An Adaptive Targeted Field Experiment: Job Search Assistance for Refugees in Jordan*

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Online Appendix

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 $[*]See \ https://maxkasy.github.io/home/files/papers/RefugeesWork.pdf for the latest version of the paper and this supplement.$

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A.3 Treatment materials

Figure A.1: Treatment paper tool: Interview preparation skills



Figure A.2: Treatment paper tool: Legal rights



Figure A.3: Treatment paper tool: Job search planning



A.4 Additional tables

Table A.2: Sampling methods by nationality

	Jordanian		Syrian	
Sampling method	Number	Percentage	Number	Percentage
Referral	662	31%	577	35%
Community-based Organization	753	36%	360	22%
Home visit	167	8%	420	25%
Social media	101	5%	29	2%
UNHCR visit	3	0%	95	6%
IRC office visit	405	19%	178	11%
Other	16	1%	4	0%
Total	2107		1663	

Table A.3: Attrition: full sample

	Rapid-response	ESO (2 months)	ESO (4 months)
Cash	-0.001	-0.003 (0.637)	0.006 (0.258)
Information	0.005	0.009 (0.069)	0.016 (0.072)
Nudge	0.011	0.004 (0.212)	0.013 (0.118)
Control mean	0.012	0.020	0.048
Observations	3770	3770	3770

Note: This table reports the regressions of attrition on treatment for the full sample. Next to each treatment effect estimate, we report a randomization inference p-value. We only compute randomization inference p-values for observations that did not attrite in the rapid follow-up survey. This implies that we do not report p-values for impacts on attrition in the rapid follow-up survey. Further, for consistency, the coefficients in columns (2) and (3) are calculated for the restricted sample for which we calculate p-values. The control mean value of attrition reported in the last row always refers to the unrestricted sample.

Table A.4: Attrition: Syrian sample

	Rapid-response	ESO (2 months)	ESO (4 months)
Cash	0.007	-0.004 (0.671)	0.007 (0.303)
Information	0.013	0.006 (0.203)	0.018 (0.110)
Nudge	0.009	0.010 (0.076)	0.031 (0.016)
Control mean	0.005	0.010	0.026
Observations	1663	1663	1663

Note: This table reports the regressions of attrition on treatment for the Syrian refugee sample. Next to each treatment effect estimate, we report a randomization inference p-value. We only compute randomization inference p-values for observations that did not attrite in the rapid follow-up survey. This implies that we do not report p-values for impacts on attrition in the rapid follow-up survey. Further, for consistency, the coefficients in columns (2) and (3) are calculated for the restricted sample for which we calculate p-values. The control mean value of attrition reported in the last row always refers to the unrestricted sample.

Table A.5: Attrition: Jordan sample

	Rapid-response	ESO (2 months)	ESO (4 months)
Cash	-0.005	-0.002 (0.579)	0.006 (0.343)
Information	-0.001	0.011 (0.106)	0.015 (0.183)
Nudge	0.012	-0.001 (0.523)	-0.002 (0.568)
Control mean	0.017	0.028	0.065
Observations	2107	2107	2107

Note: This table reports the regressions of attrition on treatment for the Jordanian sample. Next to each treatment effect estimate, we report a randomization inference p-value. We only compute randomization inference p-values for observations that did not attrite in the rapid follow-up survey. This implies that we do not report p-values for impacts on attrition in the rapid follow-up survey. Further, for consistency, the coefficients in columns (2) and (3) are calculated for the restricted sample for which we calculate p-values. The control mean value of attrition reported in the last row always refers to the unrestricted sample.

