Penn Med Field Experiment (N=402,931)

January 22, 2025

Items

Open Rates

Summary Table

Table 1: Counts and Percentages of Email Opens by Condition (Within-Condition Percentages)

email	Control	Prosocial Excuse	Explicit	Total
Email 1	66140 (49.32%)	66206 (48.78%)	65714 (49.38%)	198060 (49.15%)
Email 2	8687 (6.48%)	8744 (6.44%)	8620 (6.48%)	26051 (6.47%)
Email 3	4142 (3.09%)	3957 (2.92%)	3782 (2.84%)	11881 (2.95%)
Total	78969 (58.88%)	78907 (58.13%)	78116 (58.7%)	235992 (58.57%)

Open Rates for Email 1 and Combined Emails

Table 2: OLS Model Results for Email 1 Open Rates

	Dependent Variable:	
	Open (Email 1 Period)	Open (Full Campaign)
	(1)	(2)
Prosocial Excuse	-0.005^{***}	-0.007^{***}
	(0.002)	(0.002)
Explicit	0.001	-0.002
	(0.002)	(0.002)
Constant	0.493^{***}	0.589^{***}
	(0.001)	(0.001)
Observations	402,931	402,931
R^2	0.00003	0.00004
Note:	+p<0.1; *p<0.05; **p<0.01; ***p<0.001	

- Open rates are significantly different across conditions for Email 1 and combined emails. So we will analyze all participants, as pre-registered.

Click Rates (DV1)

Summary

Table 3: Counts and Percentages of Email Clicks by Condition (Within-Condition Percentages)

Email	Control	Prosocial Excuse	Explicit	Total
Email 1	182 (0.14%)	176 (0.13%)	164 (0.12%)	522 (0.13%)
Email 2	104 (0.08%)	75 (0.06%)	88 (0.07%)	267 (0.07%)
Email 3	67 (0.05%)	60 (0.04%)	70 (0.05%)	197 (0.05%)
Total	353 (0.26%)	311 (0.23%)	322 (0.24%)	986 (0.24%)

Primary Analyses (DV1): Click-Through Rates (Email 1 + Combined Emails)

Table 4: OLS Model Results for Click-Through Rates

	Dependent Variable:			
	Clicked (Email 1 Period)		Clicked (Full Campaign)	
	(1)	(2)	(3)	(4)
Explicit	−0.0001	−0.0001	−0.0002	−0.0002
	(0.0001)	(0.0001)	(0.0002)	(0.0002)
Prosocial Excuse	−0.00005	−0.00004	−0.0003***	−0.0003***
	(0.0001)	(0.0001)	(0.0002)	(0.0002)
Man		0.001+		0.001+
		(0.0001)		(0.0002)
Age		0.00004+		0.0001+
		(0.00000)		(0.00001)
Constant	0.001+	−0.001+	0.003+	−0.003+
	(0.0001)	(0.0002)	(0.0001)	(0.0003)
Controls?	No	Yes	No	Yes
Observations	402,931	402,931	402,931	402,931
R^2	0.00000	0.0004	0.00001	0.001
Note:		+ p<0.1; * p<0.05; ** p<0.01; *** p<0.001		

Wald Tests for Email 1 Period: Without Controls: F(1, 402928) = 0.225, p = 0.635 With Controls: F(1, 402926) = 0.166, p = 0.684

Wald Tests for Full Campaign: Without Controls: F(1, 402928) = 0.165, p = 0.685 With Controls: F(1, 402926) = 0.268, p = 0.605

Donation Incidence (DV2)

Summary

Table 5: Counts and Percentages of Donations by Condition and Email Period (Within-Condition Percentages)

