US Centre Summer Research Grant

Recipient name: Agnes Yu

Project title: Short-Circuiting Protest Deterrence: Repression, Fear Alignment and Social Networks

Summary of project:

How often are individuals less deterred from protest <u>despite</u> greater feelings of fear? How and to what extent do social networks condition the relationship between fear and deterrence? Fear and deterrence have yet been examined simultaneously in relation to protest decisions, particularly in non-maximalist, democratic contexts. Instead, a proportional relationship between fear and deterrence are often assumed, with little distinction between *fear* of protest and *deterrence* from protest.

These questions are particularly pertinent in the US context, where 10,600 protest events were recorded between May-August 2020, centered around the Black Lives Matter movement catalyzed by the killing of George Floyd. The government response was disproportionately forceful, with President Trump first threatening then applying militarized federal forces against demonstrators in places such as Seattle, Portland, Oregon, and Washington DC. The project takes the US as a democratic, non-maximalist case to examine the alignment between deterrence and fear in the face of repression/protest risks.

This study explores three functions social networks may serve to mediate the fear-deterrence relationship. I argue that core network (close friends and family) political homogeneity, discussion frequency, geographical proximity, and protest attendance may 'short-circuit' the alignment between fear and deterrence, such that individuals are *less* deterred by scenarios that they are *more* fearful of. Ultimately, the pilot data supports proposals of network proximity and nature of discussion ties mediating the alignment between fear and deterrence, such that individuals are less deterred even in cases where they may feel higher fear, supporting the *social* nature of fear and protest, and revealing promising avenues for fielding the formal survey.

Introduction

The United States (US) recorded over 10,600 protests between May-August 2020, centred around the Black Lives Matter movement catalysed by the killing of George Floyd. The government response was disproportionately forceful, with then President Donald Trump threatening and applying militarized federal forces against demonstrators in locations such as Seattle, Portland, Oregon, and Washington DC. Under this context of ongoing systemic violence, repressive governmental responses to largely peaceful protests, public fears and anxiety about a potentially unpeaceful transfer of presidential power, this project aims to understand how repression/protest risks, fear, and social networks may affect protest decisions in the US. Namely, *how often are individuals less deterred from protest despite greater feelings of fear? How and to what extent do the types of repression and social networks condition the relationship between fear and deterrence?*

Despite the large waves of protest occurring in recent years, the alignment between fear and deterrence have yet been examined in non-maximalist, democratic contexts such as the US, where protest is a more institutionalized form of political action, and where sources of political fear may not necessarily come from fear of/from government repression,[1] but from more decentralized or even social sources. Repertoires of repression in democracies may also be limited given higher audience costs should repression be explicit and violent (Boykoff 2007), which again, could mean that protest deterrence and fear may come from third-party sources, such the threat of counter-protest (Hager et al, 2021). It is unlikely that fear can be a placeholder for deterrence or be entirely constitutive of deterrence in democratic, non-maximalist settings,[2] and yet the relationships between fear-repression and repression-deterrence are understudied as most work on protest-fear has focused (rightly so) on authoritarian, maximalist cases. This project therefore extends existing understandings of protest, deterrence, and fear, focusing on the US as a pertinent case.

To explore my research questions, I conducted three pre-test surveys and one pilot survey in Lent term 2022. Prior to this, I initially conducted four cognitive interviews and two pre-tests for another survey experiment during Summer 2021. However, as I on my data collection method, I ended up pursuing an alternative approach by the end of the summer as I found that I needed an empirical basis prior to developing the specific theoretical interests I had initially outlined in my proposal. Despite ongoing difficulties with software access to

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[1] In the form where 'first amendment rights' are violated, as per Davenport's (2007) definition of repression.
[2] Literature exploring fear and ('advanced') democracies focus on the relationship between fear, democracy and terrorism (as examples, see Christensen & Aars (2019), Boyle (2011)), as opposed to protest/repression.

pursue my later revised approach, the funds used for the phases were crucial for re-evaluating the chronology of my survey experiments and *what exactly* my experiments were measuring and paves a much-improved foundation for my project to move forward.

This report describes the research design, presents preliminary results from the adjusted pilot survey conducted February 2022, and outlines the next steps for the project. Included in the appendices are a budget breakdown (Appendix A), conjoint experiment design (Appendix B), and a reflection timeline of the changes made prior to this revised approach to the project (Appendix C). All in all, the pilot results suggest promising avenues for conducting the full-sized survey, supporting several hypotheses I proposed in understanding how fear and social networks may mediate each other, and how these factors may affect protest calculations of individuals in the US.

Theory

This study understands protest (non-)participation and fear both as a *socially shaped and mediated* variables, and therefore explores socially contextualized explanations for protest behaviour. The differentiates from extant experimental approaches that commonly take fear to be an individual-level measure which obscures the importance of social contexts/relations constituting how fear is experienced and/or constrained *to begin with* and from studies that conflate fear and non-participation when one is an emotional response and the other is a resulting action (Kuran 1991, Rozenas and Zhukov 2019, Aldama et al 2019, Young 2018). By measuring both non-participation and fear, this study can better pinpoint when and how fear is (not) overcome. Similarly, individual characteristics and social (network) factors for participation are mutually reinforcing and not exclusive (Campbell 2013), and yet most literature on individual protest participation has either focused on 'innate'/biographic characteristics for participation or wider network structures. Taking fear and non-participation together and as *social* variables then, this project aims to provide a fully picture of protest decisions in the US.

