

**THE PSYCHOSOCIAL VALUE OF EMPLOYMENT:  
EVIDENCE FROM A REFUGEE CAMP  
ONLINE APPENDIX**

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# A Appendix Tables and Figures

## A.1 Tables

Table A1: No differential attrition across treatment arms

	(1) Attrition
Cash	0.003 (0.017)
Work	0.003 (0.015)
Mean in Control	0.018
Observations	745

**Notes:** This table reports attrition in each treatment arm relative to control. Standard errors are clustered at the block level.

Table A2: Treatment effects for sub-components of PHQ-9 depression screening tool

	(1) PHQ 1	(2) PHQ 2	(3) PHQ 3	(4) PHQ 4	(5) PHQ 5	(6) PHQ 6	(7) PHQ 7	(8) PHQ 8	(9) PHQ 9	(10) Depressed	(11) Mod. Depressed
Work	-0.46 (0.14)	-0.31 (0.13)	-0.41 (0.16)	-0.13 (0.14)	-0.20 (0.16)	-0.22 (0.15)	-0.21 (0.11)	-0.33 (0.10)	-0.11 (0.11)	-0.10 (0.03)	-0.05 (0.04)
Cash	-0.19 (0.16)	-0.12 (0.15)	-0.09 (0.19)	0.24 (0.15)	0.01 (0.15)	0.19 (0.17)	0.05 (0.14)	-0.12 (0.11)	0.06 (0.14)	-0.02 (0.03)	0.03 (0.05)
Shrp. q-val Work	0.005	0.033	0.025	0.206	0.131	0.112	0.058	0.005	0.184	0.005	0.112
Test Work=Cash	0.051	0.142	0.031	0.007	0.125	0.002	0.018	0.017	0.152	0.008	0.058
Shrp. q-val Work=Cash	0.046	0.075	0.041	0.027	0.075	0.018	0.029	0.029	0.075	0.027	0.046
Mean in Control	2.28	2.69	2.32	2.19	2.05	1.99	1.28	0.97	0.84	0.84	0.31
Observations	726	726	726	726	726	726	726	726	726	726	726

**Notes:** This table reports the treatment effect of the employment and cash arms on individual components of the PHQ module. Each column shows the OLS estimates of Equation (1) including dummies for each treatment arm and controlling for the baseline measure of the dependent variable (ANCOVA), camp and enumerator fixed effects, and sociodemographic controls as determined through a double-selection LASSO procedure Belloni, Chernozhukov, and Hansen (2014). Each row presents the coefficients of the specified treatment relative to the control group (which received a small weekly cash payment).

The individual components are all responses to the questions “How many days out of the last 7 days did you:” **1)** Have little interest or pleasure in doing things?, **2)** Feeling down, depressed or hopeless?, **3)** Have trouble falling or staying asleep, or sleeping too much?, **4)** Feel tired or have little energy?, **5)** Poor appetite or overeating?, **6)** Feel bad about yourself, think that you are of little worth?, **7)** Trouble concentrating on things?, **8)** Moving or speaking so slowly that other people could have notice? Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual?, **9)** Thoughts that you would be better off dead, or of hurting yourself in some way?

Standard errors are clustered at the block level. The row labeled “Test Cash=Work” reflects the unadjusted p-value for the test of equality between the Cash and Work arms, while the row labeled “Shrp. q-val Cash=Work” reflects the adjusted p-value for this test of equality, adjusted for multiple hypothesis testing of Anderson (2008) for all outcomes in this table.

Table A3: Balance on observables along exposure to death in Myanmar

	(1) No Violence	(2) Violence	(3) No Vio. vs. Vio.	(4) No Vio. vs. Vio., Town FE	(5) No Vio. vs. Vio, Grid FE
Married	0.82	0.78	0.69	0.70	0.61
Age	27.87	28.39	0.30	0.36	0.30
Household size	5.11	5.13	0.67	0.89	0.78
Formal education	0.43	0.50	0.31	0.20	0.15
Math ability (index)	-0.02	0.03	0.30	0.30	0.28
Past Ag. Work	0.58	0.66	0.22	0.17	0.15
Observations	91	654			

Columns (1) and (2) show the average value of the variable for respondents who did and did experience the death of a family or community member in Myanmar. All difference in means test control for gender because violence was targeted differently between men and women. Column (3) shows the p-value of the difference in means with no additional controls. Column (4) reports p-values while controlling for township fixed effects, while column (5) includes fixed effects using 55 by 55 kilometer grid cells for respondent location of origin in Myanmar.

Table A4: Persistence in psychosocial effects in six-week followup

	(1) PS Index	(2) Wellbeing	(3) Life Satis.	(4) Locus of Cont.	(5) Sociability	(6) Stress	(7) Cognitive	(8) Days Healthy
Work	0.161 (0.064)	0.421 (0.122)	0.045 (0.095)	0.184 (0.098)	0.084 (0.087)	0.234 (0.096)	0.039 (0.078)	0.313 (0.167)
Cash	0.041 (0.074)	0.230 (0.148)	0.019 (0.120)	0.090 (0.114)	-0.005 (0.092)	-0.003 (0.107)	0.098 (0.087)	-0.317 (0.190)
Observations	698	698	698	698	698	698	743	698
Shrp. q-val Work		0.006	0.312	0.066	0.204	0.036	0.312	0.066
Test: Cash = Work	0.048	0.178	0.807	0.306	0.223	0.010	0.415	0.000
Shrp. q-val: Cash = Work		0.286	0.555	0.343	0.287	0.038	0.421	0.002

**Notes:** This table reports the treatment effect of the employment and cash arms on a variety of outcomes collected in the six-week followup survey. Each column shows the OLS estimates of Equation (1) including dummies for each treatment arm and controlling for the baseline measure of the dependent variable (ANCOVA), camp and enumerator fixed effects, and sociodemographic controls as determined through a double-selection LASSO procedure (Belloni, Chernozhukov, and Hansen, 2014). Each row presents the coefficients of the specified treatment relative to the control group (which received a small weekly cash payment).