Email.Period	Control	Prosocial.Excuse	Explicit	Total
Email 1 Period	3 (0.00224%)	5 (0.00368%)	2 (0.0015%)	10 (0.00248%)
Email 2 Period	10 (0.00746%)	7 (0.00516%)	6 (0.00451%)	23 (0.00571%)
Email 3 Period	7 (0.00522%)	11 (0.0081%)	6 (0.00451%)	24 (0.00596%)
Total Campaign	20 (0.01491%)	23 (0.01694%)	14 (0.01052%)	57 (0.01415%)

Primary Analyses (DV2): Donation Incidence (Email 1 + Combined Emails)

Table 6: OLS Model Results for Donation Incidence

	Dependent Variable:			
	Donated (Email 1 Period)		Donated (Full Campaign)	
	(1)	(2)	(3)	(4)
Explicit	−0.00001	−0.00001	−0.00004	−0.00004
	(0.00002)	(0.00002)	(0.00004)	(0.00004)
Prosocial Excuse	0.00001	0.00001	0.00002	0.00002
	(0.00002)	(0.00002)	(0.00005)	(0.00005)
Man		0.00004**		0.0002+
		(0.00002)		(0.00004)
Age		0.00000*		0.00001+
		(0.00000)		(0.00000)
Constant	0.00002***	−0.0001**	0.0001+	−0.0004+
	(0.00001)	(0.00004)	(0.00003)	(0.0001)
Controls?	No	Yes	No	Yes
Observations	402,931	402,931	402,931	402,931
R^2	0.00000	0.0001	0.00001	0.0002
Note:		+ p<0.1; * p<0.05; ** p<0.01; *** p<0.001		

Wald Tests for Email 1 Period: Without Controls: F(1, 402928) = 1.238, p = 0.266 With Controls: F(1, 402926) = 1.197, p = 0.274

Wald Tests for Full Campaign: Without Controls: F(1, 402928) = 2.025, p = 0.155 With Controls: F(1, 402926) = 1.890, p = 0.169

Donation Amount (DV3)

Summary

Table 7: Total Donation Amounts by Condition and Email Period (Number of Donors)

Email.Period	Control	Prosocial.Excuse	Explicit
Email 1 Period	$225 (n=3)	$600 (n=5)	$150 (n=2)
Full Campaign	$1,930 (n=20)	$2,560 (n=23)	$1,045 (n=14)

Primary Analyses (DV3): Donation Amount (Raw) (Email 1 + Combined Emails)

Table 8: OLS Model Results for Donation Amount (Raw)

	Dependent Variable:			
	Amount (Email 1 Period)		Amount (Full Campaign)	
	(1)	(2)	(3)	(4)
Explicit	−0.001	−0.001	−0.007	−0.006
	(0.001)	(0.001)	(0.004)	(0.004)
Prosocial Excuse	0.003	0.003	0.004	0.004
	(0.002)	(0.002)	(0.006)	(0.006)
Man		0.004***		0.018^{+}
		(0.002)		(0.005)
Age		0.0002*		0.001^{+}
		(0.0001)		(0.0002)
Constant	0.002***	−0.010**	0.014^{+}	−0.044^{+}
	(0.001)	(0.004)	(0.004)	(0.009)
Controls?	No	Yes	No	Yes
Observations	402,931	402,931	402,931	402,931
R^2	0.00001	0.00005	0.00001	0.0002
Note:		+ p<0.1; * p<0.05; ** p<0.01; *** p<0.001		

Wald Tests for Email 1 Period: Without Controls: F(1, 402928) = 1.872, p = 0.171 With Controls: F(1, 402926) = 1.841, p = 0.175

Wald Tests for Full Campaign: Without Controls: F(1, 402928) = 4.631, p = 0.0314 With Controls: F(1, 402926) = 4.469, p = 0.0345

Primary Analyses (DV3): Donation Amount (Log-Transformed) (Email 1 + Combined Emails)

Table 9: OLS Model Results for Donation Amount (Log-Transformed)

