent housing materials and less access to public services, relative to refugees interviewed in the 2016 JLMPS. These trends suggests that material conditions of refugees outside of camps in Jordan are not improving over time or may have deteriorated with the COVID-19 pandemic.

III ECONOMIC IMPACTS OF COVID-19 AMONG SYRIAN REFUGEES

This section illustrates the economic impacts that the COVID-19 pandemic has had on Syrian refugees in Jordan. The analysis is reported in Table 5 and centers on comparing the average income and hours worked pre-lockdown (January through March 15, 2020; Panel A), during lockdown (March 15 through May 15, 2020; Panel B), and post-lockdown (post May 15, 2020; Panel C) for all the refugees in the S-RLS phone sample (column 1), those living in camps (column 2), and those living out of camps (column 3). The trends reported in the table are based on the representative phone survey and indicate that:

1. *Syrian refugees experienced an average reduction in per adult income of 80 percent during the COVID-19 lockdown in Jordan.* The table suggests that the lockdown had a sharply negative impact on per adult income and hours worked for Syrian refugees. Annualized per adult income in each household fell from $2,153 USD PPP pre-lockdown to $425 USD PPP during lockdown (a reduction of 80.3 percent), and per adult hours worked fell from 11 to 1 hours per week (a reduction of 90.9 percent), respectively. The reductions in labor income were sharp for refugees residing inside and outside of camps, but larger for the latter. Refugees inside camps saw a reduction of 72.8 percent and those outside camps a reduction of 81.3 percent in per-adult income. On average, refugees in and outside of camps worked one hour during lockdown,

an almost complete labor shutdown.

2. *Only 21.1 percent of Syrian refugee households had an employed household member during the COVID-19 lockdown in Jordan. The income shock was still negative but less severe for these households.* For those households in which a refugee was employed during the pandemic (roughly 21.1 percent of the sample), there was still a substantial reduction in income but it was less dramatic than for those households where no one kept a job. Particularly, per adult income fell from $2,590 USD pre-lockdown to $2,012 USD during lockdown (a reduction of 22.3 percent). Approximately 20.9 percent of refugee households living inside camps had an employed member during lockdown, compared to 72.3 percent before lockdown. The percentage was 21.1 percent for refugee households outside of camps, compared to 85.5 percent before lockdown.

3. *Post-lockdown income per adult was 77 percent of the pre-lockdown level for Syrian refugees in Jordan.* Post-lockdown per adult income was on average $1,658 USD PPP, an amount lower than the level observed pre-lockdown ($2,153 USD PPP). As such, post-lockdown income was approximately 77 percent of the income observed pre-lockdown. Recovery was better among the employed; post-lockdown income of households with non-zero labor income was around 88 percent of pre-lockdown levels. A similar trend is observed for the number of hours worked where the per-adult number of hours worked fell from 13 pre-lockdown to 11 post-lockdown (a recovery of 84.6 percent relative to pre-lockdown levels). Refugees inside camps saw a recovery in their income per adult of 71.1 percent. The recovery was stronger for refugees living outside of camps, as they recovered to 78.0 percent of their pre-lockdown per adult income.

4. *The number of households with positive labor income declined by 12.4 percent after the lockdown.* 2062 households had positive labor income prior to the lockdown, and this number declined to 1807 after the lockdown (a 12.4 percent loss). In camps, this loss was larger. The number of households in refugee camps with positive labor income declined by 21 percent. This percentage was lower for refugees outside of

camps (where the number of employed households dropped by 11 percent).

5. *The income variation caused by the pandemic for refugee households was more pronounced for households living outside of camps, relative to those residing in camps.* The former saw a larger reduction in their per adult income during lockdown, but also a more rapid recovery post lockdown. Per adult income for households in and out of camps fell 73.3 and 81.7 percent during lockdown, respectively. However, post-lockdown households in and out of camps recovered to 71.1 and 78.0 percent of their pre-lockdown income.

IV NEW DATA: SOCIAL ATTITUDES AND MENTAL HEALTH

This section documents some of the novel and unusual data available in the S-RLS. The data reported in this section comes primarily from the comprehensive in-person survey collected for 468 households before the COVID-19 pandemic began. These data are not available for the complete phone survey since the instrument was shortened to prevent survey fatigue on the phone. The next subsections document some interesting patterns observed for Syrian refugees living in Jordan in early 2020.

IV.A Sources of income by gender

Female-headed households are highly dependent on aid and have far lower income than male-headed households. Figure 4 illustrates the per capita income of male and female headed households. The sample reported in the figure is small (163 male-headed households and 52 female-headed households). Yet, the data is informative in illustrating the large gender disparities between these households and the high vulnerability of female-headed households. In particular, total per capita income of female-headed households is only 66.7 percent of that observed in male-headed households. The majority of the income in female-headed households comes from cash and food aid (77.8 percent of total income) and employment income is extremely low (6.3 percent). By comparison, 49 percent of total income in male-headed households comes from employment.

IV.B Prevalence of child marriage

Child marriage is more common among Syrian refugees than Jordanian nationals. In both nationality groups, it is primarily girls who are married before age 18. Figure 5 reports the share of females and males married by age for Syrian and Jordanian nationals living in Jordan, pre- and post-conflict onset.[6] The figure suggests that child marriage (marriage for individuals younger than 18 years) is more common among Syrian refugees than Jordanian nationals. Child marriage is dramatically higher for females relative to males. The figure also illustrates that child marriage is slightly lower for females post-conflict onset.

IV.C Financial access

Formal financial access is negligible for Syrian refugees. However, informal loan access is prevalent with the most common source of loans being friends and relatives. Table 6 reports that only 1.1 percent of the 467 households interviewed had a bank account. However, 48.6 percent of these households asked for a loan and 44.8 percent of households received one from friends or relatives. Most loans are interest free (92.6 percent of loans) and the majority of past loans have not been paid back in a timely manner (62.9 percent of loans are reported to be in default).

IV.D Intentions to Return

The majority of refugees believe that the Syrian Civil War will not be resolved in the near future. Even if the conflict ends, more than half of refugees are not planning to return to Syria soon. Table 7 reports the responses of the S-RLS focus respondent to four questions: "Will the conflict end in the next two years?" (Panel A), "Would you return in the next two years if the conflict is unresolved?" (Panel B), "Would you return to Syria within one year of the conflict ending?" (Panel C), and "When the conflict ends would you like to stay in Jordan?" (Panel D). Out of refugees who answered these questions, 62.5 percent reported it was unlikely or very unlikely that the Syrian Civil War will be resolved in the next two years. Moreover, 85.6 percent of the refugees reported they will be unlikely or very

[6] We compare S-RLS individuals to Jordanian nationals, unlike Tables 2, 3, and 4 which compare S-RLS to all non-refugees in Jordan, because the JLMPS only asks individuals aged 15-59 if they are registered refugees.

unlikely return to Syria if the conflict is unresolved. 52.7 percent of refugees reported that it was unlikely or very unlikely that they will return to Syria within one year of the conflict ending and 41.8 percent stated they had intentions to stay in Jordan after the conflict ends.

IV.E Aid

Food aid is received by more than 90 percent of refugee households in a typical week. Cash aid is given by non-governmental organizations (NGOs) and more than half of refugee households receive it. Table 8 illustrates that 61.5 percent of male-headed and 70 percent of female-headed households reported that they received cash assistance from an NGO. The percentage was negligible for cash assistance received from the Jordanian government, this is in line with the fact that refugees in Jordan are not part of the government's safety net programs. Assistance to refugees is managed by the United Nations agencies and NGOs. The annual cash value of the cash transfers was $674 and $767 USD PPP for male- and female-headed households, respectively. Food aid was received by more than 90 percent of the refugees and its typical weekly cash value was of approximately $18 USD PPP (or over $900 per year).