All outcomes are standardized and drawn from the six-week followup survey, in which we ask only a subset of the outcomes that compose the Psychosocial Index collected at endline. The ‘PS Index’ presented here is therefore only an index of this subset (Columns 2-6). ‘Wellbeing’ is an index of two questions asking i) how the respondent feels today on a six point scale, and ii) how many days in the past week they felt ‘good’. Higher values for ‘Stress’ represent *reduced* stress. All remaining outcomes are likewise presented such that higher scores represent improved wellbeing. ‘Cognitive’ represents an index of three arithmetic questions, and ‘Days Healthy’ measures the number of days healthy reported in the prior week.

Standard errors are clustered at the block level. The row labeled “Test Cash=Work” reflects the unadjusted p-value for the test of equality between the Cash and Work arms, while the row labeled “Shrp. q-val Cash=Work” reflects the adjusted p-value for this test of equality, adjusted for multiple hypothesis testing of Anderson (2008) for all outcomes in this table.

Table A5: Future employment expectations and outcomes do not differ by treatment

	(1) Day labor	(2) Salaried	(3) Any work	(4) Daily wage	(5) Expects work	(6) Total expected
Work	0.001 (0.015)	-0.004 (0.009)	-0.111 (0.043)	-0.009 (0.341)	-0.064 (0.143)	-0.619 (2.713)
Cash	0.023 (0.022)	-0.011 (0.008)	-0.070 (0.049)	0.119 (0.344)	0.120 (0.200)	-1.787 (3.588)
Shrp. q-val Work	1.000	1.000	0.060	1.000	1.000	1.000
Test Work = Cash	0.321	0.113	0.356	0.635	0.327	0.681
Shrp. q-val Work = Cash	1.000	1.000	1.000	1.000	1.000	1.000
Observations	743	743	698	193	698	698

**Notes:** This table reports the treatment effect of receiving employment or cash relative to the control group on future employment. The columns show OLS estimates of a regression of the outcome on a dummy for assignment to the work treatment, as well as the baseline measure of the dependent variable, camp and enumerator fixed effects, and sociodemographic controls as determined through a double-selection LASSO procedure Belloni, Chernozhukov, and Hansen (2014).

Outcomes collected during the six-week followup survey. ‘Day labor’ is a binary variable that equals 1 if the respondent reports engaging in agriculture or construction work in the prior month, and 0 otherwise. ‘Salaried’ work equals 1 if the respondent reports engaging in service or teaching work, and 0 otherwise. ‘Any work’ equals 1 if the respondent reports engaging in any work in the prior month, and 0 otherwise. ‘Daily wage’ is the wage in USD received if a respondent worked in the previous month. ‘Total expected’ is the total compensation expected in the coming month if one were to find work (USD). Standard errors are clustered at the block level.

Table A6: Mental health is correlated with family but not community value-ranking

	(1) PHQ
Rank within family	0.052 (0.020)
Rank within community	0.003 (0.019)
Observations	726

**Notes:** This table reports the baseline relationship between ranking of oneself within one’s family and one’s community on PHQ score. The PHQ score is reversed such that lower PHQ reflects a poorer outcome, or higher likelihood of depression. Regression includes camp and enumerator fixed effects. Standard errors are clustered at the block level.

Table A7: Predictability of work schedule does not impact wellbeing or preferences

	(1) Stability	(2) Dist. Mon.	(3) Risk Tol.	(4) Time Pref.
Received Schedule	-0.046 (0.068)	-0.165 (0.076)	0.104 (0.091)	0.040 (0.096)
Shrp. q-val Schedule	0.988	0.143	0.620	1.000
Observations	403	403	403	403

**Notes:** This table reports the treatment effect of receiving a schedule of two months of work relative to those who received no such schedule. Sample includes only those in the employment treatment arm. The columns show OLS estimates of a regression of the outcome on a dummy for assignment to the work treatment, as well as the baseline measure of the dependent variable, camp and enumerator fixed effects, and sociodemographic controls as determined through a double-selection LASSO procedure (Belloni, Chernozhukov, and Hansen, 2014).

All outcomes are standardized. ‘Received Schedule’ are those who received the calendar the complete two month work schedule marked. ‘Dist. Mon.’ is a prespecified revealed preference question on whether the respondent is interested in joining a committee to determine how funds will be distributed to the community, used as a proxy for ‘agency.’

Standard errors are clustered at the block level. The row labeled “Shrp. q-val Work” reflects p-values, referred to as ‘sharpened q-values,’ adjusted for multiple hypothesis testing using Anderson (2008) for all outcomes in this table.



Table A8: Time use does not differ by treatment

	(1) Hours Idle	(2) Time Chores	(3) Time Social	(4) Time Ration
Work	0.033 (0.094)	-0.115 (0.174)	0.108 (0.140)	-0.108 (0.091)
Cash	0.079 (0.114)	-0.229 (0.176)	-0.002 (0.180)	-0.119 (0.105)
Shrp. q-val: Work	1.000	1.000	1.000	1.000
Test Work=Cash	0.613	0.440	0.497	0.861
Shrp. q-val Work=Cash	1.000	1.000	1.000	1.000
Control Mean	2.284	3.154	2.870	0.321
Observations	726	726	726	726

**Notes:** This table reports the treatment effect of receiving employment or cash relative to the control group on time use. The columns show OLS estimates of a regression of the outcome on a dummy for assignment to the work treatment, as well as the baseline measure of the dependent variable, camp and enumerator fixed effects, and sociodemographic controls as determined through a double-selection LASSO procedure (Belloni, Chernozhukov, and Hansen, 2014).

All outcomes are measured in number of hours spent on the activity per day. ‘Idle’ is the average number of hours respondent reports being idle per day. ‘Chores’ is the amount of time reported spend on household chores such as cooking or fetching water. ‘Social’ is the amount of time spend socializing with others. ‘Ration’ is the amount of time spend getting household rations. ‘Market’ is the amount of time spend at the market. While not an exhaustive list of all reported activities, these activities make up the bulk of the waking (daytime) hours of the average refugee respondent. Effects on all activities available upon request.