I argue that the characteristics and types of social network may override the effects of fear through different mechanisms. Group organization and social networks are structurally, logistically, relationally, and emotionally important, and often identified as a crucial variable in studying political mobilization.[3] Three attributes of social networks are particularly

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3 Within Sociology, see the works of Snow, Zurcher & Ekland-Olson 1980, McAdam 1986, Gould 1991, McAdam and Paulsen 1993, Lim 2008, Kitts 2000, DiGrazia 2014. Within Political Science, see Huckfeldt & Spraque 1995, Stephan & Chenoweth 2008, Ley 2014). This is by no means an exhaustive list, as social network

relevant for understanding protest participation: 1) they may serve as sources of information to clarify uncertainty (Granovetter 1973, Anspach 2017), 2) as sources (and are arguably constitutive) of communal belonging that can override fear (Ley 2014), and 3) provide opportunities for socialization around a protest issue (Passy and Giugni 2001) and constitute the *value* of attending a protest should it be perceived as a social action/norm (Opp 2001).

The hypotheses I test in relation to networks include:

- *H1* Political discussion activeness will be associated with lower alignment between fear and deterrence, as frequency of discussion may lower uncertainty around protest risks and reinforce investment in protest issue(s).

- *H2* Political discussion homogeneity will be associated with lower alignment between fear and deterrence, as network solidarity and the social costs of *not* attending the protest contribute towards fear being overridden.

- *H3* The higher the network proximity of respondents with their core social network, the lower the alignment between fear and deterrence.

- *H4* Protest utility and turnout will affect respondents' deterrence more strongly than fear, while information source and network attendance will have a larger effect on fear than deterrence.**

Research Design

This study utilizes a paired-profile conjoint experiment design (Appendix B) to explore what/how protest factors deters participation and elicits fear differently, and under what protest conditions are individuals *less* deterred by protest conditions they are *more* fearful of. The conjoint design allows the Average Marginal Component Effects[4] of each protest risk and potential factors for non-participation to be causally measured relative to a baseline. While the experiment considers common explanatory variables of (non-)participation such as protest size, protest utility, risks involved, and information sources, it distinguishes from extant experimental approaches in two aspects.

Firstly, in addition to choosing the conjoint scenario they would be more deterred by, respondents are also asked to rate the degree of fear felt for each scenario so that the alignment between fear and deterrence can be zeroed in to. Second, to encapsulate the social contexts of respondents' fear responses and to test how network characteristics and proximity affects/mediates feelings of fear, respondents are asked network questions prior to the

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approaches have been long utilized in other disciplines such as Anthropology, Psychology, etc. For an overview of Social Networks and Political participation, see Campbell 2013 in the *Annual Review of Political Science*.
[4] AMCEs are understood as "the expected change in the rating of a candidate profile when a given attribute is compared to the researcher-chosen baseline (Hainmueller, Hopkins and Yamamoto 2014, pg.19)."

experimental stage so that correlations between network characteristics and conjoint outcomes can be examined. These questions include network proximity (same city, same state, in the US, abroad), political discussion homogeneity, and political discussion frequency between a respondent and their family and close friends.[5] For a baseline of motivation, respondents are asked to choose a 'most important issue facing the US' that they want to see the most change in prior to the conjoint stage. Other controls include questions on respondents' protest history and a conjoint level that accounts for COVID-19 exposure.

Pilot Findings

This section presents data from a pilot survey (n = 110, usable n = 105) fielded on a US convenience sample[6] in February 2022, with inferential caveats given the small sample size. This pilot was conducted after three pre-tests on convenience samples. [7]

Across the sample, the main findings include:

1) Fear and deterrence were aligned only 64.2% of the time (i.e. when respondents were more deterred by a profile with a *higher* fear rating), and not aligned 35.8% of the time (i.e. when respondents were more deterred by a profile with a *lower* fear rating).

2) Fear-deterrence alignment is strongly correlated with political discussion homogeneity and geographical proximity of respondents from their core network.

3) The (non-) attendance of family and close friends affect protest deterrence in different directions. Family *not* attending is associated with *less* deterrence compared to when family will attend. However, close friends being unsure of their attendance has a greater deterrence effect relative to them attending or not attending.

4) Amongst the 'Information source' attribute-levels, social media is associated with lowest deterrence relative to the attribute baseline and is also the information source most respondents report to mainly get their news from. I plan to disaggregate this further for the final survey to also proxy for social media with different network types

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[5] The last two questions measure network 'ties' between the respondent and their networks, rather than 'objective' characteristics of their social networks overall.