IV.F Integration in Jordanian Society

More than a quarter of Syrian refugee children living in Jordan do not have Jordanian friends and do not share any recreational space with Jordanian children. Table 9 illustrates the responses of the S-RLS focus respondent to the following two questions: "Do the children in this house have any Jordanian friends?" (Panel A) and "Do the children share any recreational spaces with Jordanian children?" (Panel B). 27.8 percent of households indicate that children in their households do not have Jordanian friends and 41.4 percent do not share any recreational spaces with Jordanian children.

IV.G Gender attitudes

Males report more conservative attitudes regarding the role of women than those reported by females. Table 10 illustrates the responses of the S-RLS focus respondent to the following questions: "It is okay for a woman to work outside the house." (Panel A) and "The im-

portant decisions in the family should be made by the men of the family" (Panel B). The data show that 32.5 percent of men disagree or strongly disagree that it is acceptable for women to work outside of the home (the percentage was only 5.6 for women). In a similar vein, 48.1 percent of men strongly agree or agree with the statement that "The important decisions in the family should be made by the men of the family". By comparison, only 33.7 percent of women agree or strongly agree with this idea.

IV.H Political attitudes

The majority of respondents report that politics is irrelevant for them. Table 11 illustrates the political attitudes of the S-RLS focus respondent related to their views around democracy (Panel A) and the importance of politics (Panel B). Close to half of respondents said that they do not care about these topics, perhaps reflecting either disappointment in public institutions or fear of expressing their actual political views.

IV.I Depression

Among those refugees interviewed in-person, the majority screened "likely" for depression. Figure 6 reports the distribution of the 10-item Centre for Epidemiological Studies Depression (CES-D-10) Scale. A score of ≥ 10 is commonly considered an indication of depression.[7] The figure illustrates the dramatic mental health condition of the Syrian refugee population. The mean CES-D-10 score observed for the in-person sample is 11.8 and the median is 11. If 10 is the threshold used to define depression, 61 percent of the in-person sample was depressed at the time of the interview.

Refugee mothers' mental health is correlated with the mental health problems of their children. Table 12 reports the strengths and difficulty score (SDQ) collected during the in-person S-RLS for a randomly selected child. The SDQ is a globally recognized instrument for assessing mental health status of children and young people (see Goodman and Goodman, 2009 for details). It comprises 25 questions divided in 5 scales of 5 items each. The table illustrates results for the five scales of the SDQ by the depression status of the parents of the child (as defined by the CES-D-10 scale). It is noteworthy that mothers' depression

[7] We note that recent studies validating the CES-D-10 in low- and middle-income contexts have found that thresholds as high as 16 may be appropriate depending on the setting (Baron, Davies and Lund (2017)). Even with a much higher threshold, a considerable share of our sample is depressed.

appears to be correlated with borderline and abnormal scores of mental health for their children. These patterns point to the urgency of addressing the mental health problems facing refugees, and suggest that family-oriented approaches (as opposed to those only focusing on individuals) may be beneficial.

IV.J School Attendance

School attendance is significantly lower for Syrian refugees relative to Jordanian nationals after their 14th birthday. The gap widens with age and exists for girls and boys. Figure 7 compares the average number of days in school in the last week for children ages 6 to 18 years. It compares the data observed in the in-person survey collected for the partial sample of Syrian refugees in early 2020 with the data reported for children with Jordanian citizenship in the JLMPS of 2016.[8] The figure illustrates that school attendance decreases for refugee children of any gender who are 15 years and older. The gap between Syrian refugees and Jordanian nationals increases for older cohorts of children, suggesting that the financial imperative to contribute to household income may reduce school attendance.

V CONCLUDING REMARKS

This study presents a first glance at the data collected by the first waves of the Syrian Refugee Life Study (S-RLS), a new and unique representative longitudinal study of the socio-demographic characteristics of Syrian refugees in Jordan. Beyond the direct insights gleaned from this analysis, we hope that when future rounds are collected, the S-RLS will continue to open up new avenues for knowledge generation on the economic, social, and political role of refugees. Its longitudinal (panel) data dimension may also represent an opportunity to study the effectiveness of various humanitarian interventions and policy changes, and the impacts of refugee inflows on local economies.

[8] We compare SRLS children to Jordanian nationals, unlike Tables 2, 3, and 4 which compare SRLS to all non-refugees in Jordan, because the JLMPS only asks individuals aged 15-59 if they are registered refugees.

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VI TABLES AND FIGURES

Table 1. S-RLS Survey Modules

Module	In-Person	Phone Survey
Panel A: Household Characteristics and Family Life		
Current Household Roster	X	X
2011 Household Roster	X	
Dwelling Characteristics	X	X
Marriage & Fertility	X	
Migration	X	X
Panel B: Consumption and Expenditures		
Food Consumption: Staples	X	
Food Security	X	X
Frequent Non-Food Purchases & Durables	X	
Panel C: Income		
Economic Outcomes		X
Agriculture	X	
Self-Employment: Current & History	X	
Employment: Current & History	X	
Transfers, Savings, & Credit	X	
NGOs & Government Assistance	X	
Panel D: Education, Cognition and Preferences		
Schooling History	X	
Risk & Time Preferences	X	
Ambiguity, Altruism, & Trust	X	
Raven's Tests	X	
Panel E: Health and Well-Being		
Physical & Mental Health	X	X
Sleep	X	
Perceived Stress	X	X
Grit	X	
Covid-19		X
Panel F: Child Outcomes		
Child Strengths & Difficulties	X	
Sleep Patterns: Children	X	
Other Child Outcomes	X	
Panel G: Social Capital, Attitudes, and Safety		
Religion	X	
Norms & Host Community Relations	X	
Community Groups, Social Capital, & Political Attitudes	X	
Community Problems	X	
Safety & Crime Victimization	X	
N	468	2,516

Table 2. Individual Summary Statistics

	2020 S-RLS (Phone Survey)						2016 JLMPS					
	Syrian Refugee						Non-Refugee		Syrian Refugee			
	All		Camp		Non-Camp				All		Camp		Non-Camp	
	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N
	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
Panel A: Demographics														
Male (=1)	0.50	6,932	0.51	981	0.50	5,935	0.54	15,866	0.46	1,069	0.49	708	0.45	361
Age (Years)	32.76	6,932	33.82	981	32.59	5,935	34.08	15,866	32.98	1,069	32.56	708	33.05	361
Panel B: Education														
In-School Adult (=1)	0.06	4,589	0.07	599	0.06	3,979	0.11	16,081	0.04	1,080	0.02	715	0.04	365
Adult Schooling Years	7.99	4,558	8.42	596	7.92	3,951	10.84	15,865	7.42	1,068	6.58	707	7.57	361

Notes: A refugee in JLMPS is defined as someone who is registered as a refugee among those aged 15-59 years old who are neither Jordanian nationals nor born in Jordan. Thus, we restrict the SRLS sample to those aged 18-59 to maintain comparability. Non-refugees includes Jordanians and non-Jordanians without a refugee status in Jordan. In-School Adults are those who indicate their occupation as student in S-RLS. As for JLMPS, this question is asked directly to respondents. Adult years of schooling in S-RLS are calculated as 6 years for those whose highest level of education completed successfully is elementary school; 9 years for preparatory in Syria; 10 years for preparatory in Jordan; 12 years for vocational training and secondary; 14 years for diploma; 16 years for university; 17 years for higher diploma; and 18 years for master's. The JLMPS years of schooling are calculated by their team based on two cases. For current students and those aged less than 42 years old, the years of schooling correspond to the current grade for basic education; 10 plus current grade for vocational and secondary; 12 plus current grade for intermediate diploma and bachelor's; 16 plus current year for post-grad diploma and master's; 18 plus current year for PhD. As for those aged 42 and above, the calculation is similar, except that there are two additional levels: primary and preparatory. Those who completed primary are assigned their latest grade, while those who completed preparatory are assigned 6 plus their latest completed grade. All statistics reported for the JLMPS data use sampling weights.