Standard errors are clustered at the block level. The row labeled “Shrp. q-val Work” reflects p-values, referred to as ‘sharpened q-values,’ adjusted for multiple hypothesis testing using Anderson (2008) for all outcomes in this table.

Table A9: Heterogeneity of time use by gender

	Panel A							
	Hours Idle		Time Chores		Time Social		Time Ration	
	(1) Female	(2) Male	(3) Female	(4) Male	(5) Female	(6) Male	(7) Female	(8) Male
Work	-0.092 (0.161)	0.127 (0.112)	0.135 (0.281)	-0.147 (0.203)	0.251 (0.195)	0.060 (0.186)	-0.067 (0.162)	-0.128 (0.100)
Cash	0.029 (0.221)	0.129 (0.144)	0.007 (0.285)	-0.306 (0.202)	-0.248 (0.214)	0.088 (0.234)	-0.011 (0.168)	-0.167 (0.115)
Test: Cash = Work	0.530	0.985	0.562	0.377	0.016	0.895	0.590	0.561
Shrp. q-val Cash=Work	0.795	1.000	0.795	1.000	0.070	1.000	0.795	1.000
Test: Male = Female	0.812	0.812	0.824	0.824	0.158	0.158	0.381	0.381
Shrp. q-val Male = Female	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Observations	223	503	223	503	223	503	223	503

**Notes:** This table reports the treatment effect of the employment and cash arms on time use outcomes separately for male and female participants. Each column shows the OLS estimates of Equation (1) including dummies for each treatment arm and controlling for the baseline measure of the dependent variable (ANCOVA), camp and enumerator fixed effects, and sociodemographic controls as determined through a double-selection LASSO procedure (Belloni, Chernozhukov, and Hansen, 2014), run separately by respondent gender. Each row presents the coefficients of the specified treatment relative to the control group (which received a small weekly cash payment).

All outcomes are measured in number of hours spent on the activity per day. 'Idle' is the average number of hours respondent reports being idle per day. 'Chores' is the amount of time reported spend on household chores such as cooking or fetching water. 'Social' is the amount of time spend socializing with others. 'Ration' is the amount of time spend getting household rations. 'Market' is the amount of time spend at the market. While not an exhaustive list of all reported activities, these activities make up the bulk of the waking (daytime) hours of the average refugee respondent. Effects on all activities available upon request.

Standard errors are clustered at the block level. The row labeled "Shrp. q-val Work" reflects p-values, referred to as 'sharpened q-values,' adjusted for multiple hypothesis testing using Anderson (2008). The adjustments are made within gender for all outcomes in this table (both Panel A and B). The row labeled "Test Male = Female" reflects the unadjusted p-value for the test of equality between the Male and Female work treatment effects based on a pooled regression (not shown) where the treatment indicators were interacted with the gender of the respondent. The row labeled "Shrp. q-val Male = Female" reflects the adjusted p-value for this test of equality across all five outcomes.

Table A10: Workers who are more idle at baseline do not benefit more from employment

	(1) PS Index	(2) PHQ
Work	0.212 (0.041)	0.242 (0.075)
Cash	0.060 (0.050)	0.013 (0.089)
Work * Baseline Idleness	-0.002 (0.023)	0.039 (0.049)
Cash * Baseline Idleness	-0.021 (0.022)	0.035 (0.049)
Test: Work X Idle = Cash X Idle	0.346	0.925
Observations	726	726

**Notes:** This table reports the treatment effect of receiving employment, and the interaction effect of receiving employment and baseline hours reported idle, relative to the control group. The columns show OLS estimates of a regression of the outcome on a dummy for assignment to the work treatment, baseline hours idle, the interaction of the two, the parallel for the cash group, as well as camp and enumerator fixed effects, the baseline value of the independent variable, and sociodemographic controls as determined through a double-selection LASSO procedure Belloni, Chernozhukov, and Hansen (2014).

Table A11: Consumption patterns do not differ by treatment

Panel A			
	(1) Luxury	(2) Necessary	(3) Total Cons.
Work	0.28 (0.36)	3.10 (1.89)	3.91 (2.13)
Cash	-0.20 (0.42)	2.69 (1.95)	2.85 (2.25)
Shrp. q-val Work	0.181	0.181	0.181
Test Work=Cash	0.189	0.815	0.604
Shrp. q-val Work=Cash	1.000	1.000	1.000
Mean in Control	4.19	21.41	25.70
Observations	726	726	726

Panel B			
	(1) Savings	(2) Borrowing	(3) Lending
Work	2.47 (0.63)	-8.48 (2.22)	0.55 (0.18)
Cash	1.64 (0.73)	-9.04 (2.61)	0.38 (0.22)
Shrp. q-val Work	0.001	0.001	0.001
Test Work=Cash	0.264	0.793	0.474
Shrp. q-val Work=Cash	1.000	1.000	1.000
Mean in Control	1.19	23.93	0.10
Observations	726	726	726

**Notes:** This table reports the treatment effect of receiving employment or cash on consumption relative to the control group. The columns show OLS estimates of a regression of the outcome on a dummy for assignment to treatment, as well as the baseline measure of the dependent variable, camp and enumerator fixed effects, and sociodemographic controls as determined through a double-selection LASSO procedure Belloni, Chernozhukov, and Hansen (2014).

All outcomes are measured in USD spent (converted from Bangladeshi taka with 2020 market exchange rate of 83 BDT to 1 USD). ‘Luxury’ is made up of the following consumption categories: meat or fish, paan or cigarettes, tea, and electronics. ‘Necessary’ is made up of the following consumption categories: fruits or vegetables, health, education, household supplies, and clothing. Quantities reported are total amount spent in given category during the previous two weeks. ‘Savings’ is the total savings reported at endline; ‘Borrowing’ is the total amount in loans respondent has at endline. ‘Lending’ is the total amount lent in the previous two weeks.