Table A.6: Observations by stratum and treatment

	Cash	Information	Nudge	Control
Syr, M, < HS, never emp	51	35	61	58
Syr, M, < HS, ever emp	86	75	102	152
Syr, M, \geq HS, never emp	3	3	3	4
Syr, M, >= HS, ever emp	4	2	11	12
Syr, F, < HS, never emp	244	111	151	156
Syr, F, < HS, ever emp	61	32	89	89
Syr, F, >= HS, never emp	10	5	10	9
Syr, F , $>=$ HS, ever emp	3	3	5	5
Jor, M, < HS, never emp	47	44	44	106
Jor, M, < HS, ever emp	40	90	120	110
Jor, M, >= HS, never emp	18	23	12	9
Jor, M, >= HS, ever emp	47	23	27	65
Jor, F, < HS, never emp	101	193	153	117
Jor, F, < HS, ever emp	65	68	78	54
Jor, F , $>=$ HS, never emp	58	52	60	48
Jor, F, >= HS, ever emp	22	23	87	60

Table A.7: Successes by stratum and treatment

	Cash	Information	Nudge	Control
Syr, M, < HS, never emp	2	0	2	2
Syr, M, < HS, ever emp	6	3	6	9
Syr, M , $>=$ HS, never emp	1	0	0	1
Syr, M, >= HS, ever emp	0	0	1	1
Syr, F, < HS, never emp	6	2	1	0
Syr, F, < HS, ever emp	1	1	3	2
Syr, F, >= HS, never emp	1	0	1	0
Syr, F, >= HS, ever emp	0	0	0	0
Jor, M, < HS, never emp	2	1	3	8
Jor, M, < HS, ever emp	4	9	13	13
Jor, M, >= HS, never emp	3	4	1	0
Jor, M, >= HS, ever emp	4	2	1	6
Jor, F, < HS, never emp	2	9	8	4
Jor, F, < HS, ever emp	9	8	4	4
Jor, F, >= HS, never emp	5	2	1	3
Jor, F, >= HS, ever emp	0	0	13	3

Note: The table reports results for wage employment at the time of the rapid follow-up interview.

Table A.8: Success rates by stratum and treatment

	Cash	Information	Nudge	Control
Syr, M, < HS, never emp	0.04	0.00	0.03	0.03
Syr, M, < HS, ever emp	0.07	0.04	0.06	0.06
Syr, M , $>=$ HS, never emp	0.33	0.00	0.00	0.25
Syr, M, >= HS, ever emp	0.00	0.00	0.09	0.08
Syr, F, < HS, never emp	0.02	0.02	0.01	0.00
Syr, F, < HS, ever emp	0.02	0.03	0.03	0.02
Syr, F, >= HS, never emp	0.10	0.00	0.10	0.00
Syr, F , $>=$ HS, ever emp	0.00	0.00	0.00	0.00
Jor, M, < HS, never emp	0.04	0.02	0.07	0.08
Jor, M, < HS, ever emp	0.10	0.10	0.11	0.12
Jor, M, >= HS, never emp	0.17	0.17	0.08	0.00
Jor, M, >= HS, ever emp	0.09	0.09	0.04	0.09
Jor, F, < HS, never emp	0.02	0.05	0.05	0.03
Jor, F, < HS, ever emp	0.14	0.12	0.05	0.07
Jor, F, >= HS, never emp	0.09	0.04	0.02	0.06
Jor, F, >= HS, ever emp	0.00	0.00	0.15	0.05

Note: The table reports results for wage employment at the time of the rapid follow-up interview.

Table A.9: Weighted mean differences in employment by covariates, with randomisation inference p-values

Subgroup	Treatment	Success rate	Δ	P-value
Female Female Female Female	Cash Information Nudge Control	0.031	0.010 0.005 0.011	0.211 0.342 0.201
Male Male Male Male	Cash Information Nudge Control	0.077	-0.001 -0.020 -0.009	0.501 0.857 0.676
Jordanian Jordanian Jordanian Jordanian	Cash Information Nudge Control	0.068	-0.001 -0.006 0.002	0.531 0.648 0.463
Syrian Syrian Syrian Syrian	Cash Information Nudge Control	0.027	0.013 -0.004 0.005	0.123 0.626 0.348
No high school No high school No high school No high school	Cash Information Nudge Control	0.046	0.005 -0.002 0.002	0.329 0.574 0.428
High school High school High school High school	Cash Information Nudge Control	0.061	0.009 -0.015 0.007	0.387 0.723 0.405
Never employed Never employed Never employed Never employed	Cash Information Nudge Control	0.031	0.011 -0.001 0.004	0.206 0.514 0.402
Ever employed Ever employed Ever employed Ever employed	Cash Information Nudge Control	0.071	0.000 -0.010 0.003	0.501 0.730 0.445

Note: The table reports results for wage employment at the time of the rapid follow-up interview. Δ is the difference between weighted mean employment in a given treatment group and in the control group. p-values obtained with the randomization inference procedure discussed in Section 3.5.

