Supplementary Materials for "Does Q&A Boost Engagement? Health Messaging Experiments in the US and Ghana"

Erika L. Kirgios*, Susan Athey, Angela L. Duckworth, Dean Karlan, Michael Luca, Katherine L. Milkman, Molly Offer-Westort

*Correspondence to: erika.kirgios@chicagobooth.edu

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Additional Implementation Details

Study 1

Crafting Messages. We partnered with Innovations for Poverty Action (IPA) to implement our intervention in Ghana. We began working with them in April 2020 to craft the messages included in the intervention (see Table 19). Two of the authors participated in focus groups with Ghanaian citizens to learn more about public opinions about COVID-19, frequent misconceptions about the virus, and specific misinformation that had taken hold in Ghana. These focus groups informed an initial draft of the intervention messages. The initial draft was then run by a group of Ghanaian IPA employees who edited portions of the content to reflect the cultural and economic context. Finally, a group of doctors and public health professionals vetted our messages for accuracy.

Opting in. The IPA team in Ghana contacted citizens via random digit dialing. They then responded to a survey that allowed them to opt in for the text messaging intervention. During the survey, we reassured them that we would pay for all the messages (including their replies) sent during the intervention. Because the technology we used to send messages was not capable of coordinating across different opt-in dates, all participants started the intervention on the same day regardless of when they opted in. As a result, some participants had to wait several months between opting into the intervention and receiving their first message. We control for this wait time in all our preregistered regressions in Study 1.

Sending Messages. Due to delays in the phone lines in Ghana and glitches with the technology we used, we had to stretch the intervention from four weeks to eight weeks. During those eight weeks, we realized that response rates to our messages were quite low. After discussing with the IPA team in Ghana, we considered several potential reasons for the low response rates: (1) legibility of the messages—because all texts were sent in English, it's

possible that a large subset of our participant pool couldn't understand the texts; (2) concerns about costs—because of the delay between the opt-in survey and the text intervention, participants may have forgotten that all costs were covered and been concerned about the cost of replying; (3) failure to receive messages—delays in phone lines combined with old phone technology that cuts off texts when memory capacity is reached may have prevented participants from receiving our messages; or (4) lack of interest.

To explore which of these may be driving low response rates, we conducted a second IVR survey through IPA on day 41 of our intervention. Unfortunately, the IPA team accidentally launched the IVR survey to participants in the *Q&A* condition only and had to re-launch the IVR for participants in the *direct statement* condition on day 48.

Each participant received two calls unless they answered on the first attempt. Overall, 3,181 participants responded to the survey. The survey reminded them about the intervention and asked them if they had not responded because they could not understand the texts, because they were worried responding had cost them money, because they didn't receive a message, or for any other reason, including disinterest. Overall, the most listed reason was concern about messaging costs (35.8%). 18.0% of participants said they could not read or understand the texts, 22.0% said they weren't receiving the texts, and 23.3% said they hadn't responded for other reasons. These results suggest that our intervention in Ghana may be a conservative test of the effectiveness of Q&A-style message delivery: many participants may not have been treated at all, either due to being unable to read the messages or due to technology issues that prevented them from receiving the messages.

Study 2

Crafting Messages. We collaborated with the Michigan Department of Health and Human Services to craft text messages that would be informative for state residents. All messages were additionally vetted by a group of doctors and public health professionals to ensure their accuracy.

Opting in. All residents who had opted in to receive messages from state services received texts asking them to opt into the intervention and confirm that they were at least 18 years of age or older (see Table 20). The day after participants opted in, the intervention began. Participants could opt out of the intervention at any time by pressing “STOP”. Participants could opt back in by texting “UNSTOP” and resume where they had left off, but no participants did so.

Study 3

Crafting Messages. We pre-tested six different potential facts (and corresponding questions) for our Facebook quasi-experiment. Our pre-test included 296 participants on Amazon Mechanical Turk. Participants rated the importance, interestingness, and surprisingness of each of the six facts (presented in randomized order) on 7-point Likert scales. They also indicated how much learning the fact would make them want to read more about COVID-19 vaccines.

The six facts included: (1) that you can travel without quarantining and socialize indoors with other vaccinated people after being vaccinated; (2) that you're only fully protected by the vaccine two weeks after receiving your second shot; (3) that you still need to wear a mask if you're indoors with non-vaccinated people; (4) that everyone over 16 is eligible for the vaccine and the vaccine is completely free for all age groups; (5) that the vaccine will not infect you with the live COVID-19 virus; and (6) that the COVID-19 vaccine will prevent you from contracting a severe case of COVID-19 and will help reduce the spread in your community. All six facts were pulled from the CDC website.

Ultimately, fact #1 was rated as the most interesting, most surprising, and most likely to encourage them to read more about vaccines (though fact #4 was rated as the most important fact). So, we adapted fact #1 to create our Facebook ad stimuli.

Randomization. Behind the scenes, Facebook randomizes users into two audiences, and then the two ads are run separately. The factors that are equivalent across treatment and control group are (1) the characteristics of the candidate audience (i.e., the population of users who could *potentially* see the ad, depending on bidding outcomes) and (2) daily spend.

The A/B test for this implementation experiment was designed to optimize for link clicks, so, every day, the algorithm tried to buy as many clicks as possible within the budget. To do that,

it set a bid that it estimated would exhaust the daily budget. While we don't know the details of how bidding is optimized within each the day, the daily spend was very close to our target each day. This was particularly true after the burn-in period, when the algorithm had learned how to optimize for each ad.

This randomization strategy means that the outcomes that can be evaluated as if they are outcomes from a randomized experiment are measurements like impressions per dollar and clicks per dollar, or just impressions and clicks since dollar spend is essentially the same between treatment and control. This outcome is scientifically meaningful because it is possible to buy more clicks per dollar when you have an ad that users are likely to click on. Behind the scenes, Facebook is learning which ad is more clickable, and the outcome is a consequence of that.

The ad bidding strategy. The ad auction takes place at a per-impression level; there is a block in the newsfeed where an ad could go, and Facebook holds an auction for that space among all relevant advertisers. The algorithm will roughly estimate the click rate for the ad, and the ad will be viewed as better for users if it gets more clicks. The click rate is estimated at the individual level (demographics will be features in this estimation). The ad's estimated quality, including its click rate, will boost the ad in the auction, and an ad with higher estimated quality will get more impressions per dollar and more clicks per dollar. It will happen that demographics are correlated with estimated click rate, so that some demographics will see more impressions than others for a given ad once Facebook learns about the ad. Given that ads may be differentially attractive to different subsets of users, this can lead to imbalances in the population of users who see each ad across conditions. Indeed, we found such imbalances in our data (see Table 19).

Why can't we analyze clicks per user who viewed the ad, as originally preregistered? The number of users who saw each ad is endogenous, given that Facebook's bidding strategy implies that more effective ads will be seen by more users. In other words, the number of impressions (and the frequency of impressions per person—we did not include frequency capping, so users could see the same ad many times) vary systematically between treatment and control groups in a Facebook A/B test. If one ad is performing better, it will win more auctions than the other, and get more impressions. Moreover, the marginal impressions are systematically different than the average impressions. The better performing ad will be shown to people who are overall less "clicky" for ads like ours and less engaged in our types of ads than the worse performing ad, as the good performance of the better performing ad will lead it to win more marginal auctions for these marginal people.

A consequence of the auction mechanics is that the marginal ad viewers for the better performing ad are users who are, by definition, less likely to click on the ad—which means that the overall average click-through-rate of the better performing ad is mechanically likely to decrease. So, comparing click-through-rate can understate treatment effects.

Daily variation. The cost per impression overall and for the demographics where our ad performs well will vary day-to-day based on holidays, weather, and any other factors that drive Facebook engagement. Bids are entered in auctions for all the people who show up on Facebook that day, where competitors can change day-to-day, and many are setting a daily budget and trying to get as many impressions or clicks that day as possible, possibly subject to a maximum cost. If there are more advertising dollars in the market on a given day, less engagement, or the engagement mix shifts, then the number of impressions purchased will adjust. In general, when the residual supply of impressions shifts, the residual quality will also change. As a result, the

average impression one day doesn't have the same intrinsic propensity to click as on another day. This is why we include day fixed effects in our analyses.

Facebook's algorithm needs time to learn about the overall quality of the ad as well as which types of users are likely to click on it. In the early stages of the experiment, as data is gathered, performance and the user mix seeing the ad can fluctuate. Figure 1 shows how unique clicks change over time. Both the *Q&A* and *direct statement* ads improved in performance over time, likely because during the burn-in period, Facebook learned (1) that our ads were high-quality and (2) how to most effectively target our ads. Moreover, our ad budget began to run out towards the end of the experiment, so there is more instability in performance during the last few days. This is why we present analyses both with and without filtering to remove the first and last few days of data in our manuscript.

Robustness Checks. We present several robustness checks: we look at our analyses using Poisson regressions rather than log-linear regressions, and we also present regressions adjusting for serial correlation. Finally, we present analyses further restricting the days included in our dataset. The results of these analyses are in Tables 20 and 21. Further robustness checks and analyses that examine other dependent variables (e.g., overall clicks and unique impressions) are in the code presented in our OSF folder (https://osf.io/5ab26/?view_only=89071e3ae7464bda810b0870aa6266c1).

Additional Analyses

Study 1:

Self-reported behaviors to prevent the spread of COVID-19. In addition to information seeking and information sharing, we also collected a third category of dependent variables: self-reported adherence to recommended health behaviors. On four occasions, participants were asked questions about self-reported behaviors (i.e., how many days they had traveled via public transportation during the past week, how many days they had left home for social reasons in the past week, whether they had washed their hands after their most recent outing, and whether they had physical contact with someone outside their household during the past week). When necessary, the variables were reverse-scored such that higher numbers indicated more adherence to public health recommendations. As preregistered, we analyzed the effect of experimental condition on each behavior individually and created a behavior change composite variable by z-scoring each of the four self-reported behaviors and averaging them together.

Unfortunately, the <1.5% response rates to these questions make it impossible for us to confidently infer whether our intervention impacted these self-reported behaviors. While a non-response for our information seeking and sharing variables means that the participant did *not* seek or share information, a non-response for self-reported behavior does not offer any insight into whether the participant engaged in the given behavior. For the sake of transparency, we present the results of our preregistered analyses for these variables, with the caveat that these findings are significantly underpowered.

Response rates to our self-reported behavior questions were low but comparable across conditions. Specifically, 0.958% of participants in the *Q&A* condition and 0.853% of the participants in the *direct statement* condition responded to the question about using public

transportation on day 14 of the intervention (p = .552); 1.21% of participants in the *Q&A* condition and 1.03% of participants in the *direct statement* condition responded to the question about leaving home for social reasons on day 24 of the intervention (p = .339); 1.57% of participants in the *Q&A* condition and 1.50% of participants in the *direct statement* condition responded to the question about hand washing on day 35 of the intervention (p = .739). However, response rates on the last day of the intervention were significantly lower in the *Q&A* condition relative to the *direct statement* condition: 0.91% of participants in the *Q&A* condition and 1.45% of participants in the *direct statement* condition responded to the question about physical contact outside the household on day 52 of the intervention (p = .007).[1]

We conducted an ordinary least squares (OLS) regression predicting participants' behavior change composite score. As preregistered, we treat missing values as the "worst" possible response. Predictors in the regression included an indicator for assignment to the *Q&A* condition and a continuous control for the time difference (in days) between the date participants opted in to the study and the beginning of the intervention. We found no effect of experimental condition on this self-reported behavior change composite (beta = 0.002, SE = 0.011, p = .821). Indeed, there was no difference in adherence to recommended health behaviors on any of the four self-reported behaviors we collected (see Table 19 for the full stimuli and Table 1 for summary statistics for each of the four behaviors). For example, 1.13% and 1.18% of participants in the *Q&A* and *direct statement* conditions, respectively, indicated that they washed their hands after their last outing (p = .497).

[1] On day 41 of the intervention, our implementation partner launched an IVR survey to attempt to diagnose the low response rates to our text messages. Unfortunately, they accidentally launched the IVR survey to the *quiz-style* condition only. In order to attempt to fix this issue, they launched a new IVR survey to participants in the *direct statement* condition on day 48 of the intervention, shortly before the final self-reported behavior question was collected. This may explain why there was a difference in response rates on this final measure.

Study 2:

Response rates. We preregistered exploring whether there were any differences across conditions in response rates to the self-reported behavior variables in Study 2 examining, for example, whether delivering information in Q&A format increased willingness to respond to other messages. We report response rates to the self-reported behavior text messages in Table 4.

First, we compare response rates across the *Q&A* and *direct statement* conditions. As reported in the main manuscript, we found an overall regression-estimated 90.9% increase in self-reported adherence to recommended health behaviors in the *Q&A* condition relative to the *direct statement* condition. When examining response rates, we found a pattern that shifted throughout the intervention, with participants initially responding less frequently in the *Q&A* condition then shifting towards responding more frequently in that condition. Specifically, in week 1, participants in the *Q&A* condition were directionally less likely to reply to the self-reported behavior question than those in the *direct statement* condition (50.1% vs. 49.0%, p = .075). However, there was no difference in response rates to the self-reported behavior question in week 2 ($p = .643$), and in both weeks 3 and 4, participants' response rates to the self-reported behavior questions were higher in the *Q&A* condition than in the *direct statement* condition, even though more participants in the *Q&A* condition had opted out of the intervention and stopped receiving text messages. Specifically, 29.3% of participants in the *Q&A* condition replied to the week 3 self-reported behavior question while only 24.6% of participants in the *direct statement* condition replied ($p < .001$); in week 4, response rates were 29.5% and 26.7% in the *Q&A* and *direct statement* conditions, respectively ($p < .001$).

Next, we compared response rates across the *information provision* condition (the pooled *Q&A* and *direct statement* conditions) and the *no-treatment control* condition. Participants

responded to the self-reported behavior questions significantly less often in the *information provision* condition than in the *no-treatment control* condition across weeks 1, 2, and 4 (all p's < .001). In week 3, response rates did not differ significantly across conditions (p = .382). These results are unsurprising given that far more participants opted out of the experiment in the *information provision* condition than in the *no-treatment control* condition.

Supplementary Tables

Study 1

Table 1. Summary statistics for all dependent variables, response rates to self-reported behaviors, and message count across the Direct Statement and Q&A conditions in Study 1.