Standard errors are clustered at the block level. The row labeled “Shrp. q-val Work” reflects p-values, referred to as ‘sharpened q-values,’ adjusted for multiple hypothesis testing using Anderson (2008) for all outcomes in this table.

Table A12: How different types of workers benefit from employment and cash

	Exposure to Death		Depression		Sociability	
	(1) PS Index	(2) PHQ	(3) PS Index	(4) PHQ	(5) PS Index	(6) PHQ
Work	0.163 (0.124)	-0.024 (0.264)	0.234 (0.076)	0.107 (0.155)	0.185 (0.053)	0.226 (0.098)
Cash	0.019 (0.142)	-0.032 (0.290)	0.116 (0.089)	-0.210 (0.169)	0.052 (0.065)	0.090 (0.114)
Work X Feature	0.049 (0.127)	0.285 (0.274)	-0.029 (0.085)	0.172 (0.169)	0.050 (0.075)	-0.004 (0.141)
Cash X Feature	0.041 (0.147)	0.040 (0.308)	-0.074 (0.092)	0.286 (0.191)	0.011 (0.083)	-0.171 (0.149)
Shrp. q-val Work X Feature	1.000	1.000	1.000	1.000	1.000	1.000
Shrp. q-val Cash X Feature	1.000	1.000	1.000	1.000	1.000	1.000
Test: Work X Feature = Cash X Feature	0.936	0.275	0.585	0.461	0.581	0.151
Observations	726	726	726	726	726	726

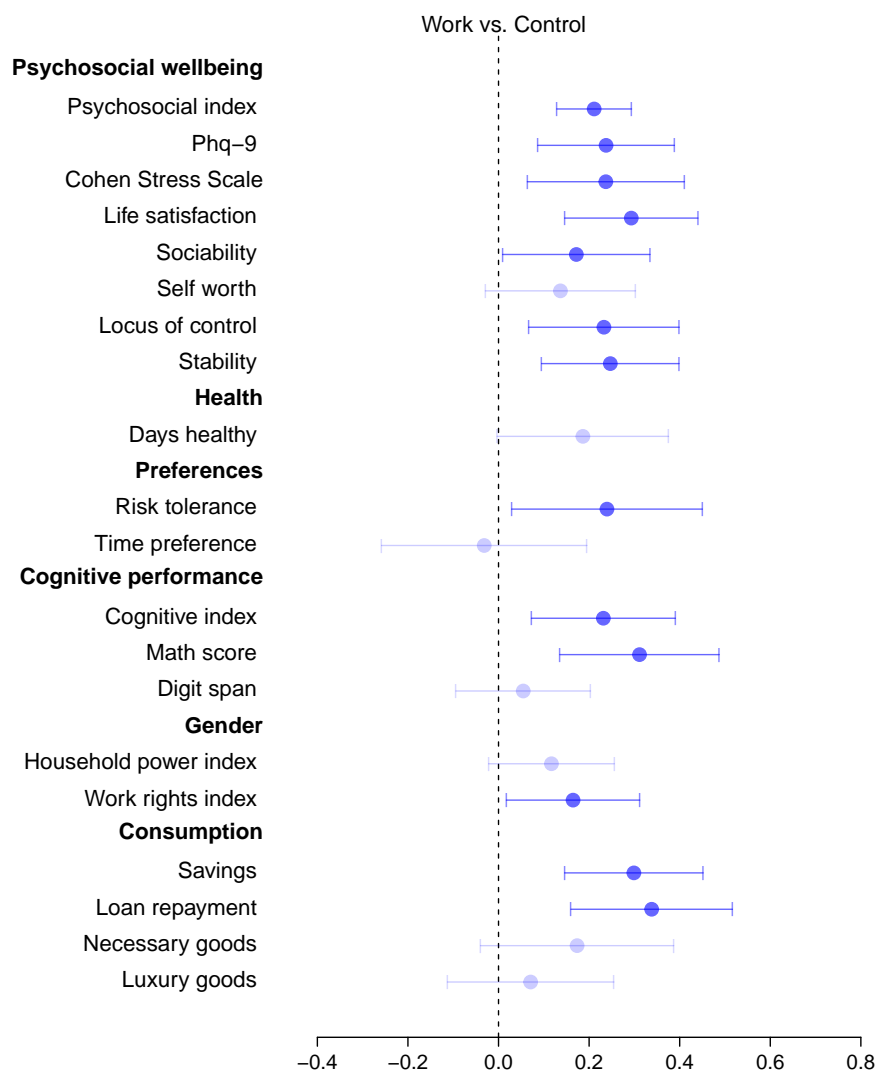
**Notes:** This table reports the impact of each treatment, and heterogeneity by the specified features, on the psychosocial index and on depression severity as measured by PHQ, where a higher value of PHQ implies lower likelihood of depression. ‘Feature’ represents the title to each respective column: exposure to death, depression, or sociability. Exposure to death is a binary variable equaling one if any death was witnessed during the violence in Myanmar. Depression is a binary variable equaling one if baseline PHQ score is greater than 4. Sociability is a binary variable equaling one if an individual reported greater than the median number of daily conversations at baseline. Regressions include the baseline measure of the dependent variable, camp and enumerator fixed effects, and sociodemographic controls as determined through a double-selection LASSO procedure Belloni, Chernozhukov, and Hansen (2014). Standard errors are clustered at the block level.