	Dependent Variable:			
	Log Amount (Email 1 Period)		Log Amount (Full Campaign)	
	(1)	(2)	(3)	(4)
Explicit	−0.00003	−0.00003	−0.0002	−0.0002
	(0.0001)	(0.0001)	(0.0002)	(0.0002)
Prosocial Excuse	0.0001	0.0001	0.0001	0.0001
	(0.0001)	(0.0001)	(0.0002)	(0.0002)
Man		0.0002**		0.001+
		(0.0001)		(0.0002)
Age		0.00001*		0.00005+
		(0.00000)		(0.00001)
Constant	0.0001***	−0.0004**	0.001+	−0.002+
	(0.0001)	(0.0002)	(0.0001)	(0.0004)
Controls?	No	Yes	No	Yes
Observations	402,931	402,931	402,931	402,931
R^2	0.00000	0.0001	0.00001	0.0002
Note:				+ p<0.1; * p<0.05; ** p<0.01; *** p<0.001

Wald Tests for Email 1 Period: Without Controls: F(1, 402928) = 1.451, p = 0.228 With Controls: F(1, 402926) = 1.411, p = 0.235

Wald Tests for Full Campaign: Without Controls: F(1, 402928) = 2.583, p = 0.108 With Controls: F(1, 402926) = 2.432, p = 0.119

Primary Analyses (DV3): Donation Amount (Outliers Removed) (Email 1 + Combined Emails)

Table 10: OLS Model Results for Donation Amount (Outliers Removed)

	Dependent Variable:			
	Amount (Email 1 Period)		Amount (Full Campaign)	
	(1)	(2)	(3)	(4)
Explicit	−0.001	−0.001	−0.003	−0.003
	(0.001)	(0.001)	(0.003)	(0.003)
Prosocial Excuse	0.001	0.001	0.001	0.001
	(0.002)	(0.002)	(0.004)	(0.004)
Man		0.002***		0.012^{+}
		(0.001)		(0.003)
Age		0.0002**		0.001^{+}
		(0.0001)		(0.0001)
Constant	0.002***	−0.007**	0.011^{+}	−0.032^{+}
	(0.001)	(0.003)	(0.003)	(0.007)
Controls?	No	Yes	No	Yes
Observations	402,930	402,930	402,925	402,925
R^2	0.00000	0.00005	0.00000	0.0002
Note:		+ p<0.1; * p<0.05; ** p<0.01; *** p<0.001		

Wald Tests for Email 1 Period: Without Controls: F(1, 402927) = 0.877, p = 0.349 With Controls: F(1, 402925) = 0.845, p = 0.358

Wald Tests for Full Campaign: Without Controls: F(1, 402922) = 1.052, p = 0.305 With Controls: F(1, 402920) = 0.962, p = 0.327

Unsubscribe Rate (DV4)

Summary

Table 11: Counts and Percentages of Unsubscribes by Condition and Email Period (Within-Condition Percentages) (continued below)

Email.Period	Control	Prosocial.Excuse	Explicit
Email 1 Period	39 (0.02908%)	30 (0.0221%)	45 (0.03381%)
Full Campaign	91 (0.06785%)	92 (0.06778%)	108 (0.08115%)

Total
114 (0.02829%)
291 (0.07222%)

Primary Analyses (DV4): Unsubscribe Rate (Email 1 + Combined Emails)

Table 13: OLS Model Results for Unsubscribe Rate

	Dependent Variable:			
	Unsubscribed (Email 1 Period)		Unsubscribed (Full Campaign)	
	(1)	(2)	(3)	(4)
Explicit	0.00005	0.00005	0.0001	0.0001
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Prosocial Excuse	−0.0001	−0.0001	−0.00000	0.00000
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Man		0.0001		−0.00001
		(0.0001)		(0.0001)
Age		0.00001*		0.00002+
		(0.00000)		(0.00000)
Constant	0.0003+	−0.0001	0.001+	−0.0002
	(0.00005)	(0.0001)	(0.0001)	(0.0002)
Controls?	No	Yes	No	Yes
Observations	402,931	402,931	402,931	402,931
R^2	0.00001	0.00005	0.00001	0.0001
Note:				+ p<0.1; * p<0.05; ** p<0.01; *** p<0.001