	Summary statistics (Means, proportions, and p-values for differences calculated via proportions tests for binary DVs and t-tests for continuous DVs)				Response Rates (Proportions and p-values for differences calculated via proportions test)			Minimum # of texts received prior to DV collection	
Dependent Variable	Direct Statement	Q&A	p-value	95% CI	Direct Statement	Q&A	p-value	Direct Statement	Q&A
How many of the past 7 days did the participant report traveling via public transport? (Day 14)	0.041	0.041	0.987	[-0.017, 0.017]	0.853%	0.958%	0.552	4	6
How many of the past 7 days did the participant report leaving home for non-essential reasons? (Day 24)	0.043	0.049	0.527	[-0.024, 0.012]	1.028%	1.215%	0.339	11	15
Did participant report washing their hands thoroughly the last time they returned from an outing? (Day 35)	1.184%	1.318%	0.519	[-0.538, 0.272]	1.498%	1.574%	0.739	18	24
[Reverse scored] Did participant report touching, hugging, or shaking hands with anyone outside household? (Day 52)	0.540%	0.428%	0.384	[-0.141, 0.365]	1.446%	0.907%	0.007	23	31
Behavior Change Composite	-0.001	0.001	0.857	[-0.023, 0.019]	--	--	--	--	--
Did participant request more information about mask-wearing? (Day 11)	0.368%	2.447%	< .001	[-2.507, -1.655]	--	--	--	3	5
Did participant request access to more general information about COVID-19? (Day 14)	1.324%	1.454%	0.548	[-0.557, 0.296]	--	--	--	6	8

Did participant request more information about leaving home safely? (Day 21)	0.383%	0.787%	0.004	[-0.681, -0.127]	--	--	--	10	14
Did participant request more information about at-risk populations? (Day 28)	0.522%	0.770%	0.097	[-0.539, 0.044]	--	--	--	15	20
Did participant request access to more general information about COVID-19? (Day 52)	2.822%	2.225%	0.04	[0.026, 1.169]	--	--	--	25	33
Information Seeking Composite	0.054	0.077	< .001	[-0.035, -0.010]	--	--	--	--	--
Topic-Specific Information Seeking (Exploratory)	0.013	0.040	< .001	[-0.034, -0.020]	--	--	--	--	--
General Information Seeking (Exploratory)	0.041	0.037	.238	[-0.003, 0.012]	--	--	--	--	--
Number of Phone Numbers Shared	0.001	0.002	0.108	[-0.003, .0003]	0.226%	0.394%	0.106	13	17
Time lag between recruitment and intervention (in days)	93.974	95.097	0.247	[-3.024, 0.778]	--	--	--	--	--

Note. This table shows summary statistics for Study 1 as well as the results of preregistered two-tailed, independent samples t-tests and proportions tests comparing the *direct statement* and *Q&A* conditions. Specifically, the first four columns report the mean (or proportion) of self-reported compliance with recommended health behaviors across conditions, take-up of information seeking opportunities, and number of phone numbers shared, as well as the p-value and 95% confidence interval for the difference in means (or proportions) as calculated by a t-test (or proportions test). As preregistered, missing values due to non-response for each self-reported behavior DV are replaced with the "worst" possible response (i.e., maximum non-compliance). Moreover, the behavioral DV collected on day 52 is reverse scored (i.e., responding "yes" was coded as 0, and "no" as 1), consistent with our preregistration. The next three columns report the response rates across conditions for the behavior change and information sharing variables, as well as the p-value for the difference in response rates calculated via a proportions test. The final two columns report the minimum number of texts received prior to collection of a particular DV across conditions.

Table 2. Regression-Estimated Effects of Q&A Treatment on Each Distinct Information Seeking Opportunity in Study 1.

	Model 1 *Outcome: Did participant request more information about mask-wearing? (Intervention day 11)*			**Model 2** *Outcome: Did participant request access to more general information about COVID-19? (Intervention day 14)*			**Model 3** *Outcome: Did participant request more information about leaving home safely? (Intervention day 21)*			**Model 4** *Outcome: Did participant request more information about at-risk populations? (Intervention day 28)*			**Model 5** *Outcome: Did participant request access to more general information about COVID-19? (Intervention day 52)*		
	b	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**
Q&A Condition	0.021	[0.017, 0.025]	<.001	0.001	[-0.003, 0.006]	0.524	0.004	[0.001, 0.007]	0.004	0.003	[-0.000, 0.005]	0.091	-0.006	[-0.012, -0.000]	0.045
Days elapsed between recruitment and start of intervention	-0.000	[-0.000, -0.000]	<.001	-0.000	[-0.000, -0.000]	.001	-0.000	[-0.000, -0.000]	<.001	-0.000	[-0.000, -0.000]	.003	-0.000	[-0.000, -0.000]	<.001
Observations		11585			11585			11585			11585			11585	
Adjusted R^2		0.009			0.001			0.001			0.001			0.002	

Note. This table reports the results of five ordinary least squares (OLS) regression models with robust standard errors predicting whether participants responded affirmatively to each information seeking opportunity in Study 1. The first regression model predicts whether a given participant in Study 1 requested more information about how to wear masks properly on day 10 of the intervention (Model 1, preregistered). The second regression model predicts whether a given participant in Study 1 requested access to a resource with more general information about COVID-19 on day 13 of the intervention (Model 2, preregistered). The third regression model predicts whether a given participant in Study 1 requested more information about how to leave home safely when necessary on day 20 of the intervention (Model 3, preregistered). The fourth regression model predicts whether a given participant in Study 1 requested more information about at-risk populations on day 27 of the intervention (Model 4, preregistered). The fifth regression model predicts whether a given participant in Study 1 requested access to a resource with more general information about COVID-19 on day 51 of the intervention (Model 5, preregistered). All models show the main effect of assignment to the Q&A condition. The models also include a continuous control for the number of days prior to the intervention start date that the participant was recruited.

Table 3. Regression-Estimated Effects of Q&A Treatment on Each Distinct Information Seeking Opportunity in Study 1 Using Logistic Regression.

	Model 1 *Outcome: Did participant request more information about mask-wearing? (Intervention day 11)*			**Model 2** *Outcome: Did participant request access to more general information about COVID-19? (Intervention day 14)*			**Model 3** *Outcome: Did participant request more information about leaving home safely? (Intervention day 21)*			**Model 4** *Outcome: Did participant request more information about at-risk populations? (Intervention day 28)*			**Model 5** *Outcome: Did participant request access to more general information about COVID-19? (Intervention day 52)*		
	b	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**
Q&A Condition	1.933	[1.497, 2.421]	<.001	0.103	[-0.209, 0.416]	0.519	0.733	[0.236, 1.261]	0.005	0.400	[-0.059, 0.872]	0.091	-0.238	[-0.473, -0.005]	0.046
Days elapsed between recruitment and start of intervention	-0.007	[-0.011, -0.004]	<.001	-0.006	[-0.009, -0.002]	<.001	-0.007	[-0.013, -0.002]	<.001	-0.007	[-0.013, -0.002]	.004	-0.005	[-0.008, -0.003]	<.001
Observations		11585			11585			11585			11585			11585	
McFadden R^2		0.069			0.007			0.020			0.013			0.008	

Note. This table reports the results of five logistic regression models predicting whether participants responded affirmatively to each information seeking opportunity in Study 1. The first regression model predicts whether a given participant in Study 1 requested more information about how to wear masks properly on day 10 of the intervention (Model 1, preregistered). The second regression model predicts whether a given participant in Study 1 requested access to a resource with more general information about COVID-19 on day 13 of the intervention (Model 2, preregistered). The third regression model predicts whether a given participant in Study 1 requested more information about how to leave home safely when necessary on day 20 of the intervention (Model 3, preregistered). The fourth regression model predicts whether a given participant in Study 1 requested more information about at-risk populations on day 27 of the intervention (Model 4, preregistered). The fifth regression model predicts whether a given participant in Study 1 requested access to a resource with more general information about COVID-19 on day 51 of the intervention (Model 5, preregistered). All models show the main effect of assignment to the Q&A condition. The models also include a continuous control for the number of days prior to the intervention start date that the participant was recruited.

Study 2, Comparisons Across Q&A and Direct Statement Conditions

Table 4. Summary statistics for all dependent variables, response rates to self-reported behaviors, and message count across the Direct Statement and Q&A conditions in Study 2.

	Summary statistics (Means, proportions, and p-values for differences calculated via proportions tests for binary DVs and t-tests for continuous DVs)				Response Rates (Proportions and p-values for differences calculated via proportions test)			Minimum # of texts received prior to DV collection	
Dependent Variable	Direct Statement	Q&A	p-value	95% CI	Direct Statement	Q&A	p-value	Direct Statement	Q&A
Did the participant report always wearing a masking when leaving home? (Day 5)	46.401%	44.857%	0.017	[0.273, 2.817]	50.113%	48.952%	0.073	4	6
How many of the past 7 days did the participant report leaving home for non-essential reasons? (Day 12)	2.419	2.438	0.643	[-0.102, 0.063]	36.636%	36.933%	0.634	11	15
Did participant report washing their hands thoroughly the last time they returned from an outing? (Day 20)	21.925%	26.773%	<.001	[-5.954, -3.752]	24.627%	29.288%	< .001	18	24
[Reverse scored] Did participant report touching, hugging, or shaking hands with anyone outside household? (Day 28)	20.407%	22.458%	<.001	[-3.100, -1.002]	26.700%	29.531%	< .001	25	32
Behavior Change Composite	-0.039	-0.004	<.001	[-0.053, -0.016]	--	--	--	--	--
Behavior Change Composite (Binary)	1.183	1.235	.002	[-0.085, -0.018]	--	--	--	--	--
Did participant request access to more general information about COVID-19? (Day 5)	9.682%	8.344%	< .001	[0.603, 2.073]	--	--	--	6	8
Did participant request more information about mask-wearing? (Day 10)	4.220%	6.022%	<.001	[-2.370, -1.235]	--	--	--	10	14
Did participant request more information about	7.322%	8.764%	<.001	[-2.140, -.744]	--	--	--	17	23

leaving home safely? (Day 18)									
Did participant request more information about at-risk populations? (Day 23)	5.279%	5.223%	0.87	[-0.519, 0.630]	--	--	--	22	28
Did participant request access to more general information about COVID-19? (Day 28)	8.631%	7.738%	0.013	[0.190, 1.600]	--	--	--	27	34
Information Seeking Composite	0.351	0.361	0.358	[-0.030, 0.011]	--	--	--	--	--
Topic-Specific Information Seeking (Exploratory)	0.168	0.200	< .001	[0.019, 0.045]	--	--	--	--	--
General Information Seeking (Exploratory)	0.183	0.161	< .001	[-0.034, -0.011]	--	--	--	--	--
Number of Phone Numbers Shared	0.021	0.020	0.660	[-0.003, 0.005]	2.435%	2.027%	0.033	13	17
Date participants opted into study (expressed as days since the first participant opted in on Day 0)	26.979	27.163	0.303	[-0.175, 0.562]	--	--	--	--	--

Note. This table shows summary statistics for Study 2 as well as the results of preregistered two-tailed, independent samples t-tests and proportions tests comparing the *direct statement* and *Q&A* conditions. Specifically, the first four columns report the mean (or proportion) of self-reported compliance with recommended health behaviors across conditions, take-up of information seeking opportunities, and number of phone numbers shared, as well as the p-value and 95% confidence interval for the difference in means (or proportions) as calculated by a t-test (or proportions test). As preregistered, missing values due to non-response for each self-reported behavior DV are replaced with the "worst" possible response (i.e., maximum non-compliance). Moreover, the behavioral DV collected on day 28 is reverse scored (i.e., responding "yes" was coded as 0, and "no" as 1), consistent with our preregistration. The next three columns report the response rates across conditions for the behavior change and information sharing variables, as well as the p-value for the difference in response rates calculated via a proportions test. The final two columns report the minimum number of texts received prior to collection of a particular DV across conditions.

Table 5. Regression-Estimated Effects of Q&A Treatment Relative to Direct Statements on Binary Self-Reported Behaviors in Study 2 Using Logistic Regression.

	Model 1 *Outcome: Did the participant report always wearing a masking when leaving home? (Day 5)*			**Model 2** *Outcome: Did participant report washing their hands thoroughly the last time they returned from an outing? (Day 20)*			**Model 3** *Outcome: Did participant report touching, hugging, or shaking hands with anyone outside household? (Day 28)*		
	b	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**
Q&A Condition	-0.061	[-0.112, -0.010]	.018	0.265	[0.205, 0.324]	<.001	0.122	[0.060, 0.184]	<.001
Time between recruitment and intervention	-0.005	[-0.007, -0.004]	<.001	-0.003	[-0.005, -0.001]	.001	-0.000	[-0.002, 0.002]	.804
Observations		29810			29810			29810	
McFadden R^2		0.007			0.003			0.001	

Note. This table reports the results of three logistic regression models predicting self-reported adherence to public health guidelines for each of the three binary behavioral questions collected during the intervention among Study 2 participants. Comparisons between the *Q&A* and *direct statement* conditions are derived from Wald tests, as preregistered. In each case, as preregistered, missing values are replaced with the "worst" possible response (i.e., maximal non-compliance). The first regression model predicts whether a given Study 2 participant reported always wearing a mask when leaving home (Model 1, preregistered). The second regression model predicts whether a given Study 2 participant reported washing their hands thoroughly the last time they returned from an outing (Model 2, preregistered). The third regression model predicts whether a given Study 2 participant reported touching, hugging, or shaking hands with anyone outside their household, reverse-scored such that "1" represents not touching anyone outside their household, and "0" represents touching someone outside their household (Model 3, preregistered). All models show the main effect of assignment to the Q&A condition. The models also include a continuous control for the day the participant was recruited and an indicator for assignment to the *no-treatment control* condition (not shown here; see Table 13 for results comparing the *no-treatment control* condition to the *information provision* condition using logistic regression).

Table 6. Preregistered robustness checks for regression-estimated effects of the Q&A condition relative to the Direct Statement condition on self-reported behaviors in Study 2.

	(1) Replacing Missing Values with "Worst" Response (Pre-Registered)			(2) Replacing Missing Values with "Best" Response			(3) Replacing Missing Values with Average Response (Pre-Registered, Exploratory)			(4) Removing Missing Values (Pre-Registered, Exploratory)		
	Treatment Effect	p-value	95% CI	Treatment Effect	p-value	95% CI	Treatment Effect	p-value	95% CI	Treatment Effect	p-value	95% CI
Did the participant report always wearing a masking when leaving home? (Day 5)	-0.015 (0.006)	0.018	[-0.028, -0.003]	-0.004 (0.003)	0.120	[-0.009, 0.001]	-0.005 (0.003)	.058	[-0.010, 0.000]	-0.010 (0.005)	0.054	[-0.019, 0.000]
How many of the past 7 days did the participant report leaving home for non-essential reasons? (Day 12)	0.022 (0.042)	0.605	[-0.061, 0.105]	-0.001 (0.009)	0.890	[-0.019, 0.017]	0.000 (0.009)	0.993	[-0.017, 0.017]	0.000 (0.023)	0.988	[-0.046, 0.046]
Did participant report washing their hands thoroughly the last time they returned from an outing? (Day 20)	0.049 (0.006)	< .001	[0.038, 0.059]	0.002 (0.002)	0.372	[-0.002, 0.006]	0.006 (0.002)	0.001	[0.002, 0.010]	0.024 (0.007)	0.001	[0.009, 0.038]
[Reverse scored] Did participant report touching, hugging, or shaking hands with anyone outside household? (Day 28)	0.021 (0.005)	< .001	[0.010, 0.031]	-0.008 (0.003)	0.014	[-0.014, -0.002]	-0.001 (0.003)	0.674	[-0.007, 0.005]	-0.004 (0.010)	0.685	[-0.025, 0.016]
Behavior Change Composite	0.035 (0.010)	< .001	[0.016, 0.054]	-0.010 (0.007)	0.152	[-0.024, 0.004]	0.003 (0.007)	.684	[-0.011, 0.017]	0.029 (0.020)	0.147	[-0.010, 0.069]

Note. This table presents the results of preregistered robustness checks for the regression-estimated effects of the *Q&A* condition (relative to the *direct statement* condition) on self-reported behaviors in Study 2. Across all analyses, we preregistered using an OLS regression with robust standard errors with indicators for experimental condition and a control for the day participants opted into the intervention. Regression-estimated effects are reported for each of the four self-reported behavior variables as well as for the preregistered behavior change composite variable. The preregistered robustness checks all involve different methods for handling missing data due to participant non-response. The first model imputes the 'worst' possible response (i.e., full non-adherence) for missing values (our primary preregistered analysis, also reported in Manuscript Table 4); the second model imputes the 'best' possible

response (i.e., full adherence) for missing values; the third model imputes average responses for missing values; the fourth model removes missing values completely. For all models, we report the regression-estimated treatment effect, the p-value for the treatment effect, and the 95% confidence interval for the treatment effect.