## A.2 Figures

Figure A1: Intervention Timeline by Weeks

T = 0	Baseline Survey
T = 1	Work Submission + Midline 1
T = 2	Work Submission + Midline 2
T = 3	Work Submission + Midline 3
T = 4	Work Submission + Midline 4 + Certificate Delivery
T = 5	Work Submission + Midline 5
T = 6	Work Submission + Midline 6
T = 7	Work Submission + Midline 7
T = 8	Work Submission + Endline Survey 1
T = 9	Additional week of work
T = 15	Endline Survey 2

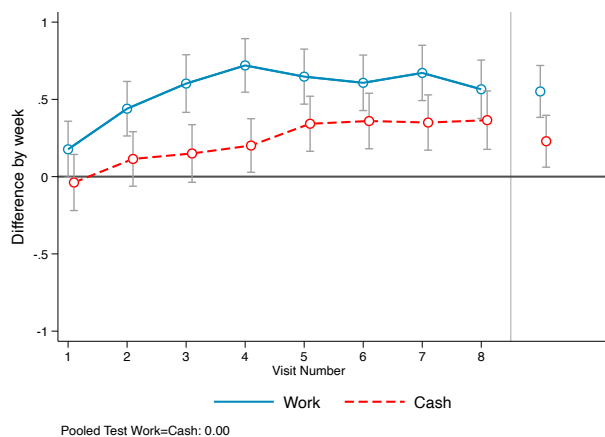
Figure A2: Main employment treatment effects relative to control



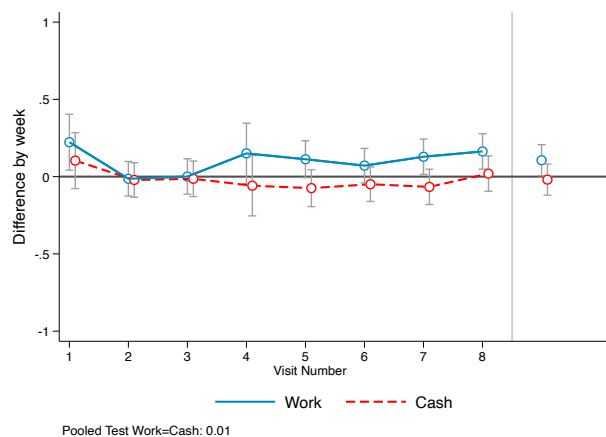
**Notes:** This figure plots the point estimates and 95% confidence intervals for each outcome in the work treatment group relative to the control group. All outcomes are standardized. The scales for PHQ-9 and the Cohen Stress Scale are scaled such that positive values represent better outcomes.

Figure A3: Weekly trends in psychosocial measures

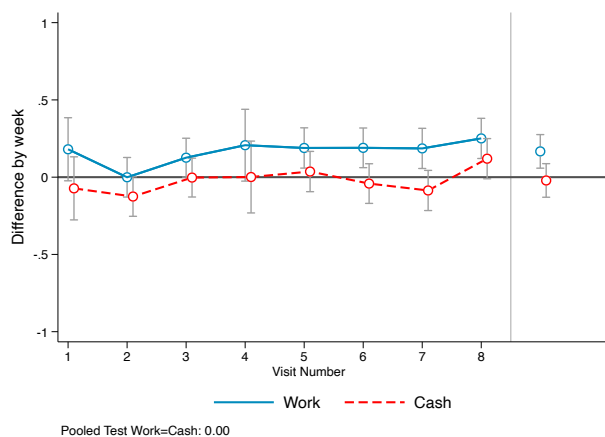
(a) Stress Index



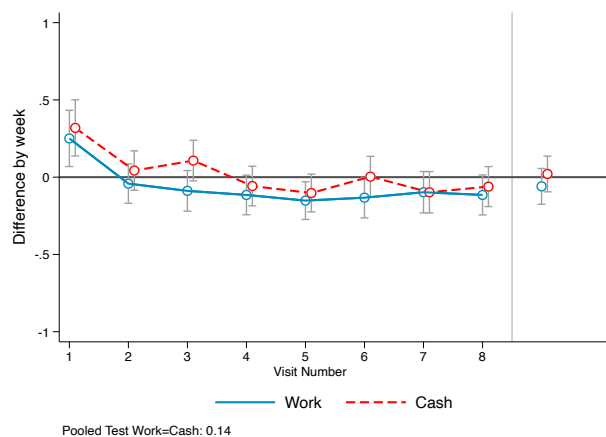
(b) Sociability



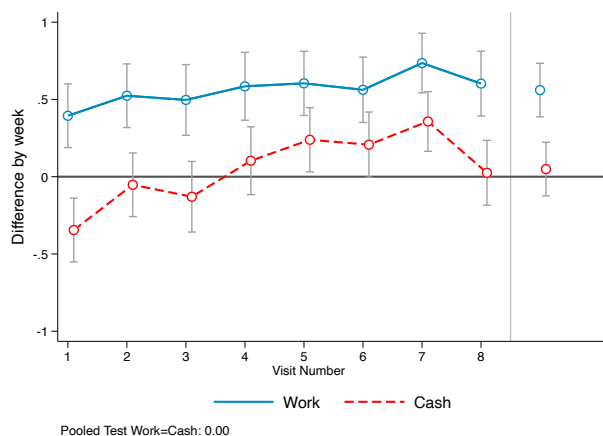
(c) Positive Conversations



(d) Negative Conversations



(e) Days Healthy



**Notes:** Each figure plots the impact of the treatment (work or cash) by week relative to the control arm. The estimates to the right of the dotted line represent the pooled effect across all eight weeks.



Figure A4: Participation certificate to boost 'resume'



**Notes:** The wording of the certificate was made such that it could be applied to both arms; cash-only arms participated in weekly surveys along with all other experiment participants, so technically also engaged in data collection for our project.

Figure A5: Pre-filled calendar for randomization in predictability of work schedule

HHID: 1 Respondent Name: \_\_\_\_\_ Block: \_\_\_\_\_ Starting date: 6/11

	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
WEEK-1					●	✓	✗
WEEK-2		✓			C	✓	✗
WEEK-3	✓		✓	✓	C		✗
WEEK-4	✓	✓	✓		C		✗
WEEK-5		✓	✓		C	✓	✗
WEEK-6	✓		✓		C		✗
WEEK-7	✓	✓	✓	✓	C		✗
WEEK-8	✓	✓				C	✗
WEEK-9	✓	✓	✓	✓	C		✗

**Notes:** The picture above shows an example of a calendar provided to a worker randomized into the “certain” schedule arm. We describe this randomization procedure in detail here. Workers were randomized, stratified by block, into certain and uncertain schedule workers. Respondents assigned to the certain schedule received a calendar like the one in this figure marking all their days of work. Respondents assigned to the uncertain schedule received a blank calendar and were informed of their work schedule one week in advance (when they met the enumerator to answer the weekly survey). To prevent uncertain schedule individuals from assuming and copying the schedule of their certain neighbors, we assigned these two treatments within a block to two different schedules (e.g. certain individuals in Block X were on schedule A and uncertain individuals on schedule B). To ensure that schedule types were not collinear with certainty treatment, we alternated whether schedule A or B was assigned to the certain treatment arm across blocks. This yielded variation in days worked within the block level across schedules (individuals) and time.

