# Facts Shape Feelings: Information, Emotions, and the Political Consequences of Violence<sup>\*</sup>

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#### Abstract

What makes violence political? Existing research argues that experiencing violence generates anger and grievances, which cause political mobilization, retribution, and spirals of escalating violence. I argue that the effect of violence on the political behavior of survivors is highly variable: situation-specific information shapes how survivors of violence experience anger, and whether they attribute blame to individual perpetrators or form more durable, expansive political grievances toward targets like police or prosecutors. I use qualitative and computational methods to analyze transcripts of original interviews with relatives of Black and Latinx homicide victims in Chicago, IL. I find substantial diversity in emotional experience and blame attribution. I argue that this diversity is caused by variation in clarity about identity and motive of the perpetrator, and variation in perception of perpetrator responsibility. Having or lacking crucial information determines whether survivors become angry at perpetrators or form broader political grievances after traumatic experiences. Evidence from Chicago challenges the notion that violent trauma and anger have automatic or straightforward consequences for political behavior.

Keywords: Violence, Emotions, Anger, Trauma, United States, Homicide

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#### 1 Introduction

Ms. K's son and Ms. L's brother were murdered in Chicago the same week. Both were gangaffiliated but killed over non-gang-related personal feuds. "So-called friends" set up Ms. L's brother. Ms. K thinks her son was killed over romantic competition. Ms. L is extremely angry at her brother's killers. She wants revenge. One of the "so-called friends" was later murdered, and Ms. L relishes that he was too mutilated for an open-casket funeral (Respondent 83, Chicago, IL, 2018). Ms. K, however, feels differently. She says her son's death is "nobody's fault." Rather than the killer, she focuses mainly on the detectives who haven't "done their job" and who "disrespected" her, making her provide an alibi for the time of her son's murder (Respondent 75, Chicago, IL, January 2018). Why is Ms. L primarily angry at the killers while Ms. K's main grievance is toward the police?

Political scientists argue that anger is a critical link between perceived injuries—including violence—and various political behaviors. Anger about violence motivates retribution and participation in violence (Gurr, 1971; Petersen and Zukerman Daly, 2010; Costalli and Ruggeri, 2015; Balcells, 2017). It spurs both greater political participation (Bateson, 2012) and lesser trust in government (Webster, 2017). Anger inspires extremist views (Nielsen, 2017), approval of inter-group violence (Claassen, 2013; Zeitzoff, 2014), and support for vigilantism (Javeline, 2014; García-Ponce, Young and Zeitzoff, 2019). I attempt to reconcile mixed results in this literature by focusing on underappreciated variation in emotional experiences after violence, and variation in blame attribution that shapes the political implications of anger.

I analyze 31 original interviews with relatives of homicide victims in Chicago, Illinois to study emotional responses to violence. Among families who experienced similar trauma, I find substantial variation in how angry survivors are, and how they attribute blame for the homicide. Where the existing literature either assumes that anger is an automatic consequence of violent injury, or focuses mainly on the political effects of anger compared to other emotions, I show not only that emotion experiences vary among people exposed to similar violence, but also that the political implications of a single emotion—anger—vary between different people as well. Some

angry survivors focus on the private citizens who killed their family members, while others mostly express anger at agents of the state who are not the perpetrators, strictly speaking. I develop a new theoretical framework to account for this variation, and argue that the processes linking victimization to grievance, anger, and action are more variable than previous studies assume.

I show that knowing particular information about the circumstances of a homicide—the perpetrator's identity, motive, and culpability—is associated with increased expression of anger toward the individual perpetrator, and, crucially, with relative de-prioritization of grievances against the state. When survivors *lack* information necessary to experience anger at a specific perpetrator, the political consequences of violence are counterintuitively *larger*.

I develop a new theory, building on Lerner and Keltner's (2000) cognitive appraisal framework, to explain why some survivors express anger at individual perpetrators, rather than political targets. I propose that *cognitive clarity* about the perpetrator's 1) identity, 2) motive, and 3) culpability are important predicates for expressing anger and blame at the perpetrator. Negative emotions have larger political consequences when people are unclear about any of the three conditions but still experience a negative core affective state common in the wake of violence (Barrett, 2006). Without *cognitive clarity*, survivors often attribute negative emotions including anger to a "next best" target, like the police or other political actors. Anger and blame directed at police—usually for valid reasons, to be sure—has clear political implications: My research suggests that even non-state-perpetrated violence can directly affect attitudes toward the state under certain circumstances.<sup>1</sup>

Anger motivates more or less political grievance depending on what information is available after violence. I show that emotion experiences and political grievance vary widely within a single context, but I also argue that information, emotional experiences, and the political