Table 3. Adult Educational Attainment (%)

	2020 S-RLS (Phone Survey)			2016 JLMPS			
	Syrian Refugee			Non-	Syrian Refugee		
	All	Camp	Non-Camp	Refugee	All	Camp	Non-Camp
Illiterate	8.69	7.38	8.83	7.37	21.82	24.33	16.9
$<$ 10th grade	38.85	33.89	39.71	15.01	54.96	54.17	56.51
Basic Education	26.88	30.7	26.32	31.35	9.55	8.2	12.19
Vocational	.22	.34	.2	.55	0	0	0
Secondary Education	16.98	18.62	16.73	19.04	8.99	8.77	9.42
Post-Secondary	2.74	2.68	2.73	8.31	1.97	2.55	.83
University	5.42	6.38	5.21	16.6	2.62	1.98	3.88
Post-Graduate	.22	0	.25	1.78	.09	0	.28
N	4558	596	3951	15865	1068	707	361

Notes: A refugee in JLMPS is defined as someone who is registered with the United Nations High Commissioner for Refugees, excluding Jordanian nationals and those born in Jordan. Non-refugees includes Jordanians and non-Jordanians without a refugee status in Jordan. The JLMPS sample is also restricted to 15-59 year olds. For our analysis of JLMPS and S-RLS, data are at the individual-level and limited to adults 18-59 years old. For JLMPS, the "Read & Write" category is relabelled as "$<$ 10th grade" because Basic Education includes some individuals over age 42 in the JLMPS with 9 years of education due to a schooling reform. For S-RLS, the Focus Respondent is excluded as he/she was not included in the roster. Education categories in S-RLS are re-grouped to make JLMPS and S-RLS comparable; the original S-RLS education categories are Nursery, Illiterate, Read & Write, Elementary, Preparatory, Vocational Training, Secondary, Diploma, BA, Higher Diploma, M.A., and Ph.D.

Table 4. Household Summary Statistics

	2020 S-RLS (Phone Survey)						2016 JLMPS					
	Syrian Refugee						Non-Refugee		Syrian Refugee			
	All		Camp		Non-Camp				All		Camp		Non-Camp	
	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N
	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
Panel A: Basic Demographics														
Household Size	5.96	2,343	5.96	382	5.96	1,956	4.61	5,175	5.38	470	5.28	327	5.40	143
Children	3.01	2,343	3.43	382	2.93	1,956	2.12	5,175	3.13	470	3.22	327	3.11	143
Individuals per Room	2.34	2,343	3.57	382	2.10	1,956	1.50	5,174	2.54	470	4.25	327	2.11	143
Male-Head	0.77	2,343	0.81	382	0.77	1,956	0.91	5,174	0.74	470	0.85	327	0.72	143
Three Meals (=1)	0.17	2,343	0.32	382	0.14	1,956	0.62	5,121	0.50	470	0.33	327	0.54	143
Panel B: Housing														
Permanent Floor (=1)	0.76	2,343	0.01	382	0.90	1,956	0.99	5,173	0.91	470	0.59	327	0.99	143
Permanent Roof (=1)	0.68	2,343	0.00	382	0.82	1,956	0.95	5,173	0.77	470	0.03	327	0.96	143
Toilet (=1)	0.96	2,343	0.99	382	0.95	1,956	1.00	5,173	0.98	470	0.94	327	0.99	143
Piped Water (=1)	0.82	2,343	0.80	382	0.82	1,956	0.98	5,173	0.86	470	0.39	327	0.98	143
Electrical Grid (=1)	0.91	2,279	0.89	371	0.91	1,903	0.99	5,173	1.00	470	0.99	327	1.00	143
Panel C: Adult Labor Market														
Annual Income (USD PPP)	8,404	2,317	5,816	382	8,922	1,933	10,500	5,126	3,239	469	1,631	327	3,646	142
Weekly Hours	42	2,309	31	379	44	1,928	45	4,462	27	354	15	252	29	102

Notes: The table shows statistics from the representative phone S-RLS wave collected in 2020 and the 2016 JLMPS. A refugee in JLMPS is defined as someone who is registered as a refugee among those aged 15-59 years old who are neither Jordanian nationals nor born in Jordan. Non-refugees includes Jordanians and non-Jordanians without a refugee status in Jordan. Since the comparison in this table is at the household-level, we assign a JLMPS household as being refugee or camp-based following the household head's status and restrict the sample to those aged 18-59. Three meals is defined as eating at least three meals the day prior in the S-RLS survey, and as eating almost three meals each day over last 12 months in the JLMPS survey. Permanent floor indicator is defined as unity if the floor material is cement or tiles and zero otherwise (mud, soil, fabricated unit, or other) in S-RLS; for JLMPS, it is defined as unity of the floor material is cement, tiles/ceramic, or wood and zero otherwise (steel/zinc, dirt, other). Permanent Roof indicator is defined as unity if floor is made of bricks with stone, finished concrete, or tiles, and zero otherwise (rudimentary mud bricks, tin, tent/tarp, unfinished/incomplete roof, fabricated unit, other) in S-RLS; for JLMPS, it as defined as unity if the roof material is made of reinforced concrete, or wood, and zero otherwise (iron, corrugated roofing, tarp/cloth or other). Piped Water is defined as indicator that equals unity if the main water source is pipe and zero otherwise (well, water trucks, borehole well, Bottled water/vendor, or neighbors) in S-RLS; for JLMPS, it is defined as an indicator that equals unity if the other water source for other purposes (non-drinking) is public water use/filter and zero otherwise (water tank, rainwater well, artesian well, channel, dam, pond water, spring, or other) Electrical Grid is defined as unity if the source of electricity is connection to grid and zero otherwise (generator, car battery, solar home system, connection through neighbor, or other) for S-RLS; for JLMPS, it is defined as unity if the lighting source is public/general electric network and zero otherwise (private generator, gas, kerosene, and other). Income for S-RLS is annualized as the survey asks for weekly household income from adult labor before the start of the COVID-19 pandemic, while that for JLMPS is the total net salary of all workers in a household, converted to annual wages. JLMPS individuals who are not working are assigned an income of zero to maintain comparability with S-RLS. Hours worked in S-RLS also refers to the pre-pandemic adult hours, while that of JLMPS is the current number of Hours for Market & Subsistence Work. Income and hours are winsorized at the top 1% of values in order to limit the influence of outliers as pre-specified. All statistics reported for the JLMPS data use sampling weights.