## B Deviations from Pre-Analysis Plan (PAP)

Below we note the deviations in the analysis from the PAP, registered here.

### B.1 Outcomes

- For ease of exposition, we shift the outcomes of time-use (time use for all categories, including hours idle), financial wellbeing (lending, borrowing, saving, and spending), and gender dynamics (household power and work rights) to the mechanisms section. We report time-use and financial wellbeing results in the Appendix Tables given their loss of centrality as operative channels.
- Consumption is described as a main outcome variable in the final paper, but a mechanism in the PAP. Functionally, it remains in the mechanism section.
- We find that positive, not negative, conversations drives the sociability effect we find. This seemed sufficiently uninformative to warrant another appendix table (whereas had we found negative conversations driving the increased sociability, it would have been an important adverse consequence to document.)
- We construct an index of self-worth from two questions (rather than three) because we decided not to include the third question for self-worth in the baseline/endline survey after piloting.
- We replace the “Agency” subcomponent of the mental health index with the “Locus of Control” index, which functionally means that we exclude the resource allocation decision from this measure. We did so because we the question appeared to reflect more the stress involved in an allocation decision than one’s belief in their ability to make a decision, as is evident in the impact of a calendar on this outcome (Appendix Table A5, Column 2.)
- While we pre-specified “days sick > 7 days”, we learn little from this binary outcome variable beyond what we learn from the continuous “days healthy” variable, so we no longer report this outcome.

### B.2 Analysis

- We include gender fixed effects in all specifications, as we stratify the randomization by gender.

- We report all psychosocial results from the weekly data (described in Section 5.1.1 of the PAP) in the Appendix, since the time series data does not offer additional evidence beyond the baseline data.
- We report heterogeneity by past violence, baseline depression, and extroversion (sociability) in the Appendix given space constraints and the loss of their centrality to the main message of the paper.
- We report the impact of alleviating future uncertainty via schedule provision in the Appendix given space constraints and the loss of their centrality to the main message of the paper.
- We do not explore heterogeneity by mild and moderate depression. For simplicity of exposition, we only show results for mild depression, or  $PHQ9 > 4$ . Results are similar for moderate depression.
- In our examination of differential effects by gender, we move time-use to the Appendix given space constraints and the loss of their centrality to the main message of the paper.

### B.3 Sample

- We planned to visit four different camps for this RCT: 5, 8W, 17,4 for a total sample size of 1000 households (featured in the randomization sample). Upon entering the camps for the full survey, we found that Camp 4 was more difficult to travel to and the conditions were not conducive to collecting high-quality data. We decided not to proceed with including Camp 4 in our sample.

## C Details on outcome measures

### Outcome Variable Descriptions

<b>Psychological Well-being</b>	
PHQ9	The standardized total score of 9 questions from the Patient Health Questionnaire-9 (PHQ9)
Life Satisfaction Index	A standardized average of survey responses to four questions from Diener's standardized scale, responses made along a seven-point Likert scale.
Stress Index	The standardized total score from three elements of adapted from the Cohen Stress scale. "How many of the last 7 days have you [been able to fall asleep peacefully / felt nervous / felt frustrated]?"
Sociability (Total)	The total number of conversations in the past day with adults.
Sociability (Positive)	The total number of conversations in the past day with adults that the respondent felt were positive.
Self Worth Index	The standardized total score from the responses on a scale from 1 to 10 to two questions: "Think of a person you know who you most respect and who brings greatest value to your [family / community]. If that person is a 10, where would you put yourself?"
Locus of Control	The standardized total score from responses to four locus of control questions. "In the last 7 days, how many days did you feel that to a great extent your life is controlled by accidental/chance happenings..."
Allocation Decision Game	Indicator (yes / no) for response to an offer to participate an allocation committee to decide how money is spent. Participants are offered the opportunity to make a resource allocation decision for their community or have another individual (an NGO worker, an "expert", or another refugee) make the decision.
Stability Index	The standardized total score from responses to two stability questions using a Cantril ladder. "How secure [do you feel / think you will feel] [at present / five years from now]"
Physiological Index	An inverse-covariance weighted average of PHQ, Stress, Life Satisfaction, Sociability (Total), Self Worth, Locus of Control, and Stability indices.
<b>Gender Dynamics</b>	
Gender Perceptions - Work	The standardized total score of two questions regarding women's work, "How often would you agree that women should be allowed to work for a living [inside /outside] the block?"

Gender Perceptions - Violence (IPV)	The standardized total score of five questions regarding norms for intimate partner violence (IPV) from the Demographic and Health Survey (DHS) (The important decisions in the family should be made only by the men of the family. How often would you agree? The wife has the right to express her opinion even when she disagrees with what her husband is saying. How often would you agree? A wife should tolerate being beaten by her husband in order to keep the family together. How often would you agree? A husband has the right to beat his wife. How often would you agree? It is more important to send a son to school than it is to send a daughter. How often would you agree? ).
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### Financial Wellbeing

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Savings	Response to the question “How much money do you currently have in savings?” During the collection surveys (midlines) this question instead asked “How much money did you save in the past week?”
Borrowing	Total amount of money the household has borrowed.

### Economic Decision Making

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Risk Preference	Measured using incentivized responses to the multiple price list decisions adapted from Holt-Laury and Sprenger (2002).
Time Preference	Measured by adapting Andreoni and Sprenger’s (2011) convex time budget method following Giné et al. (2018).