Table A.10: Probability treatment is optimal, by stratum

Stratum	Cash	Information	Nudge	Control
Syr, M, < HS, never emp	0.38	0.09	0.29	0.24
Syr, M, < HS, ever emp	0.44	0.10	0.23	0.23
Syr, M , $>=$ HS, never emp	0.42	0.12	0.12	0.34
Syr, M, >= HS, ever emp	0.24	0.20	0.26	0.30
Syr, F, < HS, never emp	0.45	0.33	0.19	0.03
Syr, F, < HS, ever emp	0.19	0.35	0.33	0.13
Syr, F, >= HS, never emp	0.41	0.16	0.29	0.14
Syr, F, >= HS, ever emp	0.32	0.23	0.23	0.22
Jor, M, < HS, never emp	0.18	0.06	0.29	0.46
Jor, M, < HS, ever emp	0.20	0.18	0.20	0.41
Jor, M, >= HS, never emp	0.41	0.45	0.09	0.05
Jor, M , $>=$ HS, ever emp	0.31	0.24	0.08	0.36
Jor, F, < HS, never emp	0.08	0.29	0.48	0.15
Jor, F, < HS, ever emp	0.58	0.32	0.02	0.09
Jor, F , $>=$ HS, never emp	0.58	0.10	0.04	0.27
Jor, F, >= HS, ever emp	0.04	0.02	0.89	0.05

Table A.11: Main outcomes

Outcome	Definition
Wage employment	A dummy for whether the respondent cur-
	rently has a wage-paying job.
Earnings	Earnings from main job (0 if not in wage
	employment).
Well-being	An index that comprises (i) monthly ex-
	penditure, (ii) life satisfaction (0-10 scale),
	(iii) an indicator of negative affect (feeling
	anxious on previous day on a 0-10 scale),
	(iv) an indicator of positive affect (feeling
	happy on previous day on a 0-10 scale).
Social integration	An index of seven social integration ques-
	tions (each question asks the respondent to
	report on a scale from 1 to 5 how much he
	or she agrees with a given statement, for
	example, 'I feel connected to Jordan').
Intends to migrate	A dummy for whether the respondent in-
	tends to migrate to a different country in
	next 12 months (this does not include re-
	turn migration to Syria).

Note: All indices are constructed using the method outlined in ?.

Table A.12: Treatment effects on employment for Syrians, after 2 months

	Employed below 200 JOD	Employed above 200 JOD
Cash	0.033 (0.042)	0.019 (0.117)
Information	0.048 (0.007)	-0.002 (0.537)
Nudge	0.027 (0.077)	0.006 (0.354)
Control mean	0.043	0.048
Observations	1623	1608

Table A.13: Treatment effects after 2 months, full sample

	Employed	Earnings	Well-being
Cash Information Nudge	0.020 (0.107) 0.017 (0.121) 0.013 (0.202)	2.405 (0.236) 1.410 (0.341) 0.957 (0.401)	0.065 (0.029) 0.022 (0.259) 0.012 (0.374)
Control mean	0.013 (0.202)	23.416	0.012 (0.574)
Observations	3593	3582	3593

Table A.14: Treatment effects after 4 months, full sample

	Employed	Earnings	Well-being
Cash	0.003 (0.420)	-1.167 (0.626)	0.057 (0.036)
Information	0.003 (0.404)	-0.298 (0.537)	0.024 (0.217)
Nudge	0.000 (0.521)	-1.444 (0.680)	0.046 (0.075)
Control mean	0.103	22.758	0.025
Observations	3478	3463	3478