Table 7. Summary statistics for binary-transformed self-reported behavior variables across the Direct Statement and Q&A conditions in Study 2.

	Summary Statistics (Proportions, means, and p-values and 95% confidence intervals for differences calculated via proportions tests for binary DVs and t-tests for continuous DVs)			
Dependent Variable	Direct Statement	Q&A	p-value	95% CI
Behavior Change Week 1 (Mask Wearing)	46.401%	44.857%	0.017	[0.273, 2.817]
Behavior Change Week 2 (Stayed Home Y/N)	29.547%	29.372%	0.777	[-0.010, 0.013]
Behavior Change Week 3 (Hand Washing)	21.925%	26.773%	<.001	[-5.9543, -3.752]
Behavior Change Week 4 (Physical Contact)	20.407%	22.458%	<.001	[-3.100, -1.002]
Behavior Change Score (out of 4)	1.182	1.235	0.002	[-0.085, -0.018]

Note. As an exploratory analysis, we converted all self-reported behaviors in Study 2 to binary variables where full adherence to public health recommendations (e.g., always wearing a mask) was coded as "1" and no or partial adherence (e.g., never or sometimes wearing a mask) was coded as "0". We also created an exploratory behavior change score summing the instances in which participants reported full adherence. This score can take on values between 0 and 4. This table reports the proportions for each variable and the mean of the behavior change score across the *direct statement* and *Q&A* conditions. The table also reports the p-values and 95% confidence intervals for the difference in proportions (or means) across conditions, calculated via two-tailed, independent samples proportions tests (or t-tests).

Table 8. Regression-Estimated Effects of Q&A Treatment relative to Direct Statements on Each Distinct Information Seeking Opportunity in Study 2.

	Model 1 *Outcome: Did participant request access to more general information about COVID-19? (Day 5)*			**Model 2** *Outcome: Did participant request more information about mask-wearing? (Day 10)*			**Model 3** *Outcome: Did participant request more information about leaving home safely? (Day 18)*			**Model 4** *Outcome: Did participant request more information about at-risk populations? (Day 23)*			**Model 5** *Outcome: Did participant request access to more general information about COVID-19? (Day 28)*		
	b	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**
Q&A Condition	-0.013	[-0.021, -0.005]	<.001	0.018	[0.012, 0.024]	<.001	0.014	[0.007, 0.022]	<.001	-0.001	[-0.006, 0.005]	.857	-0.009	[-0.016, -0.002]	.012
Days Between Intervention Launch and Participant Opt-in	-0.000	[-0.001, -0.000]	<.001	0.001	[0.001, 0.002]	<.001	-0.000	[-0.001, -0.000]	.005	-0.000	[-0.000, -0.000]	.032	-0.000	[-0.000, 0.000]	.084
Observations		29810			29810			29810			29810			29810	
Adjusted R^2		0.017			0.012			0.004			0.000			0.002	

Note. This table reports the results of five ordinary least squares (OLS) regression models with robust standard errors predicting whether participants responded affirmatively to each information seeking opportunity in Study 2. Comparisons between the *Q&A* and *direct statement* conditions are derived from Wald tests, as preregistered. The first regression model predicts whether a given participant in Study 2 requested access to resources with more general information about COVID-19 on day 5 of the intervention (Model 1, preregistered). The second regression model predicts whether a given participant in Study 2 requested more information about how to wear masks properly on day 10 of the intervention (Model 2, preregistered). The third regression model predicts whether a given participant in Study 2 requested more information about how to leave home safely when necessary on day 18 of the intervention (Model 3, preregistered). The fourth regression model predicts whether a given participant in Study 2 requested more information about at-risk populations on day 23 of the intervention (Model 4, preregistered). The fifth regression model predicts whether a given participant in Study 2 requested access to resources with more general information about COVID-19 on day 28 of the intervention (Model 5, preregistered). All models show the main effect of assignment to the Q&A condition. The models also include a continuous control for the day the participant was recruited and an indicator for assignment to the *no-treatment control* condition (not shown here; see Table 17 for results comparing the *no-treatment control* condition to the *information provision* condition).

Table 9. Regression-Estimated Effects of Q&A Treatment relative to Direct Statements on Each Information Seeking Opportunity in Study 2 Using Logistic Regression.

	Model 1 *Outcome: Did participant request access to more general information about COVID-19? (Day 5)*			**Model 2** *Outcome: Did participant request more information about mask-wearing? (Day 10)*			**Model 3** *Outcome: Did participant request more information about leaving home safely? (Day 18)*			**Model 4** *Outcome: Did participant request more information about at-risk populations? (Day 23)*			**Model 5** *Outcome: Did participant request access to more general information about COVID-19? (Day 28)*		
	b	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**
Q&A Condition	-0.163	[-0.252, -0.074]	<.001	0.371	[0.254, 0.488]	<.001	0.196	[0.103, 0.290]	<.001	-0.010	[-0.124, 0.103]	.857	-0.119	[-0.211, -0.026]	.012
Time between recruitment and intervention	-0.005	[-0.008, -0.003]	<.001	0.027	[0.023, 0.030]	<.001	-0.004	[-0.007, -0.001]	.005	-0.004	[-0.007, -0.000]	.032	-0.003	[-0.005, 0.000]	.083
Observations		29810			29810			29810			29810			29810	
McFadden R^2		0.022			0.027			0.006			0.001			0.001	

Note. This table reports the results of five logistic regression models predicting whether participants responded affirmatively to each information seeking opportunity in Study 2. Comparisons between the *Q&A* and *direct statement* conditions are derived from Wald tests, as preregistered. The first regression model predicts whether a given participant in Study 2 requested access to resources with more general information about COVID-19 on day 5 of the intervention (Model 1, preregistered). The second regression model predicts whether a given participant in Study 2 requested more information about how to wear masks properly on day 10 of the intervention (Model 2, preregistered). The third regression model predicts whether a given participant in Study 2 requested more information about how to leave home safely when necessary on day 18 of the intervention (Model 3, preregistered). The fourth regression model predicts whether a given participant in Study 2 requested more information about at-risk populations on day 23 of the intervention (Model 4, preregistered). The fifth regression model predicts whether a given participant in Study 2 requested access to resources with more general information about COVID-19 on day 28 of the intervention (Model 5, preregistered). All models show the main effect of assignment to the Q&A condition. The models also include a continuous control for the day the participant was recruited and an indicator for assignment to the *no-treatment control* condition (not shown here; see Table 18 for results comparing the *no-treatment control* condition to the *information provision* condition using logistic regression).

Study 2, Comparisons Across Information Provision and No-treatment Control Conditions

Table 10. Summary statistics for all dependent variables, response rates to self-reported behaviors, and message count across the Information Provision and No-treatment Control conditions in Study 2.

	Summary statistics (Means, proportions, and p-values for differences calculated via proportions tests for binary DVs and t-tests for continuous DVs)				Response Rates (Proportions and p-values for differences calculated via proportions test)			Minimum # of texts received prior to DV collection		
	Information Provision	No-treatment Control	p-value	95% CI	Information Provision	No-treatment Control	p-value	Direct Statement	Q&A	No-treatment Control
Did the participant report always wearing a masking when leaving home? (Day 5)	45.632%	56.509%	< .001	[-12.300, -9.455]	49.535%	61.669%	< .001	4	6	0
How many of the past 7 days did the participant report leaving home for non-essential reasons? (Day 12)	2.429	2.871	< .001	[-0.537, -0.350]	36.784%	43.794%	< .001	11	15	3
Did participant report washing their hands thoroughly the last time they returned from an outing? (Day 20)	24.338%	24.924%	0.356	[-1.824, 0.653]	26.947%	27.521%	0.382	18	24	7
[Reverse scored] Did participant report touching, hugging, or shaking hands with anyone outside household? (Day 28)	21.428%	24.081%	< .001	[-3.870, -1.436]	28.107%	31.096%	< .001	25	32	10
Behavior Change Composite	-0.021	0.086	< .001	[-0.128, 0.087]	--	--	--	--	--	--
Behavior Change Composite (Binary)	1.209	1.401	< .001	[-0.229, -0.155]	--	--	--	--	--	--
Did participant request access to more general information about COVID-19? (Day 5)	9.016%	18.954%	< .001	[-11.011, -8.866]	--	--	--	6	8	1
Did participant request more information about mask-wearing? (Day 10)	5.117%	8.246%	< .001	[-3.893, -2.365]	--	--	--	10	14	2

Did participant request more information about leaving home safely? (Day 18)	8.040%	11.838%	< .001	[-4.700, -2.896]	--	--	--	17	23	5
Did participant request more information about at-risk populations? (Day 23)	5.251%	6.358%	< .001	[-1.799, -0.413]	--	--	--	22	28	9
Did participant request access to more general information about COVID-19? (Day 28)	8.187%	7.808%	0.352	[-0.398, 1.156]	--	--	--	27	34	12
Information Seeking Composite	0.356	0.532	< .001	[-0.202, -0.150]	--	--	--	--	--	--
Number of Phone Numbers Shared	0.021	0.026	0.056	[-0.011, 0.000]	2.232%	2.766%	0.015	13	17	4
Date participants opted into study (expressed as days since the first participant opted in on Day 0)	27.076	27.564	0.021	[-0.901, -0.074]	--	--	--	--	--	--

Note. This table shows summary statistics for Study 2 as well as the results of preregistered two-tailed, independent samples t-tests and proportions tests comparing the *information provision* condition (pooled *direct statement* and *Q&A* conditions) to the *no-treatment control* condition. Specifically, the first four columns report the mean (or proportion) of self-reported compliance with recommended health behaviors across conditions, take-up of information seeking opportunities, and number of phone numbers shared, as well as the p-value and 95% confidence interval for the difference in means (or proportions) as calculated by a t-test (or proportions test). As preregistered, missing values due to non-response for each self-reported behavior DV are replaced with the "worst" possible response (i.e., maximum non-compliance). Moreover, the behavioral DV collected on day 28 is reverse scored (i.e., responding "yes" was coded as 0, and "no" as 1), consistent with our preregistration. The next three columns report the response rates across conditions for the behavior change and information sharing variables, as well as the p-value for the difference in response rates calculated via a proportions test. The final two columns report the minimum number of texts received prior to collection of a particular DV across conditions.

Table 11. Regression-Estimated Effects of Information Provision Conditions Relative to the No-treatment Control Condition on Composites Measuring Self-Reported Adherence to Recommended Health Behavior in Study 2.

	Model 1 *Outcome: Behavior Composite*			**Model 2** *Outcome: Behavior Adherence Composite, Binary (Exploratory)*		
	b	**95% CI**	**p**	**b**	**95% CI**	**p**
Information Provision	-0.109	[-0.130, -0.088]	<.001	-0.194	[-0.231, -0.157]	<.001
Days Between Intervention Launch and Participant Opt-in	-0.002	[-0.002, 0.001]	<.001	-0.004	[-0.005, -0.003]	<.001
Observations		29810			29810	
Adjusted R^2		0.005			0.005	

Note. This table reports the results of two ordinary least squares (OLS) regression models predicting self-reported adherence to recommended health behaviors among Study 2 participants. All models show the main effect of assignment to the *information provision* conditions (the pooled *Q&A* and *direct statement* conditions). The first regression model predicts a given Study 2 participant's preregistered behavior change composite score, generated by z-scoring and averaging responses to each of the four self-reported behavior measures, replacing missing values with the "worst" possible response (e.g., maximal non-compliance) (Model 1, preregistered). The second regression model predicts a given Study 2 participant's behavior adherence composite score, generated by transforming non-binary self-reported behaviors into a binary DV (complied vs. did not comply, with missing values coded as non-compliance), and summing the number of times, out of four, that participants complied (Model 2, exploratory). All models include a continuous control for the number of days between the date the experiment launched and the date the participant opted into the experiment.

Table 12. Regression-Estimated Effects of Information Provision Conditions Relative to the No-treatment Control Condition on Self-Reported Behaviors in Study 2.

	Model 1 *Outcome: Did the participant report always wearing a masking when leaving home? (Day 5)*			**Model 2** *Outcome: How many of the past 7 days did the participant report leaving home for non-essential reasons? (Day 12)*			**Model 3** *Outcome: Did participant report washing their hands thoroughly the last time they returned from an outing? (Day 20)*			**Model 4** *Outcome: Did participant report touching, hugging, or shaking hands with anyone outside household? (Day 28)*		
	b	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**
Information Provision	-0.109	[-0.124, -0.095]	<.001	-0.448	[-0.541, -0.356]	<.001	-0.006	[-0.018, 0.006]	.329	-0.027	[-0.038, -0.015]	<.001
Days Between Intervention Launch and Participant Opt-in	-0.001	[-0.002, -0.001]	<.001	-0.012	[-0.015, -0.010]	<.001	-0.001	[-0.001, -0.000]	.002	-0.000	[-0.000, 0.000]	.823
Observations		29810			29810			29810			29810	
Adjusted R^2		0.009			0.006			0.000			0.001	

Note. This table reports the results of four ordinary least squares (OLS) regression models predicting self-reported adherence to public health guidelines for each of the four behavioral questions collected during the intervention among Study 2 participants. All models show the main effect of assignment to the *information provision* conditions (the pooled *Q&A* and *direct statement* conditions). In each case, as preregistered, missing values are replaced with the "worst" possible response (i.e., maximal non-compliance). The first regression model predicts whether a given Study 2 participant reported always wearing a mask when leaving home (Model 1, preregistered). The second regression model predicts how many days in the past week a given Study 2 participant reported leaving home for non-essential reasons, reverse-scored such that "0" represents leaving home for non-essential reasons every day and "7" represents never leaving home for non-essential reasons (Model 2, preregistered). The third regression model predicts whether a given Study 2 participant reported washing their hands thoroughly the last time they returned from an outing (Model 3, preregistered). The fourth regression model predicts whether a given Study 2 participant reported touching, hugging, or shaking hands with anyone outside their household, reverse-scored such that "1" represents not touching anyone outside their household, and "0" represents touching someone outside their household (Model 4, preregistered). All models include a continuous control for the number of days between the date the experiment launched and the date the participant opted into the experiment.