### Other Outcomes

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Cognitive Ability	A standardized weighted index of the number of correct responses to i) a digit span (forward and backward) memory test and ii) basic arithmetic problems including addition, subtraction, multiplication, and division. Only the arithmetic problems were included in midline.
Physical Health	Answer to the question “In the past 30 days, how many days were you sick?”. For the collection surveys (midline), this question was modified to ask “How many of the last 7 days did you feel sick?”

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## Outcome Variable Collection Periods

	Baseline	Midline	Weekly	Endline
<b>Psychological Well-being</b>				
PHQ9	X			X
Life Satisfaction Index	X			X
Stress Index	X		X	X
Sociability (Total)	X		X	X
Sociability (Positive)	X		X	X
Self Worth Index	X			X
Locus of Control	X			X
Allocation Decision Game		X		X
Stability Index		X		X
Physiological Wellbeing Index	X			X
<b>Gender Dynamics</b>				
Gender Perceptions - Work	X			X
Gender Perceptions - Violence (IPV)	X			X
<b>Financial Wellbeing</b>				
Savings	X		X*	X
Borrowing	X			X
<b>Economic Decision Making</b>				
Risk Preference		X		X
Time Preference		X		X
<b>Other Outcomes</b>				
Cognitive Ability	X		X*	X
Physical Health	X		X*	X

**Notes:** The “Baseline” survey was conducted with respondents before treatment assignment was revealed. The “Midline” survey were questions asked immediately after treatment assignments were disclosed after the baseline survey, but before the work task had begun. “Weekly” surveys were conducted after each week of work (if any). The “Endline” survey was conducted after the end of the eight week engagement and all work had ceased.

\*Physical Health, Savings, and Cognitive Ability are measured differently during the weekly surveys than at baseline or endline.

## D Excerpts from Human Rights Council Report

The following is a compilation of excerpts drawn from the United Nations' Human Rights Council Report on Myanmar regarding the "Clearance Operations" in Rakhine State executed by the Myanmar military (referred to below as the *Tatmadaw*) in late August and early September of 2017. These excerpts describe the indiscriminate nature of the violence perpetrated against the Rohingya during these operations. We caution the reader as several of these excerpts are difficult to read. We have left out the most graphic descriptions but direct the reader to the report itself (A/HRC/39/CRP.2) for further evidence of the random nature of violence during the Operations.

- During subsequent operations in villages and towns, the Tatmadaw did also not attempt to distinguish civilians from military objectives. Such indiscriminate attacks resulted in civilian men, women and children being injured or killed, with large numbers of civilians being driven away from their homes and villages. (P.35)
- Information therefore strongly indicates that airstrikes and shelling were used indiscriminately as a more general tactic in the context of "clearance operations," in essence attacking the civilian population as a whole as opposed to being used against specifically identified military targets. (P.35)
- The operations were designed to instill immediate terror, with people woken by intense rapid weapons fire, explosions, or the shouts and screams of villagers. Structures were set ablaze and Tatmadaw soldiers fired their guns indiscriminately into houses and fields, and at villagers. (P.178)
- Many Rohingya were killed or injured by indiscriminate shooting. Rohingya villages were approached without warning, usually from more than one direction, and often in the early morning, by armed Tatmadaw soldiers.... Members of the security forces, primarily Tatmadaw soldiers of the Western Command and the 33rd and 99th LIDs, shot assault rifles towards the Rohingya villages from a distance, not targeting any particular military objective or making any distinction between ARSA fighters and civilians. Men, women and children were all shot at. Many victims referred to the volume of gunfire, with some describing it as "raining bullets." Many were shot and killed or injured while attempting to flee. (P.205)
- One young girl described the operation in Maungdaw Township: "When the soldiers came to my village, we all ran, and they shot at us. We were around 50 people, and maybe half of us were shot. The people shot fell down while they were running. Some died and some escaped. Somehow, I escaped." (P.205-206)
- One man from Kyein Chaung village tract, known in Rohingya as Boli Bazar, in northern Maungdaw Township explained the circumstances in which his daughter was killed: "I don't know how many people died that day. The military, they were just shooting at whomever. They were shooting at people whenever they saw them, on the



streets or in the houses. When they were shooting, there was no time to look back and care for those who were shot. As people were running, they were shooting at them. That is how my daughter died. She was hit fleeing. I couldn't go back and carry her." (P.206)

- Some Rohingya villagers who could not flee, or who sought shelter inside their houses, were also shot and killed or injured, when bullets penetrated thatched roofs and bamboo walls. Villagers were shot in other locations where they had found shelter, including through rapid arms fire into forested hills where they had fled. (P.206-207)
- The Mission has provided detailed accounts above of corroborated mass killings perpetrated in the villages of Min Gyi, Maung Nu, Chut Pyin, Gu Dar Pyin, the villages of Koe Tan Kauk. Dozens, and in some cases hundreds, of men, women and children were killed. Additional organized mass killings are likely to have taken place. Witnesses reported seeing bodies of large numbers of Rohingya, including those with gunshot and machete wounds, as well as decapitated heads, in burned villages en route to Bangladesh. (P.207)
- Rohingya fleeing the "clearance operations" also faced violent attacks at border crossing points, resulting in loss of life and serious injuries. Soldiers opened fire on groups of Rohingya at or close to border crossing points, including large numbers gathered on the shores of the Bay of Bengal or Naf River, while waiting to cross into Bangladesh. 2005 A man from Nga Yant Chaung village tract, Buthidaung Township, described arriving at the Naf River in mid-September 2017 and being fired upon by soldiers. Some of the people ran; others, like him, lay on the ground. He said that 25 people were killed, including three of his relatives. (P.208)
- Soldiers also shot at boats carrying Rohingya to Bangladesh, resulting in further casualties. One witness explained how the boat she was in was shot at by soldiers as it crossed the Naf River, killing three men and two women. Another witness described her experience while waiting for a boat: "Soldiers started shooting, so we crawled away and lay down behind the plants in the mud. I saw many people being shot at. Dead bodies of men, women and children were floating in the river." (P.208-209)
- Another feature of the "clearance operations" was the widespread destruction of Rohingya homes and villages, causing further death and injury through burning. Houses were burned both manually using flammable liquid and matches, and by the use of "launchers," weapons firing a munition that explodes upon impact. This latter method in particular meant that victims were often caught by surprise and had little time to escape. (P.209)
- Landmines, planted by the Tatmadaw in and around Rohingya villages as part of the "clearance operations" also caused death and injury. On or around 26 August 2017, a group of Tatmadaw soldiers approached Sin Oe Pyin (Ywar Gyi) hamlet, in Maung Gyi Taung village tract, Buthidaung Township. They systematically planted mines along the main road to the village, with one villager describing them as being placed "15 feet apart." Once the operations began, the landmines killed and injured many