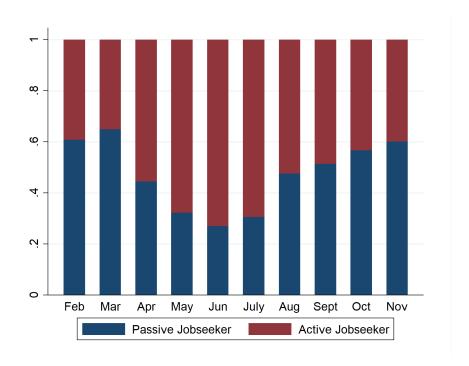
Table A.15: Test of the surrogacy condition

	Dep var: month 4 employment				
Cash	0.037	0.026	-0.026	-0.026	
	(0.017)	(0.016)	(0.021)	(0.020)	
Information	0.024	0.007	-0.000	0.000	
	(0.019)	(0.018)	(0.022)	(0.021)	
Nudge	-0.001	-0.007	-0.002	0.002	
	(0.014)	(0.014)	(0.020)	(0.019)	
Week 6 employment	0.358 (0.073)	0.257 (0.034)			
Month 2 employment			0.497 (0.044)	0.452 (0.035)	
Wald test (<i>p</i>) Sample	0.081	0.245	0.575	0.527	
	Syrian	Jordanian	Syrian	Jordanian	

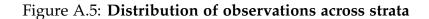
Note: Robust standard errors in parentheses. All regressions are re-weighted using strata-specific weights. The second row from the bottom reports the p value from a Wald test of the joint null hypothesis that the coefficients on all the treatment dummies are equal to zero.

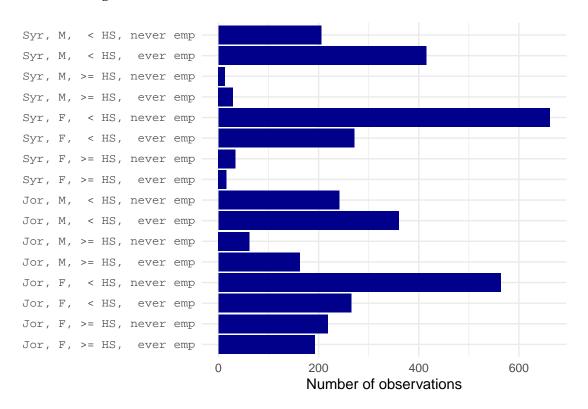
A.5 Additional figures

Figure A.4: Active and passive sampling



Note: This Figure reports the proportion of jobseekers selected through active and passive sampling.







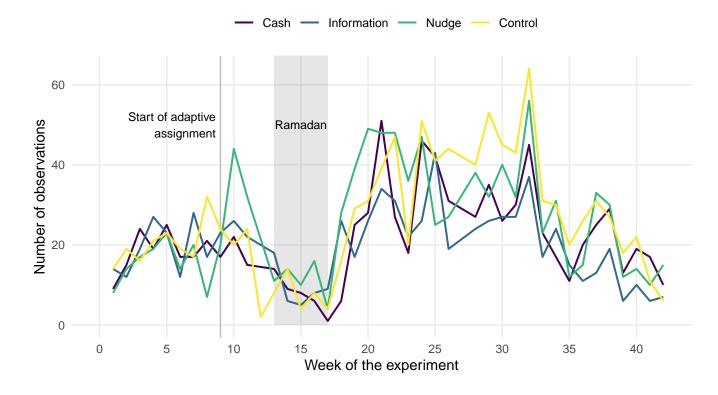
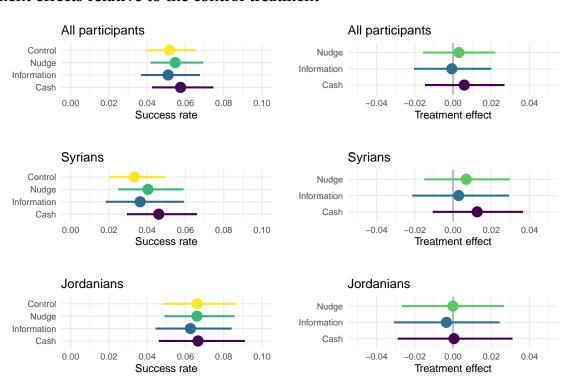