Table 13. Regression-Estimated Effects of Information Provision Conditions Relative to the No-treatment Control Condition on Binary Self-Reported Behaviors in Study 2 Using Logistic Regression.

	Model 1 *Outcome: Did the participant report always wearing a masking when leaving home? (Day 5)*			**Model 2** *Outcome: Did participant report washing their hands thoroughly the last time they returned from an outing? (Day 20)*			**Model 3** *Outcome: Did participant report touching, hugging, or shaking hands with anyone outside household? (Day 28)*		
	b	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**
Information Provision	-0.440	[-0.498, -0.383]	<.001	-0.033	[-0.099, 0.033]	.326	-0.151	[-0.218, -0.084]	<.001
Time Between Intervention Launch and Participant Opt-in	-0.005	[-0.007, -0.004]	<.001	-0.003	[-0.005, -0.001]	.002	-0.000	[-0.002, 0.002]	.822
Observations		29810			29810			29810	
McFadden R^2		0.006			0.000			0.001	

Note. This table reports the results of three logistic regression models predicting self-reported adherence to public health guidelines for each of the three binary behavioral questions collected during the intervention among Study 2 participants. All models show the main effect of assignment to the *information provision* condition (the pooled *Q&A* and *direct statement* conditions). In each case, as preregistered, missing values are replaced with the "worst" possible response (i.e., maximal non-compliance). The first regression model predicts whether a given Study 2 participant reported always wearing a mask when leaving home (Model 1, preregistered). The second regression model predicts whether a given Study 2 participant reported washing their hands thoroughly the last time they returned from an outing (Model 2, preregistered). The third regression model predicts whether a given Study 2 participant reported touching, hugging, or shaking hands with anyone outside their household, reverse-scored such that "1" represents not touching anyone outside their household, and "0" represents touching someone outside their household (Model 3, preregistered). All models include a continuous control for the number of days between the date the experiment launched and the date the participant opted into the experiment.

Table 14. Preregistered robustness checks for regression-estimated effects of the Information Provision condition relative to the No-treatment Control condition on self-reported behaviors in Study 2.

	(1) Replacing Missing Values with "Worst" Response (Pre-Registered)			(2) Replacing Missing Values with "Best" Response			(3) Replacing Missing Values with Average Response (Pre-Registered, Exploratory)			(4) Removing Missing Values (Pre-Registered, Exploratory)		
	Treatment Effect	p-value	95% CI	Treatment Effect	p-value	95% CI	Treatment Effect	p-value	95% CI	Treatment Effect	p-value	95% CI
Did the participant report always wearing a masking when leaving home? (Day 5)	-0.109 (0.007)	< .001	[-0.124, -0.095]	0.013 (0.003)	< .001	[0.007, 0.018]	0.003 (0.003)	0.302	[-0.003, 0.008]	0.005 (0.005)	0.330	[-0.005, 0.015]
How many of the past 7 days did the participant report leaving home for non-essential reasons? (Day 12)	-0.448 (0.047)	< .001	[-0.541, -0.356]	0.048 (0.010)	< .001	[0.028, 0.068]	0.019 (0.010)	0.052	[-0.000, 0.038]	0.047 (0.025)	0.058	[-0.002, 0.095]
Did participant report washing their hands thoroughly the last time they returned from an outing? (Day 20)	-0.006 (0.006)	0.329	[-0.018, 0.006]	-0.000	0.984	[-0.005, 0.004]	-0.001 (0.002)	0.776	[-0.005, 0.004]	-0.002 (0.008)	0.780	[-0.018, 0.014]
[Reverse scored] Did participant report touching, hugging, or shaking hands with anyone outside household? (Day 28)	-0.027 (0.006)	< .001	[-0.038, -0.015]	0.004 (0.004)	0.341	[-0.004, 0.011]	-0.004 (0.003)	0.281	[-0.010, 0.003]	-0.012 (0.011)	0.284	[-0.034, 0.010]
Behavior Change Composite	-0.109 (0.011)	< .001	[-0.130, -0.088]	0.036 (0.008)	< .001	[0.020, 0.052]	0.006 (0.008)	0.459	[-0.010, -0.021]	-0.024 (0.022)	0.273	[-0.067, 0.019]

Note. This table presents the results of preregistered robustness checks for the regression-estimated effects of the *information provision* condition (relative to the *no-treatment control* condition) on self-reported behaviors in Study 2. Across all analyses, we preregistered using an OLS regression with robust standard errors with an indicator for experimental condition and a control for the day participants opted into the intervention. Regression-estimated effects are reported for each of the four self-reported behavior variables as well as for the preregistered behavior change composite variable. The preregistered robustness checks all involve different methods for handling missing data due to participant non-response. The first model imputes the 'worst' possible response (i.e., full non-adherence) for missing values (our primary preregistered analysis); the second model imputes the 'best' possible response (i.e., full adherence) for missing values; the third model imputes average responses for missing values; the fourth model removes missing

values completely. For all models, we report the regression-estimated treatment effect, the p-value for the treatment effect, and the 95% confidence interval for the treatment effect.

Table 15. Summary statistics for binary-transformed self-reported behavior variables across the Information Provision and No-treatment Control conditions in Study 2.

	Summary Statistics (Means, Proportions, Differences)			
	Information Provision	No-treatment Control	p-value	95% CI
Behavior Change Week 1 (Mask Wearing)	45.632%	56.509%	< .001	[-12.300, -9.455]
Behavior Change Week 2 (Stayed Home Y/N)	29.460%	34.553%	< .001	[-0.644, -0.374]
Behavior Change Week 3 (Hand Washing)	24.338%	24.924%	0.356	[-1.824, 0.653]
Behavior Change Week 4 (Physical Contact)	21.428%	24.081%	< .001	[-3.870, -1.436]
Behavior Change Score (out of 4)	1.209	1.401	<.001	[-0.229, -0.155]

Note. As an exploratory analysis, we converted all self-reported behaviors in Study 2 to binary variables where full adherence to public health recommendations (e.g., always wearing a mask) was coded as "1" and no or partial adherence (e.g., never or sometimes wearing a mask) was coded as "0". We also created an exploratory behavior change score summing the instances in which participants reported full adherence. This score can take on values between 0 and 4. This table reports the proportions for each variable and the mean of the behavior change score across the *information provision* and *no-treatment control* conditions. The table also reports the p-values and 95% confidence intervals for the difference in proportions (or means) across conditions, calculated via two-tailed, independent samples proportions tests (or t-tests).

Table 16. Regression-Estimated Effects of Information Provision Conditions Relative to the No-treatment Control Condition on Composite Information Seeking and Information Sharing in Study 2.

	Model 1 *Outcome: Information Seeking Composite*			**Model 2** *Outcome: Topic-Specific Information Seeking Composite (Exploratory)*			**Model 3** *Outcome: General Information Seeking Composite (Exploratory)*			**Model 4** *Outcome: Number of phone numbers shared*		
	b	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**
Information Provision	-0.176	[-0.200, -0.152]	<.001	-0.080	[-0.095, -0.065]	<.001	-0.096	[-0.109, -0.083]	<.001	-0.005	[-0.011, -0.000]	.037
Days Between Intervention Launch and Participant Opt-in	0.000	[-0.000, 0.001]	.518	0.001	[0.000, 0.001]	<.001	-0.001	[-0.001, -0.000]	<.001	-0.000	[-0.000, -0.000]	0.048
Observations		29810			29810			29810			29810	
Adjusted R^2		0.007			0.004			0.007			0.000	

Note. This table reports the results of four ordinary least squares (OLS) regression models predicting information seeking and information sharing among Study 2 participants. All models show the main effect of assignment to the *information provision* conditions (the pooled *Q&A* and *direct statement* conditions). The first regression model predicts a given Study 2 participant's information seeking composite score, generated by summing the number of times (out of 5) the participant responded affirmatively to an information seeking opportunity (Model 1, preregistered). The second regression model predicts a given Study 2 participant's topic-specific information seeking composite score, generated by summing the number of times (out of 3) the participant responded affirmatively to an offer of more information about a specific topic related to COVID-19 (Model 2, exploratory). The third regression model predicts a given Study 2 participant's general information seeking composite score, generated by summing the number of times (out of 2) the participant responded affirmatively to an opportunity to access resources with general information about COVID-19 (Model 3, exploratory). The fourth regression model predicts the number of phone numbers of people they'd like to keep informed about COVID-19 a given participant in Study 2 shared (Model 4, preregistered). All models include a continuous control for the number of days between the date the experiment launched and the date the participant opted into the experiment.

Table 17. Regression-Estimated Effects of Information Provision Conditions Relative to the No-treatment Control Condition on Each Distinct Information Seeking Opportunity in Study 2.

	Model 1 *Outcome: Did participant request access to more general information about COVID-19? (Day 5)*			**Model 2** *Outcome: Did participant request more information about mask-wearing? (Day 10)*			**Model 3** *Outcome: Did participant request more information about leaving home safely? (Day 18)*			**Model 4** *Outcome: Did participant request more information about at-risk populations? (Day 23)*			**Model 5** *Outcome: Did participant request access to more general information about COVID-19? (Day 28)*		
	b	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**
Information Provision	-0.100	[-0.108, -0.091]	<.001	-0.031	[-0.037, -0.024]	<.001	-0.038	[-0.046, -0.030]	<.001	-0.011	[-0.018, -0.005]	.001	0.004	[-0.004, 0.011]	.344
Days Between Intervention Launch and Participant Opt-in	-0.000	[-0.001, -0.000]	<.001	0.001	[0.001, 0.002]	<.001	-0.000	[-0.001, -0.000]	.006	-0.000	[-0.000, -0.000]	.032	-0.000	[-0.000, 0.000]	.081
Observations		29810			29810			29810			29810			29810	
Adjusted R^2		0.017			0.011			0.003			0.000			0.000	

Note. This table reports the results of five ordinary least squares (OLS) regression models with robust standard errors predicting whether participants responded affirmatively to each information seeking opportunity in Study 2. All models show the main effect of assignment to the *information provision* conditions (the pooled *Q&A* and *direct statement* conditions). The first regression model predicts whether a given participant in Study 2 requested access to resources with more general information about COVID-19 on day 5 of the intervention (Model 1, preregistered). The second regression model predicts whether a given participant in Study 2 requested more information about how to wear masks properly on day 10 of the intervention (Model 2, preregistered). The third regression model predicts whether a given participant in Study 2 requested more information about how to leave home safely when necessary on day 18 of the intervention (Model 3, preregistered). The fourth regression model predicts whether a given participant in Study 2 requested more information about at-risk populations on day 23 of the intervention (Model 4, preregistered). The fifth regression model predicts whether a given participant in Study 2 requested access to resources with more general information about COVID-19 on day 28 of the intervention (Model 5, preregistered). All models include a continuous control for the number of days between the date the experiment launched and the date the participant opted into the experiment.

Table 18. Regression-Estimated Effects of Information Provision Conditions Relative to the No-treatment Control Condition on Each Information Seeking Opportunity in Study 2 Using Logistic Regression.

	Model 1 *Outcome: Did participant request access to more general information about COVID-19? (Day 5)*			**Model 2** *Outcome: Did participant request more information about mask-wearing? (Day 10)*			**Model 3** *Outcome: Did participant request more information about leaving home safely? (Day 18)*			**Model 4** *Outcome: Did participant request more information about at-risk populations? (Day 23)*			**Model 5** *Outcome: Did participant request access to more general information about COVID-19? (Day 28)*		
	b	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**	**b**	**95% CI**	**p**
Information Provision	-0.862	[-0.940, -0.783]	<.001	-0.502	[-0.611, -0.392]	<.001	-0.431	[-0.522, -0.339]	<.001	-0.205	[-0.323, -0.085]	<.001	0.050	[-0.054, 0.157]	.350
Time Between Intervention Launch and Participant Opt-in	-0.005	[-0.008, -0.003]	<.001	0.027	[0.023, 0.030]	<.001	-0.004	[-0.007, -0.001]	.005	-0.004	[-0.007, -0.000]	.032	-0.003	[-0.005, 0.000]	.080
Observations		29810			29810			29810			29810			29810	
McFadden R^2		0.021			0.024			0.005			0.001			0.000	

Note. This table reports the results of five logistic regression models predicting whether participants responded affirmatively to each information seeking opportunity in Study 2. All models show the main effect of assignment to the *information provision* condition (the pooled *Q&A* and *direct statement* conditions). The first regression model predicts whether a given participant in Study 2 requested access to resources with more general information about COVID-19 on day 5 of the intervention (Model 1, preregistered). The second regression model predicts whether a given participant in Study 2 requested more information about how to wear masks properly on day 10 of the intervention (Model 2, preregistered). The third regression model predicts whether a given participant in Study 2 requested more information about how to leave home safely when necessary on day 18 of the intervention (Model 3, preregistered). The fourth regression model predicts whether a given participant in Study 2 requested more information about at-risk populations on day 23 of the intervention (Model 4, preregistered). The fifth regression model predicts whether a given participant in Study 2 requested access to resources with more general information about COVID-19 on day 28 of the intervention (Model 5, preregistered). All models include a continuous control for the number of days between the date the experiment launched and the date the participant opted into the experiment.

Study 3

Table 19. Summary Statistics for Unique Users who Saw Each Ad in Study 3.

Facebook User Gender	Q&A Ad	Direct Statements Ad
Woman or Gender Identity	278,975 (56.97%)	268,073 (58.51%)
Unknown		
Man	210,690 (43.03%)	190,080 (41.5%)
Facebook User Age		
18-24	205,442 (41.96%)	188,416 (41.13%)
25-34	140,546 (28.70%)	133,120 (29.06%)
35-44	40,730 (8.32%)	40,192 (8.77%)
45-54	27,965 (5.71%)	32,000 (6.98%)
55-64	40,064 (8.18%)	38,441 (8.39%)
65+	34,918 (7.13%)	25,984 (5.67%)

Note. As mentioned in Additional Implementation Details: Study 3, Facebook's randomization strategy creates balanced, non-overlapping candidate audiences for each ad but does not ensure that the audience of users who actually see each ad is balanced. Indeed, there are significant imbalances on both sets of demographics that Facebook provides: gender and age. This imbalance is one reason we cannot analyze this experiment at the individual level but instead analyze the cost effectiveness of each ad in terms of the unique link clicks it inspires each day.

Table 20. Regression-Estimated Effects of Q&A Ad on Unique Link Clicks in Study 3 using Poisson regression and adjusting for serial correlation.