Wald Tests for Email 1 Period: Without Controls: F(1, 402928) = 3.291, p = 0.0697 With Controls: F(1, 402926) = 3.360, p = 0.0668

Wald Tests for Full Campaign: Without Controls: F(1, 402928) = 1.614, p = 0.204 With Controls: F(1, 402926) = 1.700, p = 0.192

Heterogeneous Treatment Effects

Click Rate (DV1)

Table 14: Heterogeneous Treatment Effects on Click-Through Rates

	Dependent Variable: Clicked					
	Email 1			Full Campaign		
	(1)	(2)	(3)	(4)	(5)	(6)
Explicit	−0.0002	−0.0001	−0.00002	−0.00004	−0.0002	−0.0001
	(0.0002)	(0.0001)	(0.0001)	(0.0002)	(0.0002)	(0.0002)
Prosocial Excuse	−0.0001	−0.00004	0.00001	−0.0003	−0.0003^{+}	−0.0002
	(0.0002)	(0.0001)	(0.0001)	(0.0002)	(0.0002)	(0.0002)
Man	0.001***			0.001***		
	(0.0002)			(0.0003)		
Prosocial Excuse × Man	0.0001			−0.001		
	(0.0003)			(0.0004)		
Explicit × Man	0.0001			−0.00002		
	(0.0003)			(0.0004)		
Age (Centered)		0.00004***			0.0001***	
		(0.00001)			(0.00001)	
Prosocial Excuse × Age		0.00000			0.00001	
		(0.00001)			(0.00001)	
Explicit × Age		0.00000			−0.00000	
		(0.00001)			(0.00001)	
Prior Click			0.117***			0.137***
			(0.012)			(0.013)
Prosocial Excuse × Prior Click			−0.018			−0.020
			(0.016)			(0.017)
Explicit × Prior Click			−0.006			−0.008
			(0.017)			(0.018)
Constant	0.001***	0.001***	0.001***	0.002***	0.003***	0.002***
	(0.0001)	(0.0001)	(0.0001)	(0.0002)	(0.0001)	(0.0001)
Observations	402,931	402,931	402,931	402,931	402,931	402,931
R^2	0.0001	0.0003	0.051	0.0002	0.001	0.039
Note:						+ p<0.1; * p<0.05; ** p<0.01; *** p<0.001

Wald Tests for Interaction Terms:

Email 1 Period: Gender Interactions: F(1, 402925) = 0.022, p = 0.882

Age Interactions: F(1, 402925) = 0.022, p = 0.882

Prior Click Interactions: F(1, 402925) = 0.595, p = 0.44

Full Campaign: Gender Interactions: $F(1, 402925) = 1.543$, $p = 0.214$

Age Interactions: $F(1, 402925) = 0.752$, $p = 0.386$

Prior Click Interactions: $F(1, 402925) = 0.479$, $p = 0.489$

Click Rate (intention-action gap)

Email 1 Period

Metric	Control	Explicit	Prosocial.Excuse
Clicked N (%)	182 (0.136%)	164 (0.123%)	176 (0.13%)
Donated N (%)	3 (0.00224%)	2 (0.0015%)	5 (0.00368%)
P(Donation | Click) (%)	1.65%	1.22%	2.84%

Full Campaign

Metric	Control	Explicit	Prosocial.Excuse
Clicked N (%)	353 (0.263%)	322 (0.242%)	311 (0.229%)
Donated N (%)	20 (0.01491%)	14 (0.01052%)	23 (0.01694%)
P(Donation | Click) (%)	5.67%	4.35%	7.4%

Analysis of P(Donation | Click)

Table 17: OLS Model Results for P(Donation | Click)