Figure A.7: Credible sets for average potential outcomes, and for average treatment effects relative to the control treatment





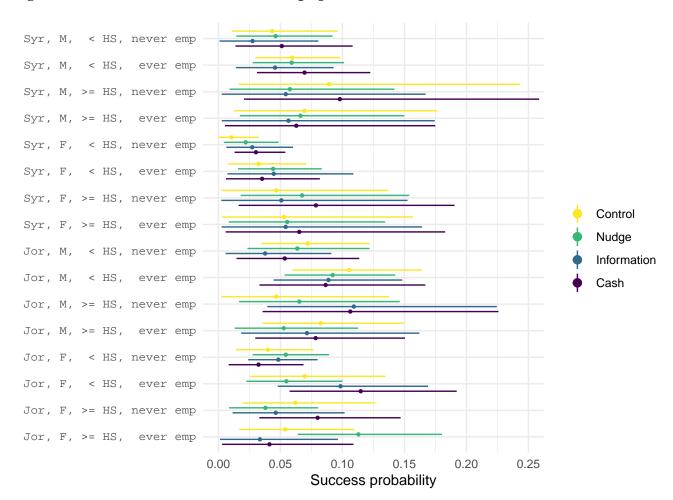


Figure A.9: Job search and baseline expenditure (control Syrians)

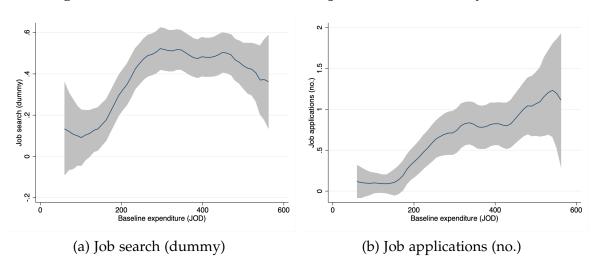
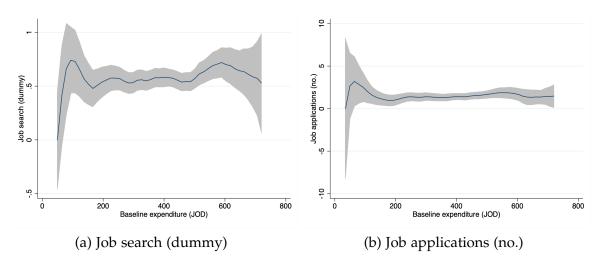


Figure A.10: Job search and baseline expenditure (control Jordanians)



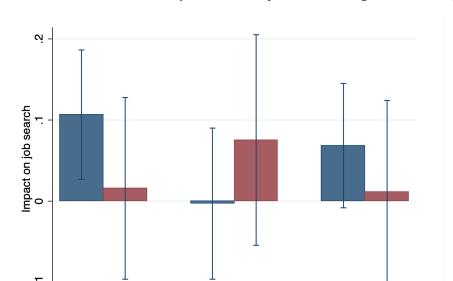


Figure A.11: Treatment effects on job search by baseline expenditure (Syrians)

Note: This figure shows treatment effects and 90% confidence intervals by baseline expenditure.