[6] While convenience samples are not likely to be representative of the US population as a whole, this is not a pressing concern as 1) I focus on measuring the effect of treatment on individuals (as opposed to a survey which tries to extrapolate information about a wider population using a sample), and 2) experiments initially fielded on nationally representative samples have fared rather successfully when replicated using convenience samples (Coppock 2018, Coppock, Leeper and Mullinix 2018).

[7] A test of the actual survey, with a small respondent pool. Like cognitive interviews, pre-tests check for systemic biases to answers, respondent attention, task difficulty, common areas for error, and problems with the survey format/flow. Contrary to the cognitive interviews, the respondents are not asked for their feedback, and do not know that this is a 'draft' version of the experiment.
** this hypothesis cannot be tested yet due to some technical difficulties.

5) The nature of political discussion ties matter: harmonious political discussion ties show protest risks increasing protest deterrence compared to active political discussion ties, where protest risks have diverging effects on deterrence.

6) Aside from being correlated with fear-deterrence, geographic proximity of networks is also correlated with higher deterrence effects of protest risks and protest (f)utility.

Sample Demographic Attributes

Of the pilot respondents (n= 105), the majority were white (76%) then African American (10.4%), East Asian (3.8%), Hispanic (3.8), South Asian, (1.9%), Mixed-ethnicity (1.9%) and undisclosed (1.9%).[8] The majority identified as Democrats (63.8%, before Republicans (20.95%), Independents (13.3%), and 1.9% other), and were men (61.9% with 37% women). Of the respondents, 87.6% were employed full-time, 4.76% were employed part-time, 4.7% were unemployed (looking and not looking), and 1% for being a student, retired, and undisclosed. The respondent population was lived in urban areas (54.3%), attained a bachelor's degree or masters (81.6%), and mostly received news through social media (42.85%) or online news (25.7%). The average age of the sample was 37.2.

(Perceived) Network characteristics

When generating binary variables of 'low' and 'high' for each type of political discussion tie(where ratings below 4 are coded as 'low' and ratings greater than 4 are coded as 'high'), approximately 59% of respondents have family discussion ties with high political agreement and 16.1% of respondents have family discussion ties with low political agreement. Of the respondents, 49.5% frequently discuss politics with their family, and 24.8% of respondents rarely discuss politics with their family. Friendship ties are slightly higher in political homogeneity with 61.9% of respondents having politically homogenous friendship discussion ties, and 16.1% of respondents have friendship political discussion ties with low political agreement. 56% frequently discuss politics with their close friends, and 23.8% of respondents rarely discuss politics with their close friends. Tables 1, 2, and 3 below shows the two network measures against network types:

Table 1 Frequency and homogeneity for Family political discussion networks, and Table 2. Network frequency and homogeneity for Close friends political discussion networks

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[8] Given the small sample size and the ratio of ethnicity between respondents, I was not able to disaggregate the data by race meaningfully, but I hope to do so with the formal survey data.

Family	Active ties (49.5%)	Inactive ties (24.8%)		Close friends	Active ties (56%)	Inactive ties (23.8%)
Homogenous ties (59%)	38%	6.6%		Homogenous ties (61.9%)	47.6%	3.8%
Heterogenous ties (16.1%)	1.9%	8.6%		Heterogenous ties (16.1%)	0.9%	11.4%

Table 3. Network frequency and homogeneity for Core political discussion networks (Family + Close friends)

Core discussion ties (family + friends)	Active ties (34.2%)	Inactive ties (15%)
Homogenous (40%)	23.8%	1.9%
Heterogenous (6%)	0	4.8%

Fear Alignment – Overall Results and Resulted by Network Characteristics

Across 525 scenario-pairs evaluated by respondents, individuals were more deterred by a protest scenario they rated with *higher* fear 64.2% of the time and are more deterred by a scenario they rated with *lower* fear 35.8% of the time, with an average difference of 1.5 scale points in fear rating (out of 7). The average level of fear across all scenarios was 4.471429. This preliminary finding supports the study's intuition of fear and deterrence being distinct.

There is also strong support for the importance of social networks and discussion-tie types in short-circuiting the alignment between fear and deterrence. Fear and deterrence are aligned for those with active political discussion ties 63% of the time with an average difference in fear rating of 1.35. Respondents with homogenous political discussion ties were more deterred by a scenario they rated with higher fear 70.7% of the time (average 1.437 difference in fear rating, while respondents with heterogenous political discussion ties were more deterred by a scenario rated with higher fear only 48.5% of the time (1.2 average difference in rating).[9] We see that disagreement has a larger correlation with fear-deterrence

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[9] This group is of a small population within the data collected, so a larger sample size from the final survey would be required for higher confidence in how significant this divergence in fear-participation alignment is.

misalignment compared to the activeness of political discussion ties, suggesting that H2 should be altered. This echoes the network literature that understands political polarization as avenues for mobilization, and while H2 perhaps needs to be adjusted, this finding still supports the project's intuition that networks may mediate the relationship between fear and deterrence through several mechanisms.