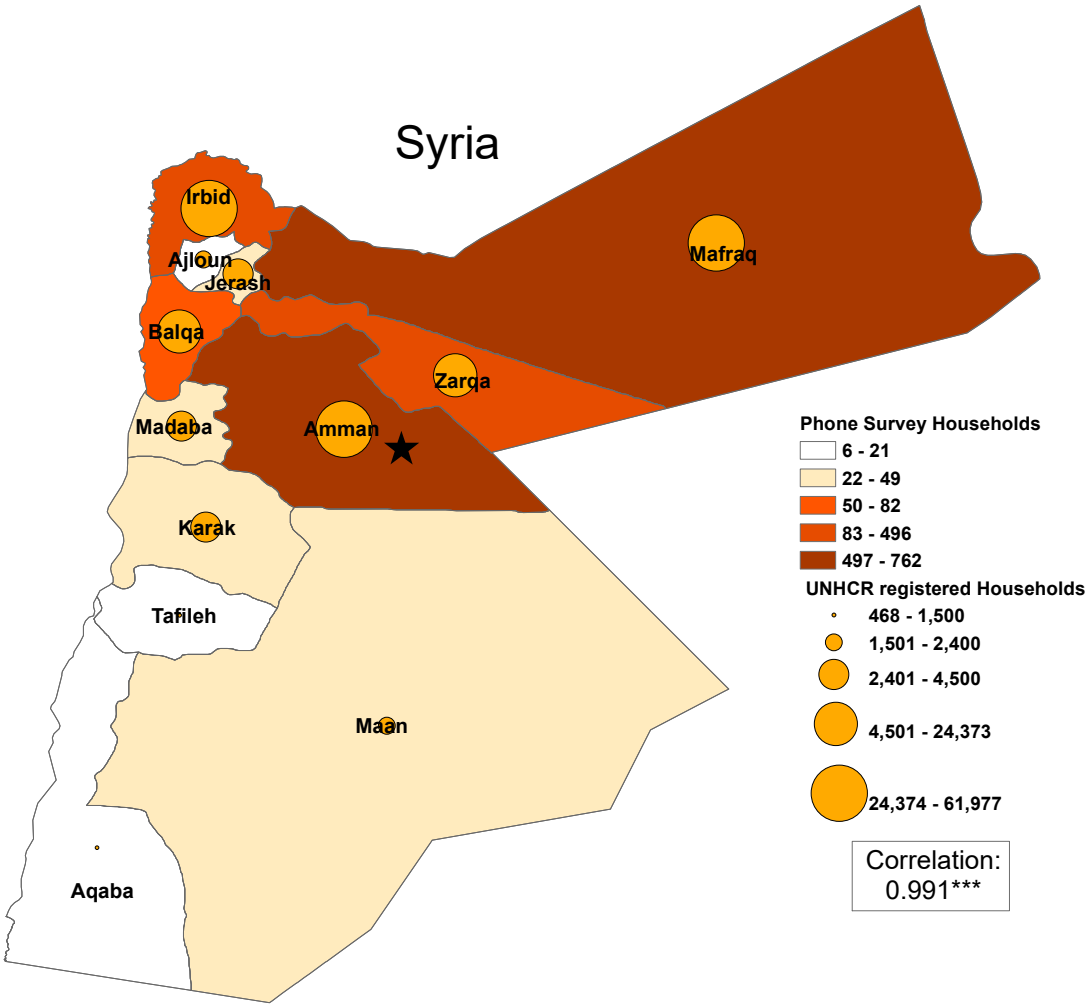


Figure 1. S-RLS Sampling Frame

Notes: This figure compares the number of UNHCR registered households with the number of households in the representative phone survey, by governorate. The correlation between these two governorate-level values is 0.991, which supports its representativeness.

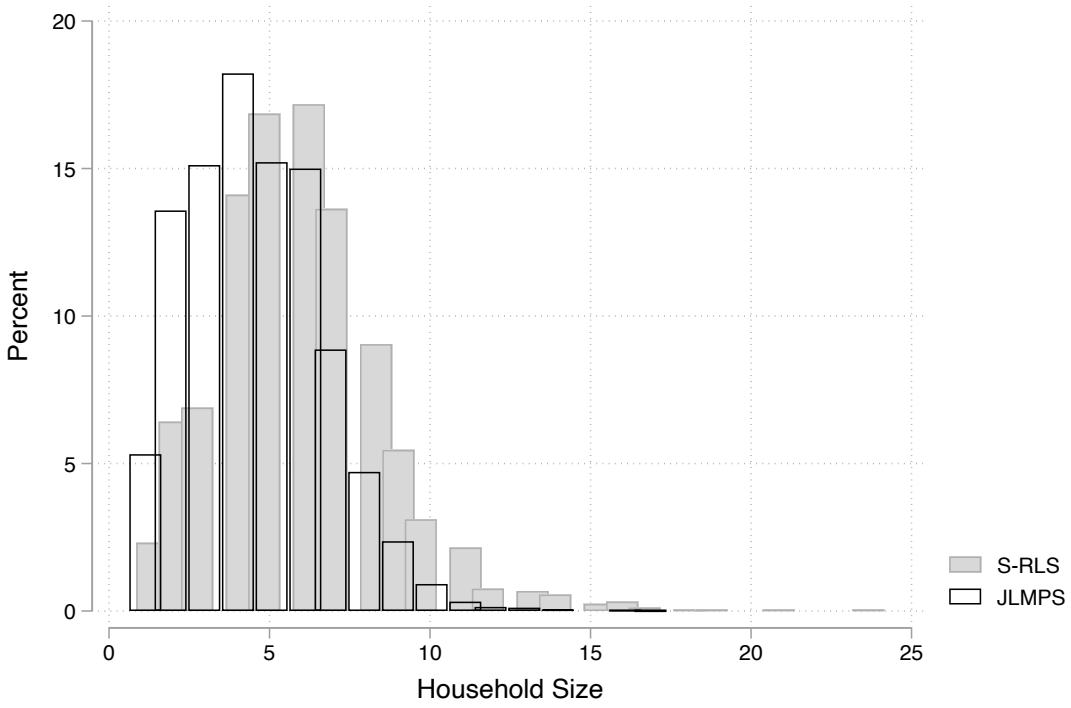


Figure 2. Household Size Distribution (S-RLS Phone Survey)

Notes: The S-RLS bars report the size distribution of households surveyed using the representative phone survey. We use the JLMPS 2016 data to create the frequency household-level weights and kept the households with a Jordanian household head for comparison purposes.

Table 5. Labor Market Statistics (Phone Survey)