	Model 1 *Outcome: Number of unique clicks on the link to the CDC website included in the ad on a given day*			**Model 2** *Outcome: Number of unique clicks on the link to the CDC website included in the ad on a given day*		
	b	**SE**	**p**	**b**	**SE**	**p**
Q&A Ad	0.092	0.013	<.001	0.066	0.027	<.001
Dollars Spent on Ad Placement	0.014	0.010	.142			
Fixed Effects for Day		Yes				
Observations		52			26	
Adjusted R^2					0.000	

Note. This table reports the results of a Poisson regression model (Model 1) and a log-linear model adjusting for serial correlation (Model 2) predicting the effect of the *Q&A* ad relative to the *direct statement* ad on daily unique link clicks. For both models, the dependent variable is the number of unique clicks on the link to the CDC vaccine information page generated by a given ad on a given day. Predictor variables for Model 1 include an indicator for the *Q&A* ad, the (logged) dollars spent bidding on a given ad on a given day, and fixed effects for the day.

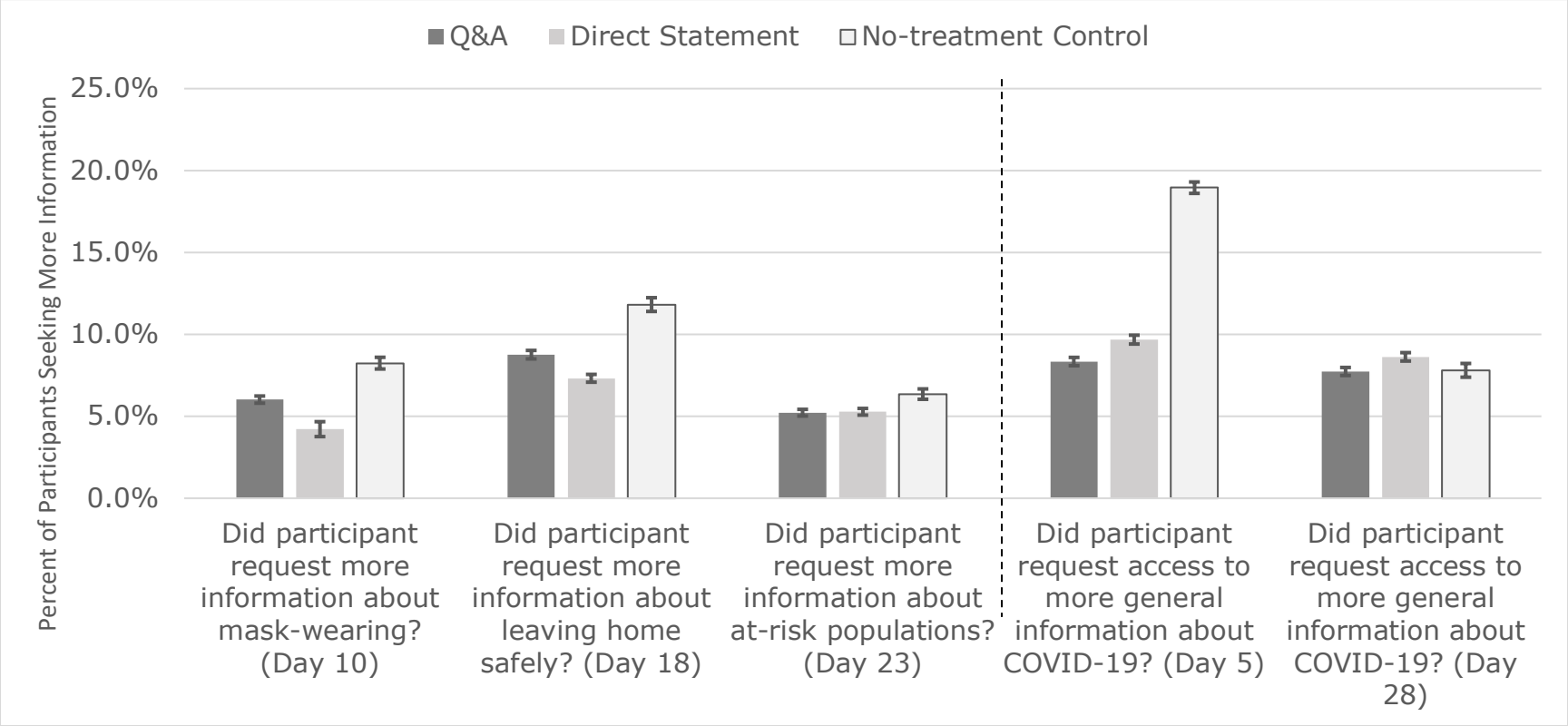
Table 21. Regression-Estimated Effects of Q&A Ad on Unique Link Clicks in Study 3 between June 24th, 2021 and July 5th, 2021.

	Model 1 *Outcome: Number of unique clicks on the link to the CDC website included in the ad on a given day*		
	b	**SE**	**p**
Q&A Ad	0.101	0.017	<.001
Dollars Spent on Ad Placement (Log)	7.382	3.319	0.050
Fixed Effects for Day		Yes	
Observations		24	
Adjusted R^2		0.940	

Note. This table reports the results of log-linear regression model with robust standard errors predicting the effect of the *Q&A* ad relative to the *direct statement* ad on daily unique link clicks. The dependent variable is the number of unique clicks on the link to the CDC vaccine information page generated by a given ad on a given day. Predictor variables include an indicator for the *Q&A* ad, the (logged) dollars spent bidding on a given ad on a given day, and fixed effects for the day. The model only includes data from the Facebook RCT between June 24th and July 5th, starting well-after the burn-in period and before the campaign ran out of money.

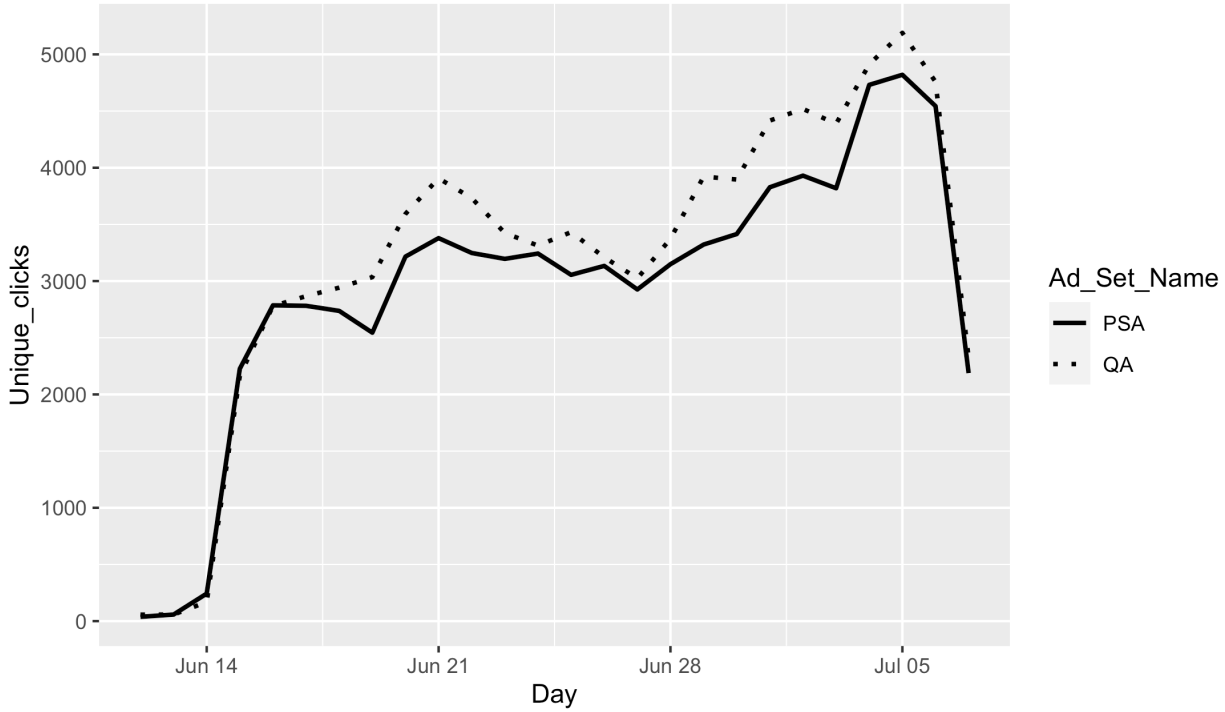
Figures

Figure 1. Information Seeking Across Conditions in Study 2



Note. This figure depicts Michigan residents' interest in seeking more information about COVID-19 in Study 2. The dark grey bars represent the proportion of participants who requested more information in the *Q&A* condition, the light grey bars represent the proportion of participants who requested more information in the *direct statements* condition, and the white bars represent the proportion of participants who requested more information in the *no-treatment control* condition. The three sets of bars on the left of the dotted line depict participants' interest in learning more specific information about masks, leaving home safely, and at-risk populations while the two sets of bars on the right of the dotted line represent participants' interest in learning more general information about COVID-19. Standard error bars are depicted around each proportion.

Figure 2. Daily unique link clicks across ads in Study 3.



Note. This figure shows the number of unique clicks generated per day by the *Q&A* ad and *direct statement* ad during the Facebook ad campaign in Study 3 (the *direct statement* ad is labeled "PSA" in the figure for brevity). The figure shows that the ads improve significantly after the burn-in period, stabilizing in performance around June 18th. After July 5th, the ad campaign's budget was running out and there is a performance drop once more. For this reason, we present both full results and date-restricted results in our main manuscript.

Supplementary Study 1

We conducted a post-test to assess whether sharing information in Q&A format rather than direct statement format was perceived as introducing more friction, defined as cost of accessing and processing the information. This experiment was preregistered (https://aspredicted.org/y8j9-yzmn.pdf).

Methods

We recruited 904 participants on Prolific to take part in a 5-minute study for $1.00. Participants completed several bot checks and basic attention checks prior to randomization; those who answered any of these questions incorrectly were not allowed to proceed with the survey.

Participants were asked to imagine that they had opted into a text messaging program intended to help them learn more about mpox, formerly known as monkeypox, a virus that reached the U.S. in 2022. They were informed that they would receive simulated text messages to help them learn more about the virus, and that they would then answer a few questions about their experience.

Participants were randomly assigned into one of two conditions: the *Q&A* condition or the *direct statement* condition. Across both conditions, participants learned (the exact same) five facts about mpox. All that differed across conditions was how these facts were presented. Specifically, we designed the survey to mimic the experience of participants in Study 1 and Study 2 as closely as possible. Participants in the *direct statement* condition simply read five mpox facts listed as direct statements, one per survey page (e.g., "MPOX TEXT: There are two types of mpox virus, Clade I and Clade II. Clade I causes more severe illness and deaths, with some outbreaks killing up to 10% of people who get sick. Clade II causes less severe infections,

and more than 99.9% of those infected survive. In 2022, Clade II caused a global outbreak of mpox."). Meanwhile, participants in the *Q&A* condition were first asked a relevant question (e.g., "MPOX TEXT: Which version of the mpox virus, Clade I or Clade II, causes more severe illnesses and deaths? Type "1" for Clade I, "2" for Clade II, or press ">>" to wait to receive an answer."). Then, they could choose between either guessing the answer by typing into a text box or clicking the "next" button to avoid guessing. If they didn't guess an answer, they were forced to wait 15 seconds before proceeding to the next survey page, where they could read the relevant fact.[2] If they did guess an answer, they immediately proceeded to the survey page that contained the relevant fact. As in Studies 1 and 2, this design means that participants received the exact same health information across conditions. All that varied was whether they received this information as direct statements of fact, or whether the facts were preceded with questions (forcing participants to either guess an answer or wait before reading the information).

Participants then responded to two scales presented in randomized order. These scales were intended to measure: (1) ease of access and (2) ease of processing, or fluency of the information. The former scale included three face-valid items, also presented in randomized order on the same survey page. These items included: "It was easy to learn about mpox through this health messaging program", "Learning about mpox through this health messaging program was annoying", "It was straightforward to learn about mpox through this health messaging program". Participants responded to each item on a scale from "1: Strongly disagree" to "7: Strongly agree", and the three items were averaged together to form a single measure of ease of access (Cronbach's alpha = 0.84). The latter scale included four items and was adapted from Kostyk, Leonhardt, & Niculescu, 2019. The four items were: "The information about mpox

[2] This design feature was intended to mimic Studies 1 and 2, in which participants who didn't text back a guess were forced to wait to receive a follow-up text with the information.

communicated with me was difficult to process", "The information about mpox communicated with me was difficult to read", "The information about mpox communicated with me took a long time to process", and "The information about mpox communicated with me was difficult to understand." Participants responded to each item on a scale a 7-point Likert agreement scale. Again, the four items were presented in randomized order and averaged together to form a scale (Cronbach's alpha = 0.91).

Participants reported their gender and ethnicity before completing the survey. See our OSF folder for the survey QSF file with full survey materials.

Results

Per our preregistration, we conducted two-sample, two-tailed t-tests to compare ease of accessing and processing the information across conditions. Higher values on the ease of access scale represent greater perceived ease (i.e., less friction), whereas higher values on the fluency scale represent lower perceived ease (i.e., more friction). Participants perceived the information presented in the *Q&A* condition to be significantly less easy to access than information presented in the *direct statement* condition (M_*direct* = 5.84 vs. M_*qa* = 5.42, t = 5.35, Cohen's d = 0.36, p < .001). Moreover, they perceived the information as directionally harder to process in the *Q&A* condition relative to the *direct statement* condition (i.e., M_*direct* = 1.94 vs. M_*qa* = 2.06, t = -1.73, Cohen's d = -0.12, p = 0.08). These results are consistent with our theorizing that presenting information in Q&A format creates friction by increasing processing and access costs.

Study Stimuli

Study 1 Stimuli

The table below contains details on the timing and content of all text messages sent to Ghanaian citizens who participated in Study 1. All participants who opted into Study 1 via IVR began receiving text messages on the same day. The first two columns describe the timing of each message—the time of day and date on which the first message in each sequence was sent. Due to delays in the phone lines, we cannot be certain about exactly when each participant received each message or how long the delay was between messages in a sequence.

The next two columns describe messages sent in the *direct statement* condition, with the first column representing to texts sent to start a conversation thread and the second column representing messages sent in response to participant replies. Similarly, columns five and six represent conversation-starting messages and reply messages sent in the *Q&A* condition.

In the *Q&A* condition columns, messages in red text were sent immediately after a participant replied to the question posed on information sharing days; messages in purple text were sent about 24 hours later **only** if the participant had not yet responded to the question posed. For that reason, certain message sequences are repeated in the *Q&A* condition columns, but participants only saw them once. Across all columns, messages highlighted in yellow are messages intended to collect dependent variables (i.e., self-reported behaviors, information seeking opportunities, and information sharing opportunities).