who tried to flee.<sup>2037</sup> As one villager described, “The mines were put at the entrance of the village, that is the only way out so when people were running they stepped on them and died.” Another recalled: “Some people were running and were killed by the mines, as they didn’t know that they were planted there. Others were hit by the mines as they were coming back from the field. My 18-year old relative died from an explosion coming back from the paddy field just in front of my house.” (P.211)

## E Script to participants

**FOR EVERYONE:** We want to thank you for all the time you have spent with us so far: we have learned so much from you. As a token of our gratitude, we would like to offer you a gift. We do not have a lot of money, but we still want to help by learning about your life and conditions in the camp better so that we can do something in a larger scale in the future. Because we don't have enough for everybody, we are offering a lottery. You might receive: (1) 300 taka today plus a total of 400 taka over the next two months, (2) 300 taka today plus a total of 3600 taka over the next two months, (3) 300 taka today plus a work opportunity from which you can earn 3600 taka over the next two months or (4) Nothing. Most people get nothing (this is the most common happening, most people in your block will receive nothing). Here are a few envelopes, each with a different number on them. I do not know what numbers are in these envelopes. I want you to choose one of these, and tell me the number inside. I will enter it into my tablet and it will tell me which of the gifts you will receive. Does that make sense?

**T-0 (Control, No Work)** Congratulations! You drew a number that entitles you to 300 taka today plus a total of 400 taka over the next two months. *Enumerator: Please give three 100 taka bill to the respondent* This is yours to keep and do what you wish with the money. We will come to your block every week for the next eight weeks to check in and see how you are doing and will ask you some questions again. Next week, you will receive 50 taka if you come to meet us in your block and answer a few questions, and this process will continue for the next 8 weeks, adding up to 400 taka by the end. You will have come to the collection point every week to collect money, you cannot send someone else on your behalf. We have a few remaining questions to ask you – it will take about 30 minutes, and then we will be on our way. Is that okay?

**T-1 (Cash, No Work)** Congratulations! You drew a number that entitles you to 300 taka today plus a total of 3600 taka over the next two months. *Enumerator: Please give three 100 taka bill to the respondent* This is yours to keep and do what you wish with the money. We will come to your block every week for the next eight weeks to check in and see how you are doing and ask you some questions again. Next week you will receive 450 taka if you come to meet us in your block and answer a few questions, and this process will continue for the next 8 weeks, adding up to 3600 taka by the end. You will have come to the collection point every week to collect money, you cannot send someone else on your behalf. We have a few remaining questions to ask you, it will take about 30 minutes and then we will be on our way. Is that okay?

**T2a: pay for work with a certain schedule** Congratulations! You drew a number that entitles you to 300 taka today plus a work opportunity where you can earn a total of 3600 taka over the next two months. *Enumerator: Please give three 100 taka bill to the respondent.* This is yours to keep and do what you wish with the money. Now let me tell you about the work opportunity. As you know, we are conducting a research project in which we are trying to understand how you feel about life and how you spend your days in the camps. If we understand this well, we will be able to help you and your community by providing you with the things you need. Does it make sense to you? ENUMERATOR: BEGIN PINK VIDEO HERE. Would you like to accept this work opportunity? Wonderful! Then here are 2 sets of papers for the next 2 days in this current week you will be working. Within each set there are 5 sheets for 5 times during the day on which you will be working. You will get next week's work on the collection day (SPECIFY THE COLLECTION DAY). Here is the calendar that tells you exactly on which days we need you to complete these sheets. At the end of each day, please put the 5-sheet bundle/set in the collection box that will be kept in your block. We will check in with you throughout the week and collect these sheets at the end of the week and make your payment for that week. We have a few remaining questions to ask you, and then we will be on our way. Is that okay?

**T2b: pay for work with uncertain schedule** Congratulations! You drew a number that entitles you to 300 taka today plus a work opportunity where you can earn a total of 3600 taka over the next two months. [Enumerator: Please give three 100 taka bill to the respondent] This is yours to keep and do what you wish with the money. Now let me tell you about the work opportunity. As you know, we are conducting a research project in which we are trying to understand how you feel and how you spend your days in the camps. If we understand this well, we will be able to help you and your community by providing you with the things you need. Does it make sense to you? ENUMERATOR: BEGIN BLUE VIDEO HERE. Would you like to accept this work opportunity? Wonderful! Ok, now let me give you a few final details on your work task. For this coming week, you will have to work on \*these two days\*. At the end of the day you will have to submit your daily work in the collection box and attend a weekly collection session to collect your weekly payment based on your work. Here are 2 sets of papers for the next 2 days in this current week you will be working. Within each set there are 5 sheets for 5 times during the day on which you will be working. You will get next week's work on the collection day (SPECIFY THE COLLECTION DAY). At the end of each day, please put the 5 sheet set in the collection box that will be kept in your block. We will check in with you throughout the week and collect these sheets at the end of the week and make your payment for that week. Even though we'll

pay you this total amount at the end of every week, we don't know which twenty-four days you will work for us in the next 2 months. We will only be able to tell you at the beginning of each week. That means, when you return us your completed work and get your weekly payments, our collectors will tell you the next week's schedule. Your weekly schedule will be uncertain. We have a few remaining questions to ask you, and then we will be on our way. Is that okay?