Below median

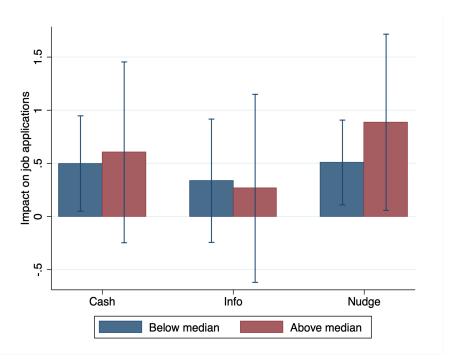
Info

Nudge

Above median

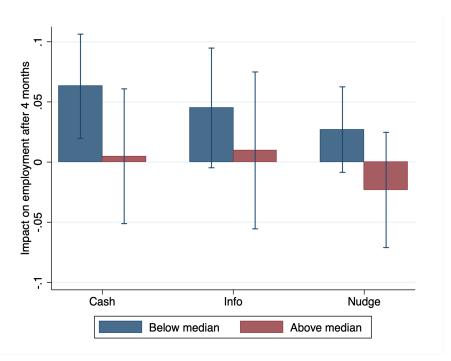
Cash

Figure A.12: Treatment effects on applications by baseline expenditure (Syrians)



Note: This figure shows treatment effects and 90% confidence intervals by baseline expenditure.

Figure A.13: Treatment effects on 4-month employment by baseline expenditure (Syrians)

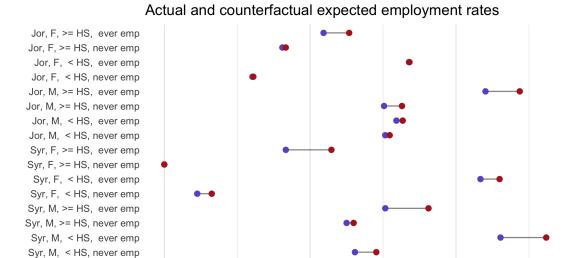


Note: This figure shows treatment effects and 90% confidence intervals by baseline expenditure.

Figure A.14: Simulated expected employment rate by week

This plot shows simulated expected employment from 32 simulations (red), contrasted with expected employment from a pure RCT (blue), and the counterfactual where everybody receives the control treatment (black). The grey lines show each of the 32 simulation trajectories.

Figure A.15: Simulated outcomes by group



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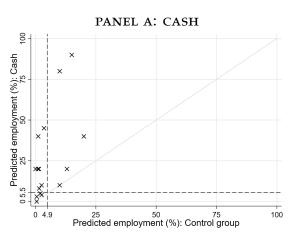
Mean expected employment

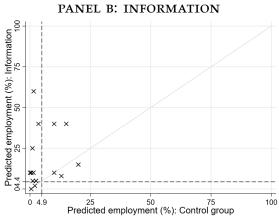
Blue dots show expected employment for a pure RCT.

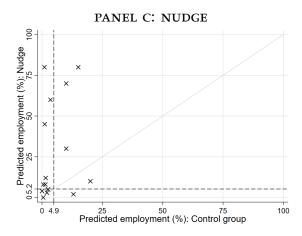
Red dots show expected employment for Thompson matches, averaged across 32 simulations.

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Figure A.16: Forecast employment outcomes: Local staff

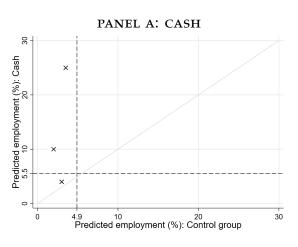


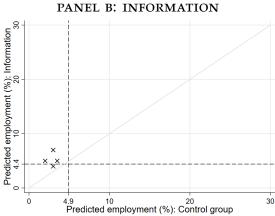


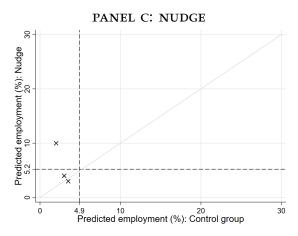


Note: These scatterplots show IRC employees' incentivized forecasts of six-week employment rates under each of the three treatment arms; for each plot, we graph against the incentivized forecast of the six-week rate for the control group. On each plot, we superimpose the weighted average employment rates from Table A.9.

Figure A.17: Forecast employment outcomes: Head-office staff







Note: These scatterplots show IRC employees' incentivized forecasts of six-week employment rates under each of the three treatment arms; for each plot, we graph against the incentivized forecast of the six-week rate for the control group. On each plot, we superimpose the weighted average employment rates from Table A.9.