Table 22. Timing and Contents of Text Messages Sent in Study 1

		Direct Statement Condition		**Q&A Condition**	
Time	Date	Conversation-Starting Text	Reply Texts	Conversation-Starting Texts	Reply Texts
8:00 AM	December 11-12, 2020	COVID TEXT: Not everyone with COVID shows symptoms, but they can still spread the virus.		COVID TEXT: Does everyone with COVID show symptoms? Reply 1 for Yes, 2 for No	If participant texted Y: Actually, not everyone with COVID shows symptoms, but they can still spread the virus.
					If participant texted N: That's right! Not everyone with COVID shows symptoms, but they can still spread the virus.
		Stay safe and healthy! Stay at least 1 meter away from people outside your home, including your neighbors and friends, even if they seem healthy.			[Sent immediately after previous text, if participant replied]: Stay safe and healthy! Stay at least 1 meter away from people outside your home, including your neighbors and friends, even if they seem healthy.
				COVID TEXT: Some people with COVID don't show any symptoms, but they can still spread the virus.	
				Stay safe and healthy! Stay at least 1 meter away from people outside your home, including your neighbors and friends, even if they seem healthy.	
8:00 AM	December 21-22, 2020	COVID TEXT: Masks aren't enough to protect you on their own: Even if you and another person are both wearing masks, you need to stay 1m apart to be safe.		COVID TEXT: If you and another person are both wearing masks, do you still need to stay 1m apart to stay safe? Reply 1 for Yes, 2 for No	If participant texted Y: That's right! Masks aren't enough to protect you on their own: Even if you and another person are both wearing masks, you need to stay 1m apart to be safe.
					If participant texted N: Actually, masks aren't enough to protect you on their own: Even if you and another person are both wearing masks, you need to stay 1m apart to be safe.
		Remember: masks (plus social distancing!) help protect others from you AND protect *you* from others. TEXT 1 to learn how to maximize a mask's protective power.	If participant texts 1: (1) When you wear a mask, make sure it covers your nose AND mouth. Try not to leave any gaps between the fabric and the side of your face.	Remember: Masks (plus social distancing!) help protect others from you AND protect *you* from others. TEXT 1 to learn how to maximize a mask's protective power.	If participant texts 1: (1) When you wear a mask, make sure it covers your nose AND mouth. Try not to leave any gaps between the fabric and the side of your face.
			(2) If you wear a cloth mask, make sure to include multiple layers of fabric.		(2) If you wear a cloth mask, make sure to include multiple layers of fabric.
			(3) Wash or sanitize your hands after removing your mask, and try not to touch your eyes, nose, or mouth while taking it off.		(3) Wash or sanitize your hands after removing your mask, and try not to touch your eyes, nose, or mouth while taking it off.
			(4) Wash your mask under hot water as often as you are able.		(4) Wash your mask under hot water as often as you are able.

			(5) Don't use your mask when damp or wet -- it won't protect you as effectively!		(5) Don't use your mask when damp or wet -- it won't protect you as effectively!
				COVID TEXT: Masks aren't enough to protect you on their own: Even if you and another person are both wearing masks, you need to stay 1m apart to be safe.	
				Remember: masks (plus social distancing!) help protect others from you AND protect *you* from others. TEXT 1 to learn how to maximize a mask's protective power.	If participant texts 1: (1) When you wear a mask, make sure it covers your nose AND mouth. Try not to leave any gaps between the fabric and the side of your face.
					(2) If you wear a cloth mask, make sure to include multiple layers of fabric.
					(3) Wash or sanitize your hands after removing your mask, and try not to touch your eyes, nose, or mouth while taking it off.
					(4) Wash your mask under hot water as often as you are able.
					(5) Don't use your mask when damp or wet -- it won't protect you as effectively!
		COVID TEXT: How many of the past 7 days did you travel via public transportation? Reply with a number from 0 to 7	If participant texted 0: Great! Thank you for doing your part to prevent the spread of COVID-19 by avoiding travel in crowded spaces.	COVID TEXT: How many of the past 7 days did you travel via public transportation? Reply with a number from 0 to 7	If participant texted 0: Great! Thank you for doing your part to prevent the spread of COVID-19 by avoiding travel in crowded spaces.
			If participant texted more than 0: We understand that bus travel is sometimes necessary. Whenever possible, avoid travel in crowded spaces to prevent the spread of COVID-19.		If participant texted more than 0: We understand that bus travel is sometimes necessary. Whenever possible, avoid travel in crowded spaces to prevent the spread of COVID-19.
		[Sent immediately upon reply, or a few hours later if no reply]: Avoid travel between villages or cities! Help reduce the spread of COVID across Ghana by staying in your village or city.		[Sent immediately upon reply, or a few hours later if no reply]: Avoid travel between villages or cities! Help reduce the spread of COVID across Ghana by staying in your village or city.	
8:00 AM	December 24-25, 2020	TEXT 1 if you want us to share a phone number you can use to access more free and accurate information about COVID	If participant texts 1: Use this free service and learn more about COVID: Dial "321" if you use Vodafone and "5100" if you use MTN. Keep yourself and your loved ones safe.	TEXT 1 if you want us to share a phone number you can use to access more free and accurate information about COVID	If participant texts 1: Use this free service and learn more about COVID: Dial "321" if you use Vodafone and "5100" if you use MTN. Keep yourself and your loved ones safe.
8:00 AM	December 28-29, 2020	COVID TEXT: Scientists estimate that you're almost *20 times* more likely to catch COVID from other people indoors than outdoors.		COVID TEXT: Are you about 2, 10, or 20 times more likely to contract COVID from other people indoors than outdoors? Text 2, 10, or 20	If participant texted 2 or 10: Actually, scientists estimate that you're almost *20 times* more likely to catch COVID from other people indoors than outdoors.

					If participant texted 20: Right! Scientists estimate that you're almost *20 times* more likely to catch COVID from other people indoors than outdoors.
		Don't share air! Sharing air with others is very risky. Wear a mask, don't go to crowded indoor spaces, and don't invite guests to your home.			Don't share air! Sharing air with others is very risky. Wear a mask, don't go to crowded indoor spaces, and don't invite guests to your home.
				COVID TEXT: Scientists estimate that you're almost *20 times* more likely to catch COVID from other people indoors than outdoors.	
				Don't share air! Sharing air with others is very risky. Wear a mask, don't go to crowded indoor spaces, and don't invite guests to your home.	
		COVID TEXT: When you must leave your home for work, the market, or the pharmacy, avoid touching your face. If you can, avoid touching surfaces with your hands.		COVID TEXT: When you must leave home to go to work, the market, or the pharmacy, can you touch your face? Reply 1 for Yes, 2 for No	If participant texted Y: Actually, when you must leave your home for work, the market, or the pharmacy, avoid touching your face. If you can, avoid touching surfaces with your hands.
					If participant texted N: Right! When you must leave your home for work, the market, or the pharmacy, avoid touching your face. If you can, avoid touching surfaces with your hands.
		TEXT 1 if you'd like to learn a few tricks to help you avoid catching the virus when you have to leave your home for a necessity.	(IF THEY TEXT 1): 1) Use a clean cloth or tissue from inside your home to cover your hands or use your elbow to touch things whenever you can. Make sure not to touch your face.	TEXT 1 if you'd like to learn a few tricks to help you avoid catching the virus when you have to leave your home for a necessity.	(IF THEY TEXT 1): 1) Use a clean cloth or tissue from inside your home to cover your hands or use your elbow to touch things whenever you can. Make sure not to touch your face.
			2) When you go out, wear a mask that covers your nose and mouth. Make your own mask using cloth from home by tying it behind your head or ears.		2) When you go out, wear a mask that covers your nose and mouth. Make your own mask using cloth from home by tying it behind your head or ears.
			3) When you get home, wash your hands with soap and water if you can, and wash the cloth and mask you used so you can use them again.		3) When you get home, wash your hands with soap and water if you can, and wash the cloth and mask you used so you can use them again.
			4) And remember: Stay home as much as you can. COVID can be spread by coughing, sneezing, even just talking. Social distance to stay safe!		4) And remember: stay home as much as you can. COVID can be spread by coughing, sneezing, even just talking. Social distance to stay safe!
8:00 AM	December 31, 2020-January 1, 2021			COVID TEXT: When you must leave your home for work, the market, or the pharmacy, avoid touching your face. If	

				you can, avoid touching surfaces with your hands.	
				TEXT 1 if you'd like to learn three tricks to help you avoid catching the virus when you have to leave your home for a necessity.	(IF THEY TEXT 1): 1) Use a clean cloth or tissue from inside your home to cover your hands or use your elbow to touch things whenever you can. Make sure not to touch your face.
					2) When you go out, wear a mask that covers your nose and mouth. Make your own mask using cloth from home by tying it behind your head or ears.
					3) When you get home, wash your hands with soap and water if you can, and wash the cloth and mask you used so you can use them again.
					4) And remember: stay home as much as you can. COVID can be spread by coughing, sneezing, even just talking. Social distance to stay safe!
		COVID TEXT: How many of the past 7 days did you leave home for non-work reasons like praying or meeting friends and family? Reply with a number from 0 to 7	If participant texted 0: Excellent! Leaving your home for groceries or medicine can be necessary, but it's important to stay home as much as possible to prevent the spread of COVID.	COVID TEXT: How many of the past 7 days did you leave home for non-work reasons like praying or meeting friends and family? Reply with a number from 0 to 7	If participant texted 0: Excellent! Leaving your home for groceries or medicine can be necessary, but it's important to stay home as much as possible to prevent the spread of COVID.
			If participant texted 1 or 2: Good job! Leaving your home for groceries or medicine can be necessary, but it's important to stay home as much as possible to prevent the spread of COVID.		If participant texted 1 or 2: Good job! Leaving your home for groceries or medicine can be necessary, but it's important to stay home as much as possible to prevent the spread of COVID.
			If participant texted more than 2: Leaving your home for groceries or medicine can be necessary, but it's important to stay home as much as possible to prevent the spread of COVID.		If participant texted more than 2: Leaving your home for groceries or medicine can be necessary, but it's important to stay home as much as possible to prevent the spread of COVID.
		Avoid gatherings when possible, especially with large groups (10 or more). When you are in a public place, stay at least 1 meter from those around you.		Avoid gatherings when possible, especially with large groups (10 or more). When you are in a public place, stay at least 1 meter from those around you.	
8:00 AM	January 3-4, 2021	Do you want to keep your friends and family informed about COVID? If so, text us their numbers separated by a space. They may receive an SMS or call about COVID.	If we receive a phone number: Thank you for sharing! We are happy to share more information about COVID with your loved ones.	Do you want to keep your friends and family informed about COVID? If so, text us their numbers separated by a space. They may receive an SMS or call about COVID.	If we receive a phone number: Thank you for sharing! We are happy to share more information about COVID with your loved ones.
8:00 AM	January 7-8, 2021	COVID TEXT: Losing your sense of smell can be a symptom of COVID. Remember, though,		COVID TEXT: Is losing your sense of smell a symptom of COVID? Reply 1 for Yes, 2 for No	If participant texted Y: Right! Losing your sense of smell can be a symptom of COVID.

		you can have COVID even if you're not showing any symptoms.			Remember, though, you can have COVID even if you're not showing any symptoms.
					If participant texted N: Actually, losing your sense of smell can be a symptom of COVID. Remember, though, you can have COVID even if you're not showing any symptoms.
		Keep your distance from at-risk loved ones to protect them & message them on WhatsApp to let them know you're thinking of them. TEXT 1 to learn who is at-risk.	If participant texted 1: People at higher risk of dying from COVID include those with high blood pressure, diabetes, cancer, or sickle cell anemia. Those over 65 are higher risk, too.	Keep your distance from at-risk loved ones to protect them & message them on WhatsApp to let them know you're thinking of them. TEXT 1 to learn who is at-risk.	If participant texted 1: People at higher risk of dying from COVID include those with high blood pressure, diabetes, cancer, or sickle cell anemia. Those over 65 are higher risk, too.
			That's not all, though. People with asthma, lung disease, heart disease, liver disease, or compromised immune systems are also at higher risk.		That's not all, though. People with asthma, lung disease, heart disease, liver disease, or compromised immune systems are also at higher risk.
				COVID TEXT: Losing your sense of smell can be a symptom of COVID. Remember, though, you can have COVID even if you're not showing any symptoms.	
				Keep your distance from at-risk loved ones to protect them & message them on WhatsApp to let them know you're thinking of them. TEXT 1 to learn who is at-risk.	If participant texted 1: People at higher risk of dying from COVID include those with high blood pressure, diabetes, cancer, or sickle cell anemia. Those over 65 are higher risk, too.
					That's not all, though. People with asthma, lung disease, heart disease, liver disease, or compromised immune systems are also at higher risk.
		COVID TEXT: COVID spreads even in tropical climates with high temperatures. Another COVID fact? The virus infects people of all ages, races, and ethnicities.		COVID TEXT: Can COVID spread in tropical climates with high temperatures? Reply 1 for Yes, 2 for No	If participant texted Y: That's right! COVID spreads even in tropical climates with high temperatures. Another COVID fact? The virus infects people of all ages, races, and ethnicities.
					If participant texted N: Actually, COVID spreads even in tropical climates with high temperatures. Another COVID fact? The virus infects people of all ages, races, and ethnicities.
		Remember, being sick is no one's fault. Look out for your community and be kind to those around you.			Remember, being sick is no one's fault. Look out for your community and be kind to those around you.
8:00 AM	January 11-12, 2021			COVID TEXT: COVID spreads even in tropical climates with high temperatures. Another COVID fact? The virus infects people of all ages, races, and ethnicities.	