	Dependent Variable:	
	Donated (Email 1)	
	(1)	(2)
Explicit	−0.004	−0.016
	(0.013)	(0.017)
Prosocial Excuse	0.012	0.017
	(0.016)	(0.019)
Constant	0.016^{***}	0.057^{+}
	(0.009)	(0.012)
Observations	522	986
R^2	0.002	0.003
Note:	+ p<0.1; * p<0.05; ** p<0.01; *** p<0.001	

Wald Tests for Email 1 Period: Without Controls: F(1, 519) = 1.128, p = 0.289

Wald Tests for Full Campaign: Without Controls: F(1, 983) = 3.291, p = 0.07

Additional Analyses

Distribution of Prior Clicks

Table 18: Distribution of Prior Clicks by Condition

Condition	Prior Click N (%)
Control	748 (0.56%)
Explicit	756 (0.57%)
Prosocial Excuse	726 (0.53%)
Total	2230 (0.55%)

Table 19: OLS Model for Prior Clicks by Condition

	Dependent Variable:
	Prior Click
Explicit	0.0001
	(0.0003)
Prosocial Excuse	−0.0002
	(0.0003)
Constant	0.006***
	(0.0002)
Observations	402,931
R^2	0.00000
Note:	+ p<0.1; * p<0.05; ** p<0.01; *** p<0.001

Wald Test for Prior Clicks: F(1, 402928) = 1.351, p = 0.245

Donation Incidence (DV2) Among Email Openers

Donations Among Email 1 Openers

Table 20: Donation Behavior Among Email 1 Openers

condition	n_openers	Donated N (%)	Total Amount
Control	66140	3 (0.005%)	$225
Explicit	65714	2 (0.003%)	$150
Prosocial Excuse	66206	5 (0.008%)	$600

Donations Among All Email Openers

Table 21: Donation Behavior Among All Email Openers

condition	n_openers	Donated N (%)	Total Amount
Control	78969	20 (0.025%)	$1,930
Explicit	78116	14 (0.018%)	$1,045
Prosocial Excuse	78907	23 (0.029%)	$2,560

Table 22: OLS Models for Donation Incidence Among Email Openers

	Dependent Variable:	
	Donated (Email 1 Openers)	Donated (All Email Openers)
	(1)	(2)
Explicit	−0.00001	−0.0001
	(0.00003)	(0.0001)
Prosocial Excuse	0.00003	0.00004
	(0.00004)	(0.0001)
Constant	0.00005*	0.0003***
	(0.00003)	(0.0001)
Observations	198,060	235,992
R^2	0.00001	0.00001
Note:	+p<0.1; *p<0.05; **p<0.01; ***p<0.001	

Wald Tests for Donation Incidence Among Email Openers: Email 1 Openers: F(1, 198057) = 1.268, p = 0.26

All Email Openers: F(1, 235989) = 2.105, p = 0.147

Donation Amount (DV3) Among Email Openers

Table 23: OLS Models for Donation Amount (Raw) Among Email Openers

	Dependent Variable:	
	Amount (Email 1 Openers)	Amount (All Email Openers)
	(1)	(2)
Explicit	−0.001	−0.011
	(0.003)	(0.007)
Prosocial Excuse	0.006	0.008
	(0.005)	(0.010)
Constant	0.003*	0.024***
	(0.002)	(0.006)
Observations	198,060	235,992
R^2	0.00001	0.00002
Note:		+p<0.1; *p<0.05; **p<0.01; ***p<0.001

Wald Tests for Donation Amount (Raw) Among Email Openers: Email 1 Openers: F(1, 198057) = 1.893, p = 0.169