	All		In-Camp		Out-of-Camp	
	Mean	N	Mean	N	Mean	N
	(1)		(2)		(3)	
Panel A: Pre-Lockdown						
A1. All Data						
Total Income (Annualized USD PPP)	8,266	2,481	5,714	401	8,765	2,078
Per-Adult Income (Annualized USD PPP)	2,153	2,481	1,626	401	2,256	2,078
% Working (Per Week)	81	2,469	70	397	83	2,070
Total Hours Worked (Per Week)	42	2,469	31	397	44	2,070
Per-Adult Hours Worked (Per Week)	11	2,469	9	397	11	2,070
A2. Positive Amounts						
Total Income (Annualized USD PPP)	9,946	2,062	7,874	291	10,290	1,770
Per-Adult Income (Annualized USD PPP)	2,590	2,062	2,240	291	2,649	1,770
Total Hours Worked (Per Week)	51	1,993	44	277	53	1,715
Per-Adult Hours Worked (Per Week)	13	1,993	13	277	13	1,715
Panel B: Lockdown						
B1. All Data						
Total Income (Annualized USD PPP)	1,593	2,494	1,528	402	1,605	2,090
Per-Adult Income (Annualized USD PPP)	425	2,494	442	402	421	2,090
% Working (Per Week)	9	2,494	11	402	8	2,090
Total Hours Worked (Per Week)	3	2,494	4	402	3	2,090
Per-Adult Hours Worked (Per Week)	1	2,494	1	402	1	2,090
B2. Positive Amounts						
Total Income (Annualized USD PPP)	7,538	527	7,312	84	7,589	442
Per-Adult Income (Annualized USD PPP)	2,012	527	2,118	84	1,993	442
Total Hours Worked (Per Week)	34	213	34	46	33	166
Per-Adult Hours Worked (Per Week)	9	213	9	46	8	166
Panel C: Post-Lockdown						
C1. All Data						
Total Income (Annualized USD PPP)	6,394	2,483	4,061	402	6,841	2,080
Per-Adult Income (Annualized USD PPP)	1,658	2,483	1,132	402	1,758	2,080
% Working (Per Week)	66	2,489	49	401	69	2,086
Total Hours Worked (Per Week)	29	2,489	19	401	31	2,086
Per-Adult Hours Worked (Per Week)	8	2,489	6	401	8	2,086
C2. Positive Amounts						
Total Income (Annualized USD PPP)	8,786	1,807	7,097	230	9,028	1,576
Per-Adult Income (Annualized USD PPP)	2,278	1,807	1,979	230	2,320	1,576
Total Hours Worked (Per Week)	45	1,634	40	195	46	1,438
Per-Adult Hours Worked (Per Week)	11	1,634	12	195	11	1,438

Notes: This table displays descriptive results on household employment and income. Panel A shows pre-lockdown numbers, Panel B shows lockdown numbers, Panel C shows post-lockdown numbers. Data are at the household-level. Income is annualized as the survey asks for weekly household income from adult labor. All income and hours data are winsorized at the top 1% of values in order to limit the influence of outliers.

Table 6. Financial Access (In-person Survey)

Panel A. Financial Access	% of hhs
Bank account (Y/N)	1.1
Community savings group (Y/N)	1.9
Applied for formal or informal loan (year)	48.6
Denied formal or informal loan (year)	7.3
Lent money (Y/N, year)	0.6
Mean loan value (annual total, USD PPP)	1,693.8
N	467
Panel B. Any loans?	% of hhs
No	52.7
Yes - Commercial bank	0.4
Yes - Formal money lender	3.0
Yes - Mobile lender	0.0
Yes - Friends or family	44.8
N	467
Panel C. Most Recent Loan	% of hhs w/ loan
Loan interest free (%)	92.6
N	216
Most recent loan in default (%)	62.9
N	221

Notes: Applied for loan is an imputed value that reflects the share of households who either took out a loan or reported being denied a loan in the past year. These groups are not mutually exclusive; some households were denied at some point but were still able to get a loan. Mean loan value refers to loans received, and is winsorized at the top 1% as pre-specified.

Table 7. Intentions to Return to Syria (In-person Survey)

	Percent
Panel A. Will the conflict end in the next two years?	
Very likely	1.7
Likely	17.6
Unlikely	24.4
Very unlikely	38.1
Do not know / Depends	17.3
Refuses to answer	0.9
N	467
Panel B. Return in next two years if conflict unresolved?	
Very likely I will return	3.6
Likely I will return	9.4
Unlikely I will return	33.8
Very unlikely I will return	51.8
Do not know / Depends	1.3
N	467
Panel C. Return to Syria within one year of the conflict ending?	
Very likely I will return	13.1
Likely I will return	30.6
Unlikely I will return	30.4
Very unlikely I will return	22.3
Do not know / Depends	3.2
Refuses to answer	0.4
N	467
Panel D. When the conflict ends, would you like to stay in Jordan?	
Yes	41.8
No	54.0
Do not know / Depends	3.9
Refuses to answer	0.4
N	467

Notes: This table reports focus respondent responses. Privacy was ensured during this section of the survey.

Table 8. Aid (In-person Survey)

	Male HH Household		Female HH Household	
Type of Assistance	Gov't	NGO	Gov't	NGO
By household:				
Any cash assistance, annual (%)	0.5	61.5	2.2	70.0
Annual cash value pp, (USD PPP > 0)	20.5	673.9	125.4	767.3
N	377	377	90	90
Any food aid, typical week (%)	91.0		93.3	
Typical weekly cash value pp, (USD PPP > 0)	17.8		17.9	
N	378		90	

Notes: Any [type] assistance (%) reports what percent of households receive any assistance of that type. Currencies were translated to USD PPP. We calculated the approximate dollar value of food reported in kilograms or liters using monthly data from the WFP on governorate-level food prices in Jordan. Cash values are winsorized at the top 1% level as pre-specified.

Table 9. Integration with Jordanian Community (In-person Survey)

Panel A. Do the children in this house have any Jordanian friends?	
Yes	71.5
No	27.8
Do not know / Depends	0.8
N	396
Panel B. Do the children share recreational spaces with Jordanian children?	
Yes	58.1
No	41.4
Do not know / Depends	0.5
N	394

Notes: This table reports responses from focus respondents with children in the household.

Table 10. Gender Attitudes (In-person Survey)

	Percent	
Panel A. It is okay for a woman to work outside the house.	Men	Women
Strongly agree	12.1	47.1
Agree	51.0	46.0
Neither agree or disagree	4.4	1.1
Disagree	20.4	4.2
Strongly disagree	12.1	1.1
Do not know / Depends	0.0	0.4
N	206	261
Panel B. The important decisions in the family should be made by the men of the family.		
Strongly agree	14.1	9.6
Agree	34.0	24.1
Neither agree or disagree	4.9	1.1
Disagree	42.7	51.0
Strongly disagree	4.4	13.8
Do not know / Depends	0.0	0.4
N	206	261

Notes: This table reports responses from the focus respondent.

Table 11. Political Attitudes (In-person Survey)

	Percent	
Panel A. Which is closest to your opinion?	Men	Women
Democracy is preferable to any other kind of government	47.6	34.5
In some circumstances, a non-democratic government can be preferable	3.9	3.8
For someone like me, it doesn't matter what kind of government we have.	40.8	49.8
Do not know / Depends	4.4	9.2
Refuses to answer	3.4	2.7
N	206	261
Panel B. Which is closest to your opinion?		
Politics are very important to me.	5.8	3.8
I follow politics in the media but do not really care about it.	36.4	19.9
Politics are irrelevant for someone like me.	55.3	71.3
Do not know / Depends	1.0	3.1
Refuses to answer	1.5	1.9
N	206	261

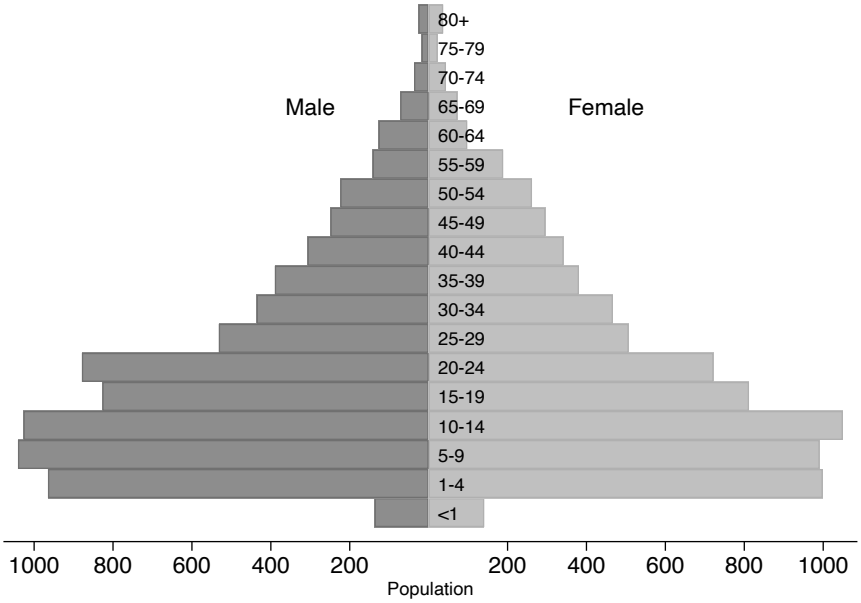
Notes: This table reports responses from the focus respondent.