On the other hand, respondents with inactive political discussion ties were more deterred by a scenario they rated with higher fear 67.5 of the time (1.33 average difference in rating), and respondents with active *and* homogenous political discussion ties were deterred by a scenario they rated with higher fear 68% of the time (1.296 average difference in rating).[10] These preliminary results suggests that H1 should also altered, as disagreement /agreement seems to be most associated with instances where deterrence and fear are short-circuited as opposed to the frequency of discussion. However, discussion frequency /activeness could still affect the fear-deterrence alignment when evaluated alongside homogeneity and network type. This is a current limitation of the small sample size, where evaluating sub-groups across characteristics/tie types (i.e. heterogenous and active, heterogenous and inactive etc.) cannot be done meaningfully at this stage.

Table 4: Fear-Deterrence alignment depending on political discussion tie-type

Political Discussion	F-D Alignment	Avg. Fear Difference
Homogenous political discussion	70%	1.44
Heterogenous political discussion*	48.5%	1.2
Active political discussion	63.8%	1.35
Inactive political discussion	67.5	1.33

The results in Table 5 also show that differentiating between network proximity is meaningful for understanding the relationship between fear and repression. More alignment and less short-circuiting is observed the further geographically respondent's core networks are located, aligning with the expectations of H3. Respondents with their core network (family and close friends) in the same city were deterred by a scenario rated with higher fear only 57% of the time, with an average fear difference of 1.3. By contrast, respondents with

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[10] Subgroups of respondents with active/heterogenous, inactive/heterogenous, and inactive/homogenous political discussion networks were too small to be included.

core networks in the same state were deterred by a scenario rated with higher fear 66% of the time, with an average fear difference of 1.55. Respondents with core networks living in the US were deterred by a scenario rated with higher fear 75% of the time, the highest across the subgroups, with the largest average fear difference between scenario-pairs of 1.72. This supports the study's intuition on social networks functioning to override fear, or to even generate a higher baseline of fear tolerance *to begin with*, as seen in the lower average fear difference for individuals with their core networks in the same city. However, why that may be the case will need to be further explored by comparing the conjoint results between the fear and deterrence measures.

Table 5: Fear-Deterrence alignment depending on network proximity

Network Proximity	F-D Alignment	Avg. Fear Difference
Same city/town	57%	1.3
Same state	66%	1.5
In the US	75%	1.72

Partial Conjoint Results Disaggregated by Network Characteristics

Due to some technically difficulties, I am not able to directly compare the conjoint results loaded with deterrence compared to the conjoint results with a binary fear variable, which would test H4 and would give us a better idea of along what dimensions are fear and deterrence affected differently. This is an area I hope to remedy prior to the formal fielding of the survey. However, this section does outline some relevant results that indicate again how the proximity of social networks is an important factor that affects risk perception and protest-deterrence for respondents.

From the results presented, we see that respondents who have their core networks in the same city (Fig. 1) are less sensitive to protest risks and repressive repertoires (in purple), and the utility of protest. The deterrence effect of 'violent protest' is on part with the baseline of 'minimal personal risk', and 'government denouncing protest and organizers' are associated with negative deterrence effects. In contrast, respondents with family in the same state but not the same city (Fig. 2) are more deterred at large by protest risks and information source-type compared to the same_city respondents. The confidence intervals for respondents

with their core networks in the US (Fig. 3) are much larger given the small sample size. This group is most sensitive to the utility of protest and information source, which echoes previous points raised about considering more deeply how networks shape perceived protest utility.

Across the subgroups, we see a general right shift across the attributes aside from family attendance, which could potentially be explained should respondents live *away* from family but *closer* to friends. This mixed result suggests the need to further disaggregate the proximity variable according to network type. The variation seen across network types and network proximity demonstrates the several functions social networks may have in constructing protest calculations which need to be further explored. Again, the results suggest the importance of social networks in shaping not only the alignment between fear and deterrence, but in constituting deterrence/fear in the first place.