				Remember, being sick is no one's fault. Look out for your community and be kind to those around you.	
8:00 AM	January 14, 2021	COVID TEXT: Did you wash your hands with soap under running water the last time you got back from an outing? Reply 1 for Yes, 2 for No, or 3 for I can't	If participant texted 1: Excellent! Doctors recommend washing your hands for 20 seconds with soap and water, just as you have been doing. This will help you stay healthy.	COVID TEXT: Did you wash your hands with soap under running water the last time you got back from an outing? Reply 1 for Yes, 2 for No, or 3 for I can't	If participant texted 1: Excellent! Doctors recommend washing your hands for 20 seconds with soap and water, just as you have been doing. This will help you stay healthy.
			If participant texted 2: Doctors recommend washing your hands for 20 seconds with soap and water. This will help you stay healthy.		If participant texted 2: Doctors recommend washing your hands for 20 seconds with soap and water. This will help you stay healthy.
			If participant texted 3: We are sorry to hear you don't have access to soap and water. Use a cloth to cover your hands when you leave home. Try not to touch your face.		If participant texted 3: We are sorry to hear you don't have access to soap and water. Use a cloth to cover your hands when you leave home. Try not to touch your face.
8:00 AM	January 17-18, 2021	COVID TEXT: To stop the spread of COVID, avoid crowded places (like markets) as much as you can. Go to the market less often than before		COVID TEXT: How often should people in your community go to the market? Reply 1 for More than before; 2 for Same as before; and 3 for Less than before	If participant texted 1 or 2: Actually, to stop the spread of COVID, avoid crowded places (like markets) as much as you can. Go to the market less often than before.
					If participant texted 3: That's right! To stop the spread of COVID, avoid crowded places (like markets) as much as you can. Go to the market less often than before.
		COVID spreads through respiratory droplets produced when someone coughs, sneezes, or even talks. These are hard to avoid in crowded places!			COVID spreads through respiratory droplets produced when someone coughs, sneezes, or even talks. These are hard to avoid in crowded places!
				COVID TEXT: To stop the spread of COVID, avoid crowded places (like markets) as much as you can. Go to the market less often than before	
				COVID spreads through respiratory droplets produced when someone coughs, sneezes, or even talks. These are hard to avoid in crowded places!	
8:00 AM	January 28-29, 2021	COVID TEXT: Herbal remedies, eating garlic, and drinking alcohol won't protect you from COVID or cure you if you have it. Nor will eating chili or drinking tea.		COVID TEXT: Can herbal remedies, eating garlic, or drinking alcohol help protect you from COVID? Reply 1 for Yes, 2 for No	If participant texted Y: Actually, herbal remedies, eating garlic, and drinking alcohol won't protect you from COVID or cure you if you have it. Nor will eating chili or drinking tea.
					If participant texted N: Right! Herbal remedies, eating garlic, and drinking alcohol won't protect you from COVID or cure you if

					you have it. Nor will eating chili or drinking tea.
		Drinking alcohol can actually make you more likely to get sick & herbal remedies can harm your health. Go to your nearest health facility if you are sick.			Drinking alcohol can actually make you more likely to get sick & herbal remedies can harm your health. Go to your nearest health facility if you are sick.
				COVID TEXT: Herbal remedies, eating garlic, and drinking alcohol won't protect you from COVID or cure you if you have it. Nor will eating chili or drinking tea.	
				Drinking alcohol can actually make you more likely to get sick & herbal remedies can harm your health. Go to your nearest health facility if you are sick.	
		COVID TEXT: In the past week, did you touch, hug, or shake hands with anyone outside your household, including family? Reply 1 for Yes, 2 for No	If participant texted Y: Avoid physical contact with people who are ill and with people outside your household as much as possible to prevent the spread of COVID.	COVID TEXT: In the past week, did you touch, hug, or shake hands with anyone outside your household, including family? Reply 1 for Yes, 2 for No	If participant texted Y: Avoid physical contact with people who are ill and with people outside your household as much as possible to prevent the spread of COVID.
			If participant texted N: Great job! Avoiding physical contact with people who are ill and with people outside your household is an important way to prevent the spread of COVID.		If participant texted N: Great job! Avoiding physical contact with people who are ill and with people outside your household is an important way to prevent the spread of COVID.
		Thanks for reading these important messages! Your COVID TEXTS experience ends today. Staying informed about COVID is a great way to protect your community.		Thanks for reading these important messages! Your COVID TEXTS experience ends today. Staying informed about COVID is a great way to protect your community.	
8:00 AM	January 31-February 1, 2021	If you want more free and accurate information about COVID, TEXT 1 and we'll share a phone number you can use to learn more.	If participant texts 1: Use this free service and learn more about COVID: Dial "321" if you use Vodafone and "5100" if you use MTN. Keep yourself and your loved ones safe.	If you want more free and accurate information about COVID, TEXT 1 and we'll share a phone number you can use to learn more.	If participant texts 1: Use this free service and learn more about COVID: Dial "321" if you use Vodafone and "5100" if you use MTN. Keep yourself and your loved ones safe.

Study 2 Stimuli

Table 23 contains details on the timing and content of all text messages sent to Michigan residents who participated in Study 2. In Study 2, not all participants were recruited on the same day, so rather than sharing message timing based on the precise date of the message, the first three columns describe the time of day, intervention week (from one to four), and day of the week in which the message was sent. The next two columns describe messages sent in the *direct statement* condition, with the first column representing texts sent to start a conversation thread and the second column representing messages sent in response to participant replies. Similarly, columns six and seven represent conversation-starting messages and reply messages sent in the *Q&A* condition while columns eight and nine represent conversation-starting messages and reply messages sent in the *no-treatment control* condition.

In the *Q&A* condition columns, messages in red text were sent immediately after a participant replied to the question posed on information sharing days; messages in purple text were sent the next day **only** if the participant had not yet responded to the question posed. For that reason, certain message sequences are repeated in the *Q&A* condition columns, but participants only saw them once. Across all columns, messages highlighted in yellow are messages intended to collect dependent variables (i.e., self-reported behaviors, information seeking opportunities, and information sharing opportunities).

Note. If a participant texted "INFO", they received this message: "To ask questions about this study, email CovidTexts@wharton.upenn.edu. To learn more about the COVID-19 response in Michigan, see: https://tinyurl.com/y5amzkcp".

Table 23. Timing and Contents of Text Messages Sent in Study 2

Time	Week	Day	Direct Statements Condition		Q&A Condition		No-treatment Control	
			Conversation-Starting Texts	Reply Texts	Conversation-Starting Texts	Reply Texts	Conversation-Starting Texts	Reply Texts
			Hi! The Michigan Department of Health and Human Services & the University of Pennsylvania are partnering to learn how people react to messages about COVID-19. We'd like your input. TEXT 1 if you are willing to receive text messages with questions and information about COVID-19 over the next 4 weeks. Message & data rates may apply.		Hi! The Michigan Department of Health and Human Services & the University of Pennsylvania are partnering to learn how people react to messages about COVID-19. We'd like your input. TEXT 1 if you are willing to receive text messages with questions and information about COVID-19 over the next 4 weeks. Message & data rates may apply.		Hi! The Michigan Department of Health and Human Services & the University of Pennsylvania are partnering to learn how people react to messages about COVID-19. We'd like your input. TEXT 1 if you are willing to receive text messages with questions and information about COVID-19 over the next 4 weeks. Message & data rates may apply.	
Beginning of text intervention. Only proceed if they indicated that they are "Yes" willing to receive texts and "Yes" over 18.			Before we can continue, please confirm that you are 18 or older: Text Y for Yes, N for No	(If participant texts Y): Great! For the next 4 weeks, you'll get texts from UPenn about COVID-19. At any time, you can reply STOP to stop receiving texts and INFO for more information.	Before we can continue, please confirm that you are 18 or older: Text Y for Yes, N for No	(If participant texts Y): Great! For the next 4 weeks, you'll get texts from UPenn about COVID-19. At any time, you can reply STOP to stop receiving texts and INFO for more information.	Before we can continue, please confirm that you are 18 or older: Text Y for Yes, N for No	(If participant texts Y): Great! For the next 4 weeks, you'll get texts from UPenn about COVID-19. At any time, you can reply STOP to stop receiving texts and INFO for more information.
9:00 AM	1	1	COVID TEXT: The vast majority of Michiganders think everyone should be wearing a mask when they go out.		COVID TEXT: Do most Michiganders think everyone should be wearing a mask when they go out? Text Y for yes, N for no	If participant texted Y: Right! The vast majority of Michiganders think everyone should be wearing a mask when they go out.		
						If participant texted N: Actually, the vast majority of Michiganders think everyone should be wearing a mask when they go out.		
			Keep your mask on! *Always* wear a mask and stay 6 ft away from others when you leave home to keep your loved ones and community safe.			[Sent immediately after previous text, if participant replied]: Keep your mask on! *Always* wear a mask and stay 6 ft away from others when you leave home to keep your loved ones and community safe.		
					COVID TEXT: The vast majority of Michiganders think everyone should be wearing a mask when they go out.			
					Keep your mask on! *Always* wear a mask and stay 6 ft away from others when you leave home to keep your loved ones and community safe.			

			COVID TEXT: Masks aren’t enough to protect you on their own: Even if you and another person are both wearing masks, you need to stay 6 ft apart to be safe.		COVID TEXT: If you and another person are both wearing masks, do you still need to stay 6 feet away from one another to stay safe? Text Y for yes, N for no	If participant texted Y: That’s right! Masks aren’t enough to protect you on their own: Even if you and another person are both wearing masks, you need to stay 6 ft apart to be safe.		
						If participant texted N: Actually, masks aren’t enough to protect you on their own: Even if you and another person are both wearing masks, you need to stay 6 ft apart to be safe.		
			And remember: We do NOT yet have a vaccine or cure for COVID-19. So keep wearing a mask, social distancing, & avoiding nonessential travel to stay healthy.			And remember: We do NOT yet have a vaccine or cure for COVID-19. So keep wearing a mask, social distancing, & avoiding nonessential travel to stay healthy.		
					COVID TEXT: Masks aren’t enough to protect you on their own: Even if you and another person are both wearing masks, you need to stay 6 ft apart to be safe.			
9:00 AM	1	3			And remember: We do NOT yet have a vaccine or cure for COVID-19. So keep wearing a mask, social distancing, & avoiding nonessential travel to stay healthy.			
			COVID TEXT: Did you wear a mask the last few times you left home? Reply 1 for never, 2 for sometimes, 3 for always	If participant texted 1 or 2: We understand that wearing a mask may seem annoying. But to keep yourself and your community safe, it’s vital you wear your mask when you go out.	COVID TEXT: Did you wear a mask the last few times you left home? Reply 1 for never, 2 for sometimes, 3 for always	If participant texted 1 or 2: We understand that wearing a mask may seem annoying. But to keep yourself and your community safe, it’s vital you wear your mask when you go out.	COVID TEXT: Did you wear a mask the last few times you left home? Reply 1 for never, 2 for sometimes, 3 for always	If participant texted 1 or 2: We understand that wearing a mask may seem annoying. But to keep yourself and your community safe, it’s vital you wear your mask when you go out.
				If participant texted 3: That's excellent! To keep yourself and your community safe, it's vital that you keep wearing your mask when you go out.		If participant texted 3: That's excellent! To keep yourself and your community safe, it's vital that you keep wearing your mask when you go out.		If participant texted 3: That's excellent! To keep yourself and your community safe, it's vital that you keep wearing your mask when you go out.
9:00 AM	1	5 (DV Day)	[send immediately if a reply, a few hours later if no reply] COVID TEXT:		[send immediately if a reply, a few hours later if no reply] COVID TEXT: One way to make			

			One way to make wearing a mask more fun: decorate your mask! Personalize it and wear it proudly.		wearing a mask more fun: decorate your mask! Personalize it and wear it proudly.			
			TEXT 1 if you want us to share resources you can use to access more free and accurate information about COVID-19	If participant texted Y: Go to COVID-explained to learn more: https://explaincovid.org/ or to the CDC website for more info on how to stay safe: https://tinyurl.com/rnohcbc	TEXT 1 if you want us to share resources you can use to access more free and accurate information about COVID-19	If participant texted Y: Go to COVID-explained to learn more: https://explaincovid.org/ or to the CDC website for more info on how to stay safe: https://tinyurl.com/rnohcbc	TEXT 1 if you want us to share resources you can use to access more free and accurate information about COVID-19	If participant texted Y: Go to COVID-explained to learn more: https://explaincovid.org/ or to the CDC website for more info on how to stay safe: https://tinyurl.com/rnohcbc
				If you're worried you might be sick, call the Michigan helpline at **888-535-6136**		If you're worried you might be sick, call the Michigan helpline at **888-535-6136**		If you're worried you might be sick, call the Michigan helpline at **888-535-6136**
			COVID TEXT: Scientists estimate that you're almost *20 times* more likely to catch COVID-19 from other people indoors than outdoors.		COVID TEXT: Are you about 2, 10, or 20 times more likely to catch COVID-19 from other people indoors than outdoors? Text 2, 10, or 20	(2 or 10) Actually, scientists estimate that you're almost *20 times* more likely to catch COVID-19 from other people indoors than outdoors.		
						(20) Right! Scientists estimate that you're almost *20 times* more likely to catch COVID-19 from other people indoors than outdoors.		
			Don't share air! Sharing air with others is very risky, especially indoors or with lots of people over a long time. Wear a mask & avoid crowded indoor spaces.			Don't share air! Sharing air with others is very risky, especially indoors or with lots of people over a long time. Wear a mask & avoid crowded indoor spaces.		
					COVID TEXT: Scientists estimate that you're almost *20 times* more likely to catch COVID-19 from other people indoors than outdoors.			
9:00 AM	2	8			Don't share air! Sharing air with others is very risky, especially indoors or with lots of people over a long time. Wear a mask & avoid crowded indoor spaces.			
9:00 AM	2	10	COVID TEXT: COVID-19 *can* be spread by talking, especially without a mask on. So mask up! Wear a mask to reduce		COVID TEXT: Can COVID-19 be spread by talking without a mask on? Text Y for yes, N for no	If participant texted Y: Right! COVID-19 *can* be spread by talking, especially without a mask on. So mask up! Wear a mask to		

			the risk of spreading (and catching) COVID-19.			reduce the risk of spreading (and catching) COVID-19.		
						If participant texted N: Actually, COVID-19 *can* be spread by talking, especially without a mask on. So mask up! Wear a mask to reduce the risk of spreading (and catching) COVID-19.		
			COVID-19 spreads through respiratory droplets produced when someone coughs, sneezes, or even talks. TEXT 1 to learn how to maximize a mask's protective power.	(If participant texts 1): (1) When you wear a mask, make sure it covers your nose AND mouth. Try not to leave any gaps between the fabric and the side of your face.	COVID-19 spreads through respiratory droplets produced when someone coughs, sneezes, or even talks. TEXT 1 to learn how to maximize a mask's protective power.	(If participant texts 1): (1) When you wear a mask, make sure it covers your nose AND mouth. Try not to leave any gaps between the fabric and the side of your face.	COVID TEXT: COVID-19 spreads through respiratory droplets produced when someone coughs, sneezes, or even talks. TEXT 1 to learn how to maximize a mask's protective power.	(If participant texts 1): (1) When you wear a mask, make sure it covers your nose AND mouth. Try not to leave any gaps between the fabric and the side of your face.
				(2) If you wear a cloth mask, make sure that it has multiple layers of fabric.		(2) If you wear a cloth mask, make sure that it has multiple layers of fabric.		(2) If you wear a cloth mask, make sure that it has multiple layers of fabric.
				(3) Wash your hands after removing your mask, and try not to touch your eyes, nose, or mouth while taking it off.		(3) Wash your hands after removing your mask, and try not to touch your eyes, nose, or mouth while taking it off.		(3) Wash your hands after removing your mask, and try not to touch your eyes, nose, or mouth while taking it off.
				(4) Launder reusable masks often. To avoid wear and tear, you can hand wash the mask under hot water & hang it to dry before your next use.		(4) Launder reusable masks often. To avoid wear and tear, you can hand wash the mask under hot water & hang it to dry before your next use.		(4) Launder reusable masks often. To avoid wear and tear, you can hand wash the mask under hot water & hang it to dry before your next use.
				(5) Don't use your mask when damp or wet -- it won't protect you as effectively!		(5) Don't use your mask when damp or wet -- it won't protect you as effectively!		(5) Don't use your mask when damp or wet -- it won't protect you as effectively!
					COVID TEXT: COVID-19 *can* be spread by talking, especially without a mask on. So mask up! Wear a mask to reduce the risk of spreading (and catching) COVID-19.			
					COVID-19 spreads through respiratory droplets produced when someone coughs, sneezes, or even talks. TEXT 1 to learn how to maximize a mask's protective power.	(If participant texts 1): (1) When you wear a mask, make sure it covers your nose AND mouth. Try not to leave any gaps between the fabric and the side of your face.		