Table 12. Child's Strengths and Difficulties by Focus Respondent's CES-D Score: Parents Only

	Respondent Characteristics			
	Not Depressed		Depressed	
	Mother	Father	Mother	Father
Emotional Problems Score				
Normal	71.7	69.4	50.6	52.5
Borderline	15.2	0.0	10.4	22.0
Abnormal	13.0	30.6	39.0	25.4
N	46	36	77	59
Conduct Problems Score				
Normal	68.8	50.0	50.0	45.5
Borderline	14.6	25.0	15.4	25.5
Abnormal	16.7	25.0	34.6	29.1
N	48	36	78	55
Hyperactivity Score				
Normal	62.5	71.4	65.0	66.1
Borderline	25.0	14.3	16.2	16.9
Abnormal	12.5	14.3	18.8	16.9
N	48	35	80	59
Peer Problems Score				
Normal	58.3	61.1	33.8	44.1
Borderline	20.8	16.7	31.2	18.6
Abnormal	20.8	22.2	35.0	37.3
N	48	36	80	59
Prosocial Score				
Normal	74.5	74.3	75.0	91.5
Borderline	14.9	17.1	15.0	6.8
Abnormal	10.6	8.6	10.0	1.7
N	47	35	80	59

Notes: This table reports the strength and difficulty scores (SDQ) restricted to focus respondents who are the parent of the randomly selected child. Columns 1 and 2 report the SDQ scores of children whose evaluating parent is not depressed, according to the parent's CES-D-10 score. Columns 3 and 4 report the SDQ scores of children whose evaluating parent scored ≥ 10 on the CES-D-10 evaluation in the same survey. Focus respondents have a nonmissing observation for each score if they responded to at least 3 of the 5 relevant questions, per official scoring guidelines.

Panel A: 2020 S-RLS Phone Survey



Panel B: Jordanian Population Census 2015

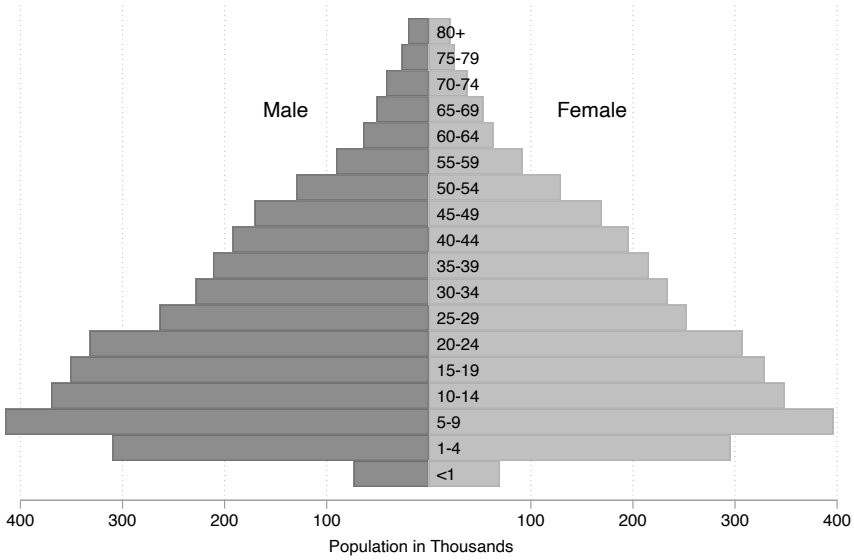


Figure 3. Age and Gender Distribution (Phone Survey)

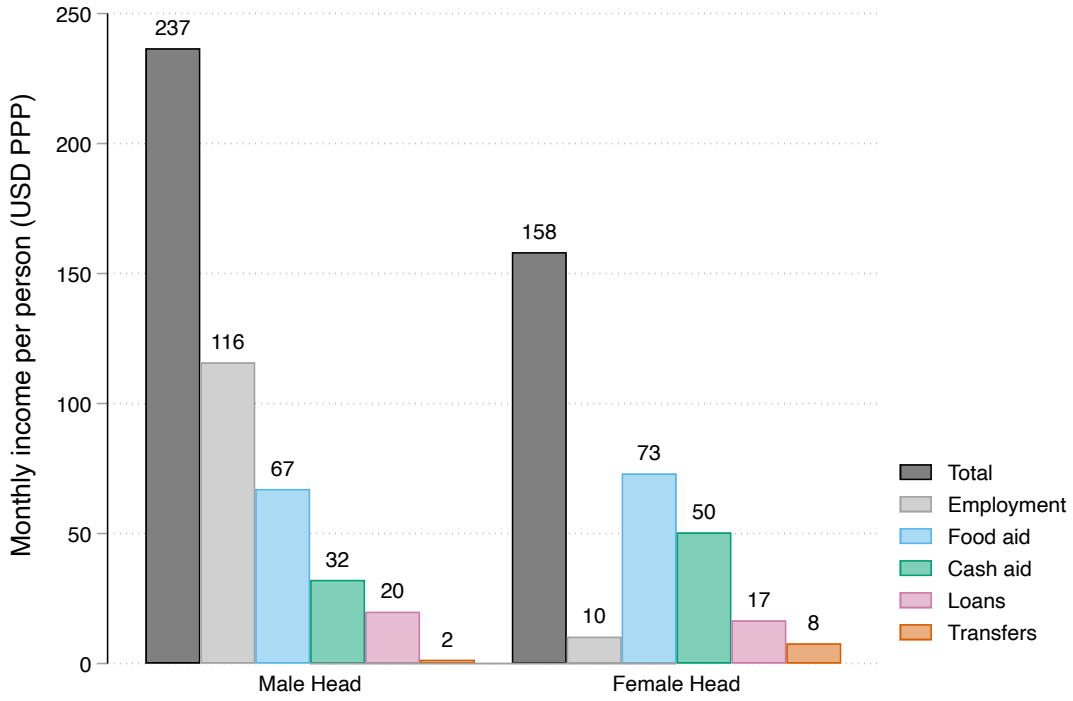
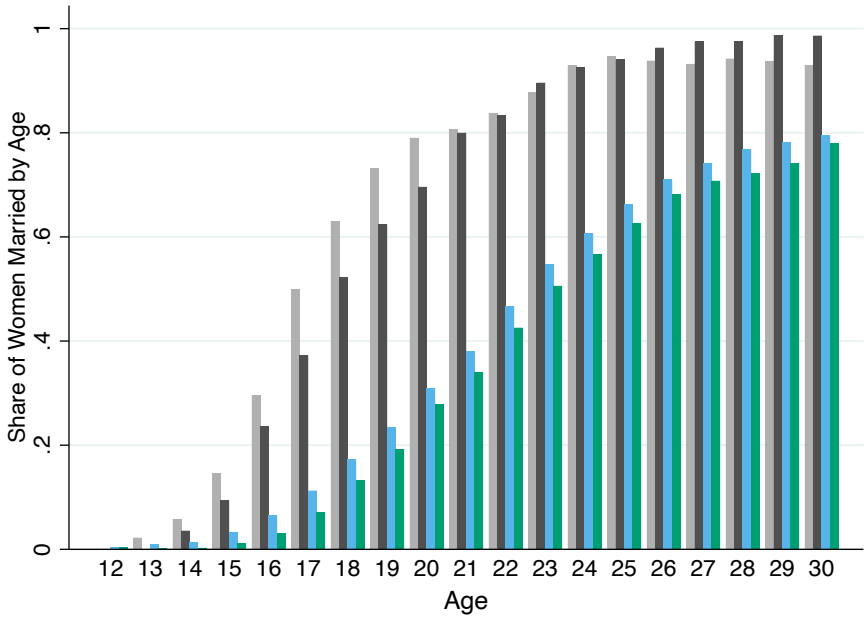