Figure 1. Effects of protest attributes on deterrence for respondents living in the same city as their core networks
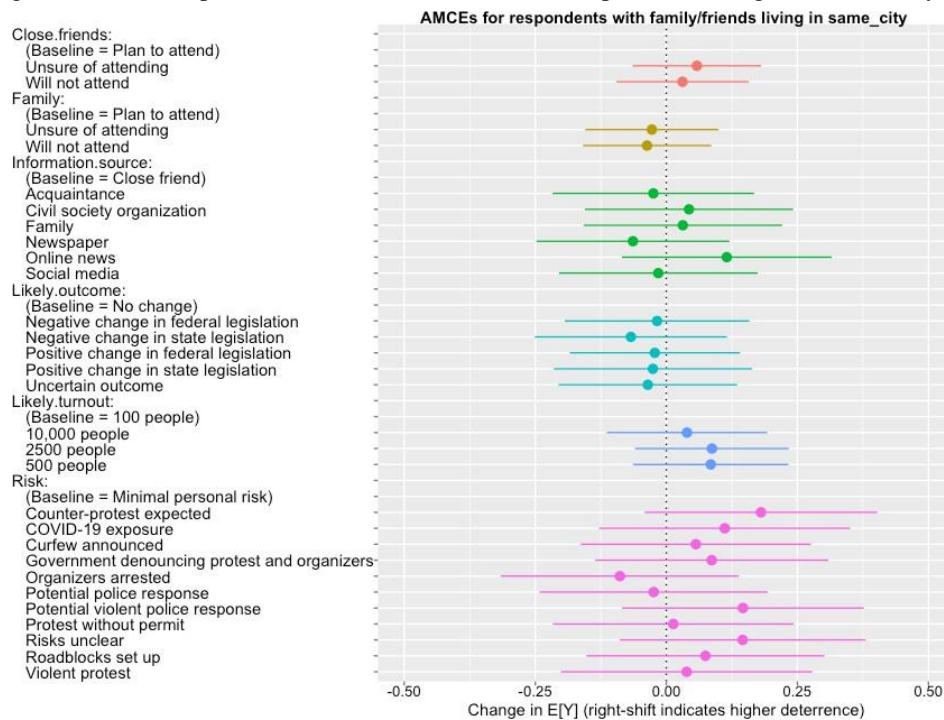
Figure 2. Effects of protest attributes on deterrence for respondents in the same state as their core networks.
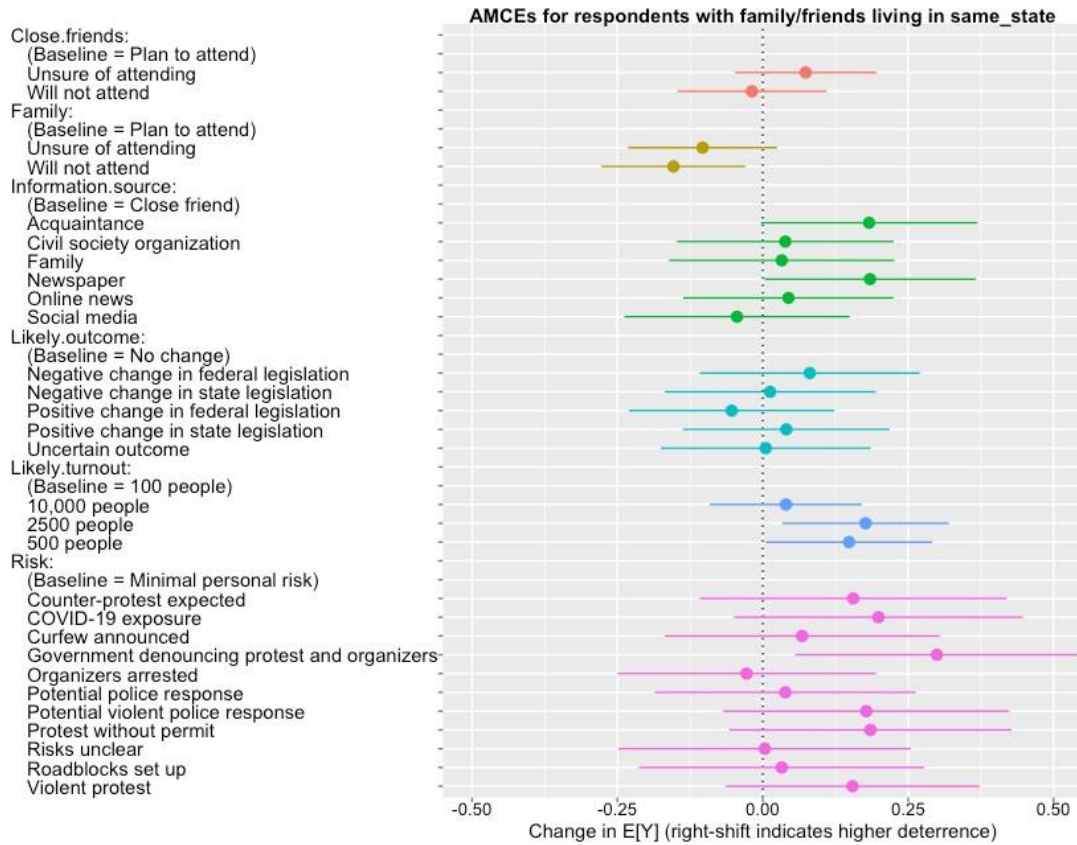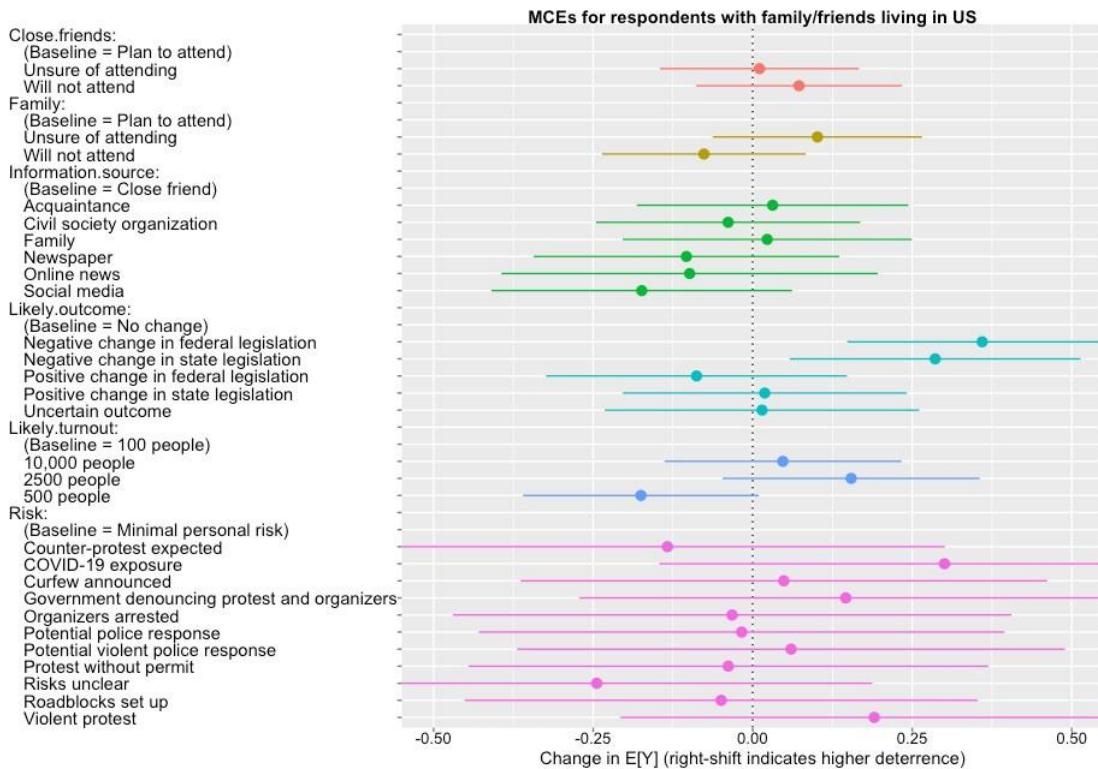