All Email Openers: F(1, 235989) = 4.712, p = 0.03

Table 24: OLS Models for Donation Amount (Log-Transformed) Among Email Openers

	Dependent Variable:	
	Log Amount (Email 1 Openers)	Log Amount (All Email Openers)
	(1)	(2)
Explicit	−0.0001	−0.0004
	(0.0001)	(0.0003)
Prosocial Excuse	0.0002	0.0002
	(0.0002)	(0.0004)
Constant	0.0002*	0.001***
	(0.0001)	(0.0003)
Observations	198,060	235,992
R^2	0.00001	0.00001
Note:		+p<0.1; *p<0.05; **p<0.01; ***p<0.001

Wald Tests for Donation Amount (Log-Transformed) Among Email Openers: Email 1 Openers: F(1, 198057) = 1.482, p = 0.223

All Email Openers: F(1, 235989) = 2.671, p = 0.102

Wald Tests for Donation Amount (Outliers Removed) Among Email Openers: Email 1 Openers: F(1, 198056) = 0.900, p = 0.343

Table 25: OLS Models for Donation Amount (Outliers Removed) Among Email Openers

	Dependent Variable:	
	Amount (Email 1 Openers)	Amount (All Email Openers)
	(1)	(2)
Explicit	−0.001	−0.005
	(0.003)	(0.006)
Prosocial Excuse	0.002	0.002
	(0.003)	(0.006)
Constant	0.003*	0.018***
	(0.002)	(0.004)
Observations	198,059	235,986
R^2	0.00000	0.00000
Note:		+p<0.1; *p<0.05; **p<0.01; ***p<0.001

All Email Openers: F(1, 235983) = 1.105, p = 0.293

Baseline Balance Checks

Table 26: Baseline Variables by Condition (Full Sample)

condition	N	Age_Mean	Age_SD	Male_Percentage	Prior_Click_Percentage
Control	134114	51.65	15.03	39.56	0.5577
Explicit	133081	51.39	14.99	39.66	0.5681
Prosocial Excuse	135736	51.6	15.09	39.71	0.5349

Table 27: Baseline Balance Checks (Full Sample)

	Dependent Variable:		
	Age	Man	Prior Click
	(1)	(2)	(3)
Explicit	-0.267^{***}	0.001	0.0001
	(0.058)	(0.002)	(0.0003)
Prosocial Excuse	-0.056	0.001	-0.0002
	(0.058)	(0.002)	(0.0003)
Constant	51.654^{***}	0.396^{***}	0.006^{***}
	(0.041)	(0.001)	(0.0002)
Observations	402,931	402,931	402,931
R^2	0.0001	0.00000	0.00000
Note:	+p<0.1; *p<0.05; **p<0.01; ***p<0.001		

Wald Tests for Baseline Differences (Full Sample): Age: F(1, 402928) = 13.202, p = 0.00028

Man: F(1, 402928) = 0.073, p = 0.787

Prior Click: F(1, 402928) = 1.351, p = 0.245

Table 28: Baseline Variables by Condition (Email Openers)

condition	N	Age_Mean	Age_SD	Male_Percentage	Prior_Click_Percentage
Control	78969	51.52	14.84	37.83	0.7193
Explicit	78116	51.44	14.8	38.04	0.763
Prosocial Excuse	78907	51.55	14.81	37.94	0.6894

Table 29: Baseline Balance Checks (Email Openers)

	Dependent Variable:		
	Age	Man	Prior Click
	(1)	(2)	(3)
Explicit	−0.088	0.002	0.0004
	(0.075)	(0.002)	(0.0004)
Prosocial Excuse	0.025	0.001	−0.0003
	(0.075)	(0.002)	(0.0004)
Constant	51.525***	0.378***	0.007***
	(0.053)	(0.002)	(0.0003)
Observations	235,992	235,992	235,992
R^2	0.00001	0.00000	0.00001
Note:	+p<0.1; *p<0.05; **p<0.01; ***p<0.001		

Wald Tests for Baseline Differences (Email Openers): Age: F(1, 235989) = 2.277, p = 0.131

Man: F(1, 235989) = 0.146, p = 0.702

Prior Click: F(1, 235989) = 2.945, p = 0.0862