Figure 4. Monthly Income by Gender: Household Heads (In-Person Survey)

Notes: The figure reports data for the focus respondents who are the household head in the S-RLS in-person survey. We additionally restrict to households for whom data on each income stream is non-missing. This includes 163 male household heads and 52 female household heads. We winsorize each of the component income streams at the top 1% level (of the distribution excluding zeros) as pre-specified, and all bars include observations with zeros. Employment includes self- and regular employment and is reported in monthly terms. The employment statistic reports take-home income and includes additional work benefits where available. Transfers, cash assistance, and loans are reported annually and divided by 12. Transfers include all remittances and other household-to-household transfers. Cash aid includes cash assistance from the government and NGOs, religious organizations, etc. Loans include commercial and informal loans. Interest in not included. Food aid was reported for the typical week and multiplied by 4. Food aid data were collected in the context of food consumption in a separate section from cash aid. Food aid was reported in dinars or by weight. Food quantities reported by weight were translated to dinars using monthly, governorate-level data from the World Food Program on food prices for a typical basket of foods. All quantities were translated into dollars (PPP) and divided by the number of people in the household. Households who reported not knowing the value of an income stream other than food aid are marked as missing. 14 households did not know the quantity of food aid received in 1 of 9 food categories, and 3 did not know the quantity received in 2 of 9 categories. These DKs are marked as zero and totaled with the rest of the food categories categories.

Panel A: Share of Women Married by Age, before and after 2011



Panel B: Share of Men Married by Age, before and after 2011

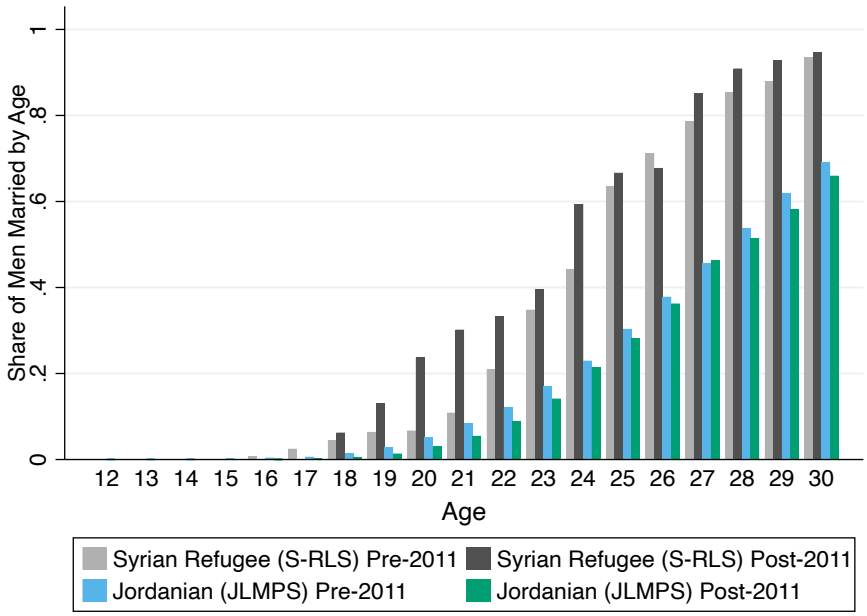


Figure 5. Refugee's Marriage Patterns (In-Person Survey)

Notes: Panel A reports the share of women who were married at each age, separated by Syrian/Jordanian and whether they attained that age before or after 2011. Syrian bars include all focus respondents in the long-form S-RLS panel survey, and Jordanian bars include all individuals reporting Jordanian citizenship in the JLMPS. To focus on the effect of the war and abstract from the large increases in age at first marriage in the late twentieth century, the figure only includes women born between 1970 and 2001. 2001 was chosen as the upper bound since this question was only asked of focus respondents in the S-RLS, who were at least 18 in 2020. 1970 was chosen as a lower bound to include women who were between the ages of 10 to 30 between 2000 to 2020.

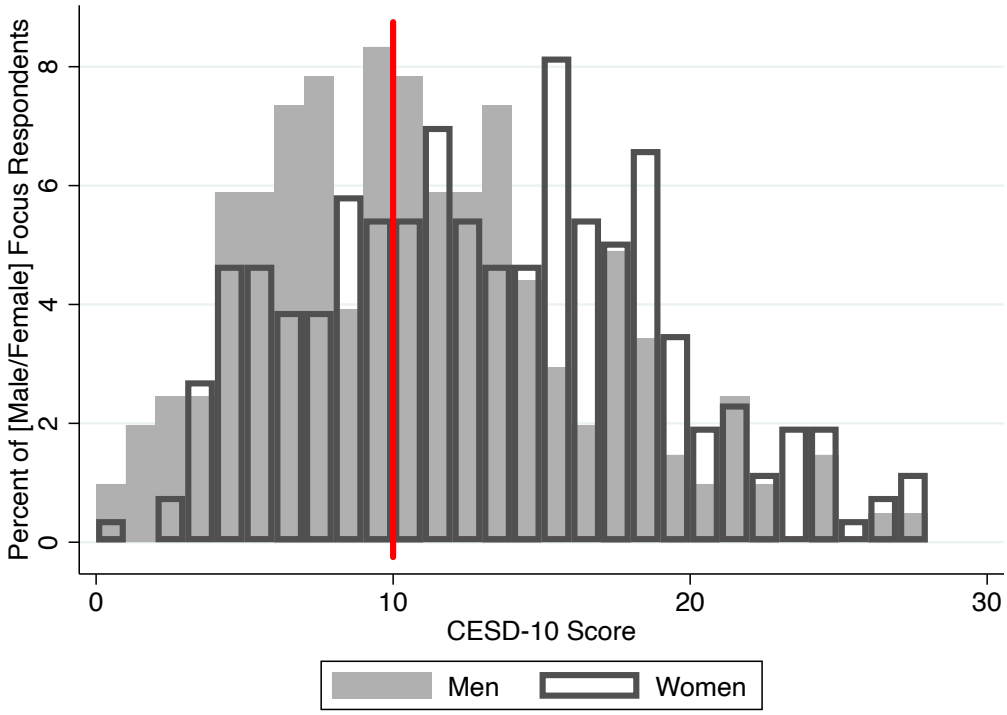


Figure 6. Depression Scores by Gender (In-person Survey)

Notes: These figures report responses from the focus respondent. They reflect the distribution of scores on the 10-item Centre for Epidemiological Studies Depression (CESD-10) Scale. Following (Andresen, 1994), a score ≥ 10 is considered depressed. It should be noted that other studies such as Baron et al. (2017) validating the CES-D10 in developing settings have found that thresholds as high as 16 are optimal depending on the setting.