Figure 3. Effects of protest attributes on deterrence for respondents with their core networks in the US. Right shift shows likelihood of each level on respondent choosing the scenario they are relatively more deterred by

Aside from network variables, some interesting results were also found when looking at protest history and fear-deterrence alignment, where past protestors have a more social understanding of protest and are less deterred by protest risk compared to never-protestors, who perceive protest as a more policy-utility based decision and are more deterred by risks and more fearful, though the effects of network proximity and type have yet to be explored for these groups. East and South Asian Americans within the sample (4) are a particularly interesting sub-group I hope to explore further in the project using a larger sample size as they are least likely to have any protest history and are highly fearful of protest risks.

Inference Limitations

The main goal of the pilot is to determine whether the study can/should be conducted at its intended scale, serving as a key intermediate step between experiment drafting and experiment fielding. The sample is not meant to be sufficiently powered, and as such there are limitations to causally interpreting the results. The pilot population is 20% of the full survey population (n=500), with a 10% buffer for incomplete responses. As seen in discussion before, the small survey population means that the 95% confidence intervals are quite large for the conjoint sections, particularly for sub-population results. The small sample poses as a particular obstacle to interpreting conjoint results for the attribute of 'risk', which has fourteen levels. The high number of levels and small amount of respondent tasks result in lower average frequency of that level being shown and evaluated, which is why the confidence levels are the largest for this attribute. As such, the pilot serves as a springboard to examine where the interesting factors/populations could be, not as a determinate of results.

Remainder of the Grant

My next steps going forward would be to formally run the conjoint experiment after some design adjustments. Table 6 below shows the stages conducted so far in dark blue, and the data collection timeline going forward using the funds to be released in lighter blue.

Table 6. Revised Data Collection Timeline

Phase	Data Collection Format	Time Period
Ethics Review	Application for LSE's Research Ethics Board Approval, and Data Management Plan	Early Summer 2020
Differentiating Terror/Horror	Pre-tests, Cognitive Interviewing	Mid/Late Summer 2021

(before change in chronology)		
1. Conjoint experiment	Pretesting + Pilot Conjoint Experiment	Late 2021
	Pilot Conjoint Experiment	Early 2022
	'Actual' Conjoint Experiment	Mid 2022
	Second conjoint with a population of interested	Autumn 2022
2. Differentiating Terror/Horror	Pre-tests, Cognitive Interviewing	Mid 2022
	Pilot and 'Actual' Experiment with Sampled Target Populations	Late 2022
3. Mapping Terror/Horror onto different types of repression	Pre-tests, Cognitive Interviewing	Mid 2022
	Pilot and 'Actual' Experiment with Sampled Target Populations	Late 2022
4. Triangulation	Potential fieldwork (qualitative + social network interviews)	Early 2023

Conclusion

Ultimately, the paper gives preliminary grounding to my intuition of fear and deterrence not aligning in the United States as an example of a democratic, non-maximalist protest context, and how social networks mediate and affect supposedly linear relationships between fear-deterrence depending on network type, tie type, and proximity. This grant has supported my intellectual progress in a very fruitful way, and I believe further research on this topic will not only illuminate American protest psychology, but also has broader implications for how individuals make protest calculations in contexts where protest is an institutionalized right and form of political behaviour. For a survey methodologist and an experimental social scientist, methodological safeguards prior to formal runs of an experiment are critical for fine-tuning tools of measurement, accounting for respondent experience, testing platform logistics, and tools for data analysis. The interviews, multiple survey pre-tests, and pilot survey supported by the grant have done exactly that, which has led to the unexpected yet welcomed outcome of me re-designing the tools of measurement

and adjusting the chronology of my project altogether, leading to interesting angles/findings I may not have initially considered.