						(2) If you wear a cloth mask, make sure that it has multiple layers of fabric.		
						(3) Wash your hands after removing your mask, and try not to touch your eyes, nose, or mouth while taking it off.		
						(4) Launder reusable masks often. To avoid wear and tear, you can hand wash the mask under hot water & hang it to dry before your next use.		
						(5) Don't use your mask when damp or wet -- it won't protect you as effectively!		
			COVID TEXT: How many of the past 7 days did you leave home for social reasons like entertainment or meeting up with friends? Reply with a number from 0 to 7	If participant texted 0: Excellent! Leaving your home for groceries or work can be necessary, but it's important to stay home as much as possible to prevent the spread of COVID-19.	COVID TEXT: How many of the past 7 days did you leave home for social reasons like entertainment or meeting up with friends? Reply with a number from 0 to 7	If participant texted 0: Excellent! Leaving your home for groceries or work can be necessary, but it's important to stay home as much as possible to prevent the spread of COVID-19.	COVID TEXT: How many of the past 7 days did you leave home for social reasons like entertainment or meeting up with friends? Reply with a number from 0 to 7	If participant texted 0: Excellent! Leaving your home for groceries or work can be necessary, but it's important to stay home as much as possible to prevent the spread of COVID-19.
				If participant texted more than 0: Leaving your home for groceries or work can be necessary, but it's important to stay home as much as possible to prevent the spread of COVID-19.		If participant texted more than 0: Leaving your home for groceries or work can be necessary, but it's important to stay home as much as possible to prevent the spread of COVID-19.		If participant texted more than 0: Leaving your home for groceries or work can be necessary, but it's important to stay home as much as possible to prevent the spread of COVID-19.
			Avoid large gatherings (of 10 or more people) when possible, especially if they're indoors. When in public, stay at least 6 ft away from others & wear a mask.		Avoid large gatherings (of 10 or more people) when possible, especially if they're indoors. When in public, stay at least 6 ft away from others & wear a mask.			
9:00 AM	2	12 (DV Day)	Do you want to keep your friends and family informed about COVID-19? If so, text us their numbers separated by commas. We will send them a text about COVID-19.	If they text a phone number: Thank you for sharing! We are happy to share more information about COVID-19 with your loved ones.	Do you want to keep your friends and family informed about COVID-19? If so, text us their numbers separated by commas. We will send them a text about COVID-19.	If they text a phone number: Thank you for sharing! We are happy to share more information about COVID-19 with your loved ones.	Do you want to keep your friends and family informed about COVID-19? If so, text us their numbers separated by commas. We will send them a text about COVID-19.	If they text a phone number: Thank you for sharing! We are happy to share more information about COVID-19 with your loved ones.
9:00 AM	3	15	COVID TEXT: Face masks help protect YOU if someone with COVID-19 coughs near you		COVID TEXT: Can face masks help protect *you* if someone with COVID-19 coughs near you	If participant texted Y: That's right! Face masks help protect YOU if someone with COVID-19 coughs near you without a mask		

			without a mask on, but they're far less effective without social distancing.		without a mask on? Text Y for yes, N for no	on, but they're far less effective without social distancing.		
						If participant texted N: Actually, face masks help protect YOU if someone with COVID-19 coughs near you without a mask on, but they're far less effective without social distancing.		
			Masks are often described as a way to protect other people from you, but that's not all they do. Masks (plus social distancing!) help protect YOU from others.			Masks are often described as a way to protect other people from you, but that's not all they do. Masks (plus social distancing!) help protect YOU from others.		
					COVID TEXT: Face masks help protect YOU if someone with COVID-19 coughs near you without a mask on, but they're far less effective without social distancing.			
					Masks are often described as a way to protect other people from you, but that's not all they do. Masks (plus social distancing!) help protect YOU from others.			
			COVID TEXT: Alcohol-free hand sanitizers are NOT an effective way to kill COVID-19. Only hand sanitizers that are 60% alcohol or greater can kill COVID-19.		COVID TEXT: Are alcohol-free hand sanitizers an effective way to kill COVID-19? Text Y for yes, N for no	If participant texted Y: Actually, alcohol-free hand sanitizers are NOT an effective way to kill COVID-19. Only hand sanitizers that are 60% alcohol or greater can kill COVID-19.		
						If participant texted N: Right! Alcohol-free hand sanitizers are NOT an effective way to kill COVID-19. Only hand sanitizers that are 60% alcohol or greater can kill COVID-19.		
			TEXT 1 if you'd like a few tips for how to stay safe when you go out.	(If participant texts 1): (1) Bring disinfecting wipes to wipe down surfaces when you use public transportation, go grocery shopping, or run other errands.	TEXT 1 if you'd like a few tips for how to stay safe when you go out.	(If participant texts 1): (1) Bring disinfecting wipes to wipe down surfaces when you use public transportation, go grocery shopping, or run other errands.	COVID TEXT: TEXT 1 if you'd like a few tips for how to stay safe when you go out.	(If participant texts 1): (1) Bring disinfecting wipes to wipe down surfaces when you use public transportation, go grocery shopping, or run other errands.
9:00 AM	3	18		(2) Leave your hand sanitizer with your keys so you don't		(2) Leave your hand sanitizer with your keys so you don't		(2) Leave your hand sanitizer with your keys so you don't forget it!

				forget it! Use it regularly when you leave home.		forget it! Use it regularly when you leave home.		Use it regularly when you leave home.
				(3) If you can, use no touch payment instead of cash or credit cards. Do your best not to touch your face.		(3) If you can, use no touch payment instead of cash or credit cards. Do your best not to touch your face.		(3) If you can, use no touch payment instead of cash or credit cards. Do your best not to touch your face.
				(4) If you're worried about forgetting your mask before you leave home, hang it near your door. That way you'll never leave home without it!		(4) If you're worried about forgetting your mask before you leave home, hang it near your door. That way you'll never leave home without it!		(4) If you're worried about forgetting your mask before you leave home, hang it near your door. That way you'll never leave home without it!
				(5) Wash your hands for at least 20 seconds with soap and water as soon as you get home.		(5) Wash your hands for at least 20 seconds with soap and water as soon as you get home.		(5) Wash your hands for at least 20 seconds with soap and water as soon as you get home.
					COVID TEXT: Alcohol-free hand sanitizers are NOT an effective way to kill COVID-19. Only hand sanitizers that are 60% alcohol or greater can kill COVID-19.			
					TEXT 1 if you'd like a few tips for how to stay safe when you go out.	(If participant texts 1): (1) Bring disinfecting wipes to wipe down surfaces when you use public transportation, go grocery shopping, or run other errands.		
						(2) Leave your hand sanitizer with your keys so you don't forget it! Use it regularly when you leave home.		
						(3) If you can, use no touch payment instead of cash or credit cards. Do your best not to touch your face.		
						(4) If you're worried about forgetting your mask before you leave home, hang it near your door. That way you'll never leave home without it!		
						(5) Wash your hands for at least 20 seconds with soap and water as soon as you get home.		
9:00 AM	3	20 (DV	COVID TEXT: Did you wash your hands thoroughly with soap under running water the	If participant texted Y: Excellent! Doctors recommend washing your hands for at least 20 seconds with soap and	COVID TEXT: Did you wash your hands thoroughly with soap under running water the last time	If participant texted Y: Excellent! Doctors recommend washing your hands for at least 20 seconds with soap and water, just as you	COVID TEXT: Did you wash your hands thoroughly with soap under running water the	If participant texted Y: Excellent! Doctors recommend washing your hands for at least 20

		Day)	last time you got back from an outing? Text Y for Yes, N for No	water, just as you have been doing. This will help you stay healthy.	you got back from an outing? Text Y for Yes, N for No	have been doing. This will help you stay healthy.	last time you got back from an outing? Text Y for Yes, N for No	seconds with soap and water, just as you have been doing. This will help you stay healthy.
				If participant texted N: Doctors recommend washing your hands for at least 20 seconds with soap and water. This will help you stay healthy.		If participant texted N: Doctors recommend washing your hands for at least 20 seconds with soap and water. This will help you stay healthy.		If participant texted N: Doctors recommend washing your hands for at least 20 seconds with soap and water. This will help you stay healthy.
			A tip to make sure you're washing for 20 seconds: sing "Happy Birthday" twice while you wash -- or pick another favorite song!		A tip to make sure you're washing for 20 seconds: sing "Happy Birthday" twice while you wash -- or pick another favorite song!			
			COVID TEXT: Losing your sense of smell (and taste) can be a symptom of COVID-19. But remember, you can have COVID-19 even if you're not showing any symptoms.		COVID TEXT: Is losing your sense of smell a symptom of COVID-19? Text Y for Yes, N for No	If participant texted Y: Right! Losing your sense of smell (and taste) can be a symptom of COVID-19. But remember, you can have COVID-19 even if you're not showing any symptoms.		
						If participant texted N: Actually, losing your sense of smell (and taste) can be a symptom of COVID-19. But remember, you can have COVID-19 even if you're not showing any symptoms.		
			Keep your at-risk loved ones safe. Wear a mask and keep your distance. If you're feeling sick, stay home. TEXT 1 if you want to know more about who is at-risk.	If they TEXT 1: People at higher risk of dying from COVID-19 include those with high blood pressure, diabetes, asthma, heart or lung disease, or sickle cell anemia.	Keep your at-risk loved ones safe. Wear a mask and keep your distance. If you're feeling sick, stay home. TEXT 1 if you want to know more about who is at-risk.	If they TEXT 1: People at higher risk of dying from COVID-19 include those with high blood pressure, diabetes, asthma, heart or lung disease, or sickle cell anemia.	COVID TEXT: Keep your at-risk loved ones safe. Wear a mask and keep your distance. If you're feeling sick, stay home. TEXT 1 if you want to know more about who is at-risk.	If they TEXT 1: People at higher risk of dying from COVID-19 include those with high blood pressure, diabetes, asthma, heart or lung disease, or sickle cell anemia.
					COVID TEXT: Losing your sense of smell (and taste) can be a symptom of COVID-19. But remember, you can have COVID-19 even if you're not showing any symptoms.			
9:00 AM	4	23			Keep your at-risk loved ones safe. Wear a mask and keep your distance. If you're feeling sick, stay home. TEXT 1 if you want to know more about who is at-risk.	If they TEXT 1: People at higher risk of dying from COVID-19 include those with high blood pressure, diabetes, asthma, heart		

						or lung disease, or sickle cell anemia.		
			COVID TEXT: To reach ‘herd immunity’ (meaning it's hard for COVID-19 to find new people to infect) ~70% of US residents would need to get COVID-19 or a vaccine.		COVID TEXT: Would more than 50% of US residents need to get COVID-19 or a vaccine to reach ‘herd immunity’? Text Y for yes, N for no	If participant texted 1: Right, to reach ‘herd immunity’ (meaning it’s hard for COVID-19 to find new people to infect) ~70% of US residents would need to get COVID-19 or a vaccine.		
						If participant texted N: Actually, to reach ‘herd immunity’ (meaning it’s hard for COVID-19 to find new people to infect) ~70% of US residents would need to get COVID-19 or a vaccine.		
			It’s DANGEROUS to try reaching ‘herd immunity’ by infecting people: this would hurt at-risk populations & overwhelm hospitals. Be safe instead: Stop the spread.			It’s DANGEROUS to try reaching ‘herd immunity’ by infecting people: this would hurt at-risk populations & overwhelm hospitals. Be safe instead: Stop the spread.		
					COVID TEXT: To reach ‘herd immunity’ (meaning it's hard for COVID-19 to find new people to infect) ~70% of US residents would need to get COVID-19 or a vaccine.			
9:00 AM	4	25			It’s DANGEROUS to try reaching ‘herd immunity’ by infecting people: this would hurt at-risk populations & overwhelm hospitals. Be safe instead: Stop the spread.			
			COVID TEXT: In the past week, did you touch, hug, or shake hands with anyone outside your household, including family? Text Y for Yes; Text N for No	If participant texted Y: Avoid physical contact with people who are ill and with people outside your household as much as possible to avoid the spread of COVID-19.	COVID TEXT: In the past week, did you touch, hug, or shake hands with anyone outside your household, including family? Text Y for Yes; Text N for No	If participant texted Y: Avoid physical contact with people who are ill and with people outside your household as much as possible to avoid the spread of COVID-19.	COVID TEXT: In the past week, did you touch, hug, or shake hands with anyone outside your household, including family? Text Y for Yes; Text N for No	If participant texted Y: Avoid physical contact with people who are ill and with people outside your household as much as possible to avoid the spread of COVID-19.
9:00 AM	4	28 (DV Day)		If participant texted N: Great job! Avoiding physical contact with people who are ill and with people outside your household is an important way		If participant texted N: Great job! Avoiding physical contact with people who are ill and with people outside your household is an important way to prevent the spread of COVID-19.		If participant texted N: Great job! Avoiding physical contact with people who are ill and with people outside your household is an important

				to prevent the spread of COVID-19.				way to prevent the spread of COVID-19.
			Thanks for reading these important messages! Your COVID TEXTS experience ends today. Staying informed about COVID-19 is a great way to protect your community.		Thanks for reading these important messages! Your COVID TEXTS experience ends today. Staying informed about COVID-19 is a great way to protect your community.		Thanks for reading these important messages! Your COVID TEXTS experience ends today. Staying informed about COVID-19 is a great way to protect your community.	
			TEXT 1 if you want us to share more resources you can use to access free and accurate information about COVID-19.	If participant texts 1: Go to COVID decoded to learn more: https://www.coviddecoded.com/. You can also get more information from the WHO: **https://tinyurl.com/vr9owsn**	TEXT 1 if you want us to share more resources you can use to access free and accurate information about COVID-19.	If participant texts 1: Go to COVID decoded to learn more: https://www.coviddecoded.com/. You can also get more information from the WHO: **https://tinyurl.com/vr9owsn**	TEXT 1 if you want us to share more resources you can use to access free and accurate information about COVID-19.	If participant texts 1: Go to COVID decoded to learn more: https://www.coviddecoded.com/. You can also get more information from the WHO: **https://tinyurl.com/vr9owsn**
				If you're worried you might be sick, call the Michigan helpline at **888-535-6136**		If you're worried you might be sick, call the Michigan helpline at **888-535-6136**		If you're worried you might be sick, call the Michigan helpline at **888-535-6136**