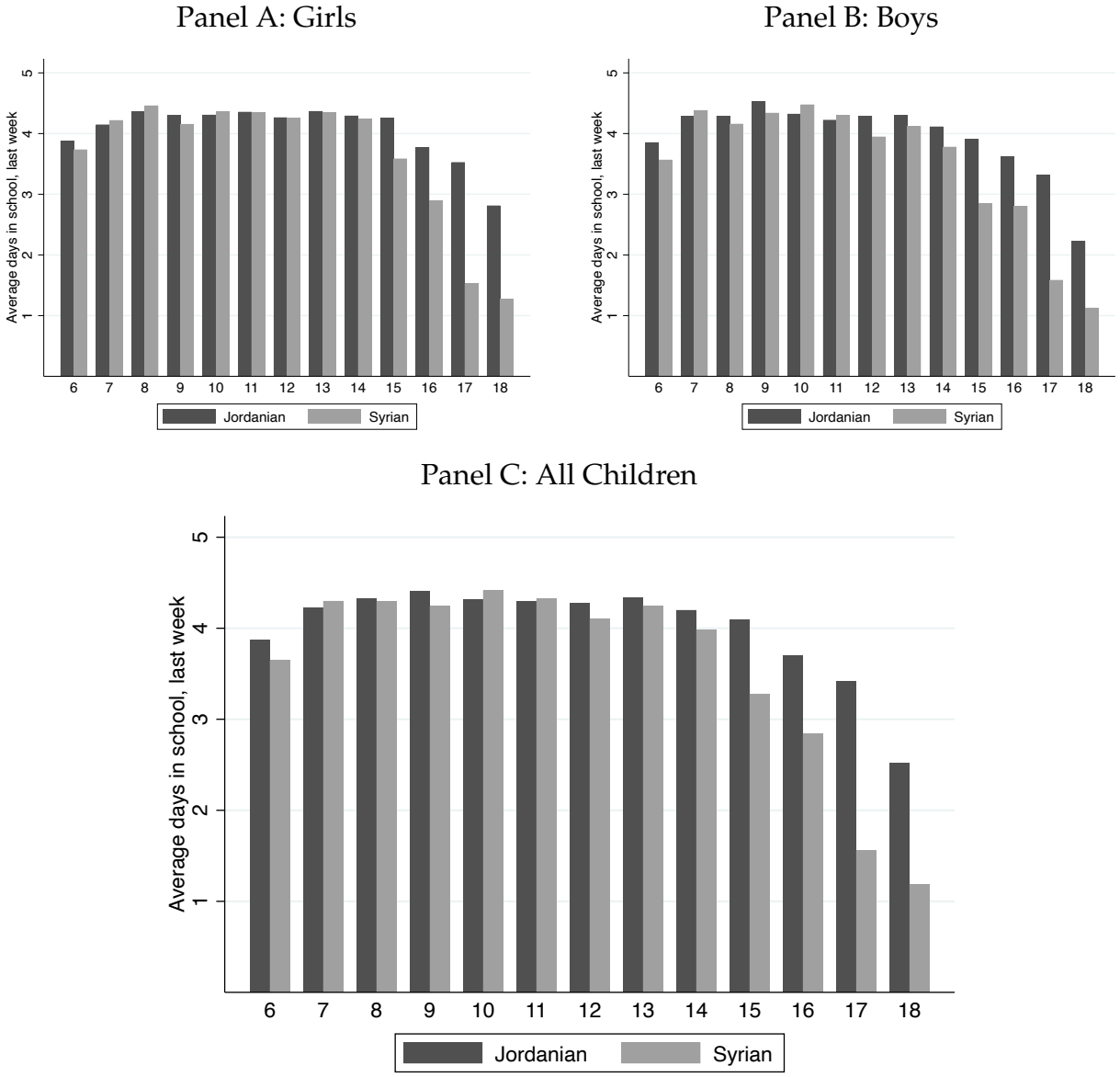


Figure 7. Average number of days in school, children aged 6-18 (In-person Survey)

Notes: Syrian bars report the days spent in school in the last week (that school was in session) of all children under 18 in the S-RLS panel survey. There are 15 focus respondents who are 18 years old, and were excluded from this figure. Jordanian bars report the number of days children with Jordanian citizenship attended school in the past week according to JLMPS data. The JLMPS data uses frequency weights.

Table A-1. Geographic Representativeness of In-person Survey

	Population (thousands)	Phone Survey	Diff (In-person - Phone)
Jordanian Governorate in 2020			
Amman	4,536	0.30	0.11***
Balqa	557	0.03	0.01
Zarqa	1,545	0.13	−0.02
Madaba	214	0.02	0.00
Irbid	2,004	0.20	0.05**
Mafraq	622	0.25	−0.12***
Jerash	268	0.02	0.01*
Ajloun	199	0.01	0.00
Karak	358	0.02	−0.02***
Tafileh	109	0.00	−0.00
Maan	179	0.01	−0.01***
Aqaba	213	0.01	−0.01*

Notes: Column 1 reports the official Jordanian 2020 estimate of the number of individuals living in each governorate. Column 2 reports what share of the phone survey population was living in each governorate in 2011 and 2020 respectively. Column 3 reports the difference between the phone survey and the in-person survey. Stars reflect whether or not the difference is statistically significant from zero in a standard t-test statistic.

Table A-2. Household Representativeness of In-person Survey

	Phone Survey	Diff (In-person - Phone)
Panel A: Focus Respondent		
HH size	5.91	0.33**
# ≤18	3.06	0.22**
Access to electricity	0.97	0.03***
Piped water	0.82	0.11***
Perm. floors and roof	0.84	0.12***
Ppl per occupied room	2.31	−0.79***
Meals yesterday	2.02	−0.06**
Days FR slept hungry	0.49	0.10
Days adults slept hungry	0.45	0.11*
Days children slept hungry	0.36	0.10*
Lives in camp	0.16	−0.16***
Panel B: Complete Roster		
Age	18.90	2.46***
Male	0.51	−0.01
Yrs schooling ≥6	6.60	1.11***
Yrs schooling ≥22	7.52	0.71***
Attendance	3.00	1.60***

Notes: Column 1 reports statistics from the phone survey population. Column 2 reports the difference between the phone survey and the in-person survey. Stars reflect whether or not the difference is statistically significant from zero in a standard t-test. Panel A reports statistics collected from the focus respondent (FR) of each survey. HH size reflects the number of individuals including the respondent in the household. # $\leq$ 18 reports the number of individuals in the household aged 18 or under. Ppl per occupied room reports the number of occupied rooms divided by household size. (Rooms separated by sheets, bathrooms, and kitchens are occupied. Detached storerooms or toilet rooms are not counted.) HH head male reports the share of households headed by a male. Meals yesterday reports the number of meals eaten by the FR yesterday. Days [group] slept hungry reports the number of days in the past week that the individual or group did not have enough to eat. Permanent roofing includes bricks, concrete or tile. Corrugated metal is not considered permanent. Permanent flooring includes cement or tiles and excludes earthen floors. Piped water reports the share of households who's main source of water in the past 7 days was a pipe. Lives in camp reports the share of households currently living in a refugee camp. Panel B reports statistics over all individuals in the household (according to the household roster). Years of schooling $\geq$ 6 reports average imputed years of schooling for all individuals at or above 6 years of age. Years of schooling $\geq$ 22 reports the same statistic for all individual at or above 22 years of age. Attendance reports the average number of days children between the ages of 9 and 18 attended school in the past week. This statistic may have been affected by COVID-19 shutdowns.