The research stages supported by the grant have paved much more certain paths for the remaining funds to be on, and for that I am very grateful. Aside from the empirical value of the work presented, I hope that the reflections in this report and its appendices also serves as an honest acknowledgement of the often meandering, non-linear process of academic research. Thank you very much, and I look forward to keeping in touch with the LSE Phelan US Centre about my work beyond this fellowship opportunity.

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<u>Appendix A: Grant Budget Breakdown</u>

[The budget has been removed from this public copy of the report]

Appendix B: Conjoint Experiment Design

Example of information + comparison panel

Suppose that demonstrations are being organized around your area for [insert choice selected from previous section by respondent], an issue you chose as most important for you to see change in. However, people may be unable or choose not to attend demonstrations for different reasons.

In the next few minutes, you will be shown pairs of scenarios **leading up to the day before a demonstration.** For each pair, please select the scenario in which you would less likely attend the demonstration.

Based on the information below, in which scenario would you **be more fearful** of attending the demonstration?

Example of a choice panel

Attribute	Scenario A	Scenario B
Close Friends	Not sure about attending	Not sure about attending
Family	Plan to attend	Not sure about attending
Potential Risk	Curfew announced	Potential violent police response
Expected size of protest	500	2,500
Information Source	Family	Civil Society Organization
Likely Outcome	No change	Negative change in state legislation

Choice   Scenario A ( )   Scenario B ( )

'From 1 (not at all) to 7 (extremely), how fearful would you be of the scenarios above?

Conjoint Attributes and Levels

Attribute	Levels
Close friends	Plan to attend, **Will not attend,** Unsure of attending
Family	Plan to attend, **Will not attend,** Unsure of attending
Risk	Curfew announced, Potential arrests of organizers, Potential violent police response, Potential police presence, COVID-19 exposure, Counter-protest expected, Protest permit denied, Potential arrests of protestors, Organizers arrested, Roadblocks set up, Minimal personal risk, Violent protest, Government denouncing protest and organizers, Risks Unclear
Likely turnout	**100 people**, 500 people, 2500 people, 10, 000 people
Information Source	Family, Close friend, Acquaintance, Civil society organization, **Online news**, Social media, Newspaper
Likely outcome	Uncertain outcome, **Negative change in state legislation**, negative change in federal legislation, No change, Positive change in state legislation, Positive change in federal legislation

Appendix C: Reflection/Timeline of Adjusting Approaches

My initial focus for summer 2021 was to conduct an experiment to differentiate terror and horror as emotional responses, and then test whether they are reliably evoked by different forms of repression varying in certainty and timing. These experiments would be the empirical foundations for exploring my overarching question of to what extent the difference in timing/forms of repression and social components deter protest-participation. However, as seen later in this report, I adjusted the chronology of the experiments for my project to flow more clearly (from inductive to deductive).

I had planned to explore whether 'terror' and 'horror' can be empirically differentiated with a vignette/factorial survey experiment, where respondents are randomly divided between a horror treatment, terror treatment, and control group. After reading the vignette, participants will be asked to rank on a Likert scale to what degree they or the subject in the vignette would likely 'feel' the 'sub-emotions' of terror and horror, and responses will be weighed by factor analysis to determine how empirically different terror and horror are from each other. Cognitive interviews and pre-tests are key safeguards to test survey logistics, quality, and coherence. The steps conducted and reflections after each are outlined in Table A, and Table B shows the new chronology and approach taken that is outlined in this report's main body.

Table A:. Timeline of data collection so far + changes/reflections at each stage

Date	Action	Reflection/Changes
Late July - Early August	LSE Ethics Review Passed, Data Management Plan submitted	I also made additional inquiries about whether pre-tests need to be resubmitted as separate applications. I was assured by the Ethics Board that no additional submissions were required.
Mid-Late August	Cognitive interviews + refining Terror/Horror experiment on Qualtrics	Through the cognitive interviews, I was able to catch missing/poorly named categories for descriptive questions, refined parts of vignettes that may have been leading, and received valuable insight into what individuals may be thinking as they go through the survey. I also adjusted the bot-test and clarified/added more survey instructions.
		The cognitive interviews also led me to decide on pre-testing a 'drag and drop' format of the experiment first when considering respondent experience. In that format, respondents would sort

		different emotions into boxes called 'most likely feel', 'least likely feel' and 'unsure' (see Appendix).
August 31ˢᵗ 2021	Pre-test with n= 30 (drag and drop format of the Terror/Horror experiment)	This pre-test was very useful for familiarizing myself with the Amazon M. Turk platform, including how to format, conduct, accept/reject responses, and to pay workers. There were some severe comprehension errors found in some respondents, and while there wasn't enough of a sample size to determine treatment effect, it was interesting that descriptively, party affiliation was not a strong indicator for participation.

I found the analyses for a survey in such a format too difficult/complex, and hard to compare the levels of 'terror', and 'horror' consistently across groups. There was some general difference between terror/horror, but again, the sample size is too small for any definitive conclusions without a pilot.

After this pre-test, I reverted back to the initial format of individuals ranking emotions individually. I also adjusted the treatments again to better reflect my theoretical distinction between terror (*prior* to scary event) and horror (midst of *actualized* scary event). I also removed 'Hesitation' as an emotion and replaced it with Guilt (as a 'control'/accompanying but not definitive sub-emotion of terror/horror), referencing some pre-test and cognitive interview responses as a 'control'/accompanying but not definitive sub-emotion of terror/horror.

For the next pre-test, I also added clear reminders for respondents to submit their responses completely as there were some discrepancies in completion codes entered in M. Turk and actual amount of responses in Qualtrics, so that workers receive full credit for their work. I also changed the tones of the background to make the options more easily visible, and the size of the text. |
| **September 8ᵗʰ 2021** | Pre-test 2 with n = 21 of a slider format of the Phase 1 Terror/Horror experiment | For the slider format, there was a lot of 'straight-lining' answers, where respondents would slide all the options to a similar degree (all 9s, or all 1s, or within a very small variation), and in cases seemingly contradictory answers may appear (for example, respondents would rate feeling 'extremely' happy and disgusted at the same time). |

		The two pre-tests made me reconsider what could be improved with the current approach, and whether the chronology of the experiments needed to be adjusted.
		This pre-test allowed me to test out using 'qualifications' on M.Turk, so that I can exclude M.Turk workers who have previously completed one of my surveys. After this pre-test, I added a manipulation check after the slider rankings, and established clearer rules for response exclusion.
September— October	Adjusting measuring instrument and re-evaluating chronology	I realized that what I was measuring in the way that I had formatted the Phase 1 experiment was <u>how different emotions may relate to one another</u>, but <u>not how terror and horror may be substantially different across different emotional 'dimensions'</u>. For example, while there are 'sub' emotions in terror and horror (i.e .anxiety is more frequently associated with terror than horror), anxiety is an emotion in its own right as well, and there is more to an emotion than just its building blocks, such that the whole is larger than the sum of its parts.
		While reflecting, I re-read papers on differentiating emotions, specifically Taylor and Uchida's (2019) paper on Awe and Horror and Smith and Ellsworth's (1985) paper on Cognitive appraisal in emotion. I also re-read Joseph de Rivera's (1977) Structural Theory of Emotion. Together, these works helped to re-design that experiment.
October— November	Re-designing an experiment and adjusting chronology + getting software access	After reflecting on my measurement instrument, I dug deeper into the chronology of my data collection process/research framing. I realized that what I needed to do as a baseline is to figure out what 'perceptions of repression' individuals in my target population (US citizens) have as this is my independent variable, before diving into the building blocks/variations of fear.
		For my project design to reflect this change, I (re-)designed a conjoint experiment where respondents will be exposed repeatedly to two panels of (varying) information, and asked in which scenario would they **<u>less likely</u>** protest.
		To provide a better framing for the project, I reversed the chronology of the experiments such

		that the approach is more deductive than inductive. The re-framed project questions are now: How often are individuals less deterred from protest <u>despite</u> greater feelings of fear? How and to what extent do social networks condition the relationship between fear and deterrence? The shifted chronology and its impact on the data collection timeline are detailed in Table 2 and 3.
December 2021-Feb 2022	Polishing experiment design, running pre-tests, and getting expert reviews	I conducted three pre-tests with the experiment design for the revised method. During this time, I also had my experiment design looked over by experts in the method.
February 2022	Last pre-test and Pilot of the survey	The pilot survey was conducted on a US convenience sample of 110 respondents, approximately 20% of the final survey size.
March 2022	Presentation of Pilot Results in report and at a conference	I hope to present the results at the International Studies Association (ISA) annual meeting.

Table B. A comparison of the chronology of experiments

Phases	Initial Chronology	Re-adjusted Chronology
1	Vignette experiment testing whether horror/terror are distinct emotions	**Conjoint** experiment exploring if different perceived forms of repression have varying effects on non-participation and how social network proximity, type, and character affects the alignment between fear and deterrence (non-participation)
2	Vignette experiment testing whether horror and terror map onto preventive and responsive repression	Vignette experiment testing whether horror/terror are distinct emotions
3	Emotional climate analysis to examine whether terror/horror is more prevalent in periods leading up to protest + social network analysis	Vignette experiment testing whether horror and terror map onto different forms of repression or network characteristics respondents may have.
Triangulation	Conjoint analysis + qualitative interviews	Qualitative interviews + Emotional climate analysis