<sup>&</sup>lt;sup>1</sup> I use the term "non-state" only to distinguish from police-perpetrated homicides. However, as Richie (2012) and Perry (2013) argue, it is difficult to characterize violence against racial minorities as decisively non-state given the state's role in perpetuating conditions that make violence possible.

consequences of violence vary widely between contexts. Violence in a conventional war or intergroup conflict, for instance, typically comes with near-definitive information about the perpetrator's (group) identity and motive (Costalli and Ruggeri, 2015). Criminal violence, nonconventional civil wars (Pearlman, 2016), and even repressive state violence (Davenport, 2005; Young, 2016) are less definitive, making assignment of blame more dependent on situationspecific information. The link between violence, anger, and *political* grievance in a violent context may be stronger or weaker depending on the ubiquity of such "shared" information. Reasoning individually about motive, identity, and circumstance, makes the political consequences of violence more variable.

In addition to a new theoretical framework, this paper makes two methodological contributions. First, I use open-ended interview responses to more holistically measure emotion experience including targets/justifications for reported emotions. Comparing these to traditional emotion elicitation questions, I show that traditional questions miss variation that is relevant for understanding the political consequences of emotions. Second, I develop a new application of structural topic modeling (STM, Roberts, Stewart and Airoldi, 2016) to support qualitative analysis of interviews. STM provides a new way to show patterns in sensitive text, making findings transparent and reproducible even when sharing underlying data is unethical.

#### 2 Violence, Anger, and Politics

How does anger shape the politics of violence? Anger at perpetrators of injustice explains desire for retribution (Lerner et al., 2003; Fischer and Roseman, 2007; McDermott et al., 2017), participation in punishment more broadly (Frijda, 1994), or supporting harsh policies against transgressors. A large literature on electoral campaigns finds anger is a powerful mobilizer within certain limits. Anger at political elites can mobilize people in electoral politics and social movements (Lebel and Ronel, 2009; Valentino et al., 2011), and affect assimilation of political information (Suhay and Erisen, 2018). Phoenix (2019) and Phoenix and Arora (2018), though, find that the "mobilizing" effects of anger vary across racial groups in the United States. Using cognitive appraisal theory and affective intelligence theory, they show that Black and Asian

Americans are less mobilized by anger, possibly due to lower expectations of the political system. Banks et al. (2019) show that anger among Black Americans only promotes participation in group-specific acts like donating to Black organizations.

Studies focused on violence and anger find contradictory results as well. Some studies identify a straightforward relationship between injustice, anger (or indignation), and either short-term retribution (Claassen, 2013; Costalli and Ruggeri, 2015), or long-term political alignments (Balcells, 2017). Other work finds weak links between anger or moral outrage and preferences for punishment of violent offenders (Javeline, 2014; García-Ponce, Young and Zeitzoff, 2019). In studies of violent events like terrorist attacks or rebel violence, there are divergent findings suggesting that anger might either support conservative voting, or not (Bonanno and Jost, 2006; Vasilopoulos et al., 2018; Nussio, 2020).

I argue that some of this divergence results from imprecise measurement. Anger is typically targeted at specific objects of blame (Lerner and Keltner, 2001), so the consequences of a person's anger depend on *who* they are angry at and *why*. Many studies use broad questions ("How many times have you felt angry in the last week?") to measure a narrow quantity of interest: anger at a particular target for a particular injury. Other studies use indirect proxies or simply assume that violence exposure causes anger.

These approaches have drawbacks. First, simply counting anger episodes confuses anger caused by violence—the signal of interest—with anger-proneness as a personal trait. High trait-anger increases attention to angering stimuli (Wilkowski et al., 2007). Second, closed-ended measurements usually neglect information about the target and justification for anger, which are important for understanding anger's political consequences. When blame is measured directly, angry people often blame unexpected targets (García-Ponce, Young and Zeitzoff, 2019). Accounting for blame attribution helps reconcile divergent findings in existing studies. In interviews, I find substantial variation in both emotional experiences and blame attribution, leading to variable political consequences.

#### **3** Violence and Trauma in Chicago

I interview relatives of 31 homicide victims who were killed in Chicago, Illinois between 2015 and 2017.<sup>2</sup> Interviews, conducted in January 2018, lasted 90-180 minutes. From 2015-2017, over 1,500 people were murdered in Chicago, but death toll is a conservative measure of gun violence; more gunshot victims in Chicago survive compared to other American cities (Asher, 2017). Violence in Chicago largely affects Black and Latinx people living in highly segregated neighborhoods on the South and West sides (Papachristos and Wildeman, 2014). Though discourse around violence affecting Black and Latinx communities is often "masculinized," women are disproportionately impacted by the after-effects or sequelae of violence (Smith, 2016), including exposure to abuse, intimate partner violence, and social marginalization (Richie, 2012). Not all violence in Chicago relates to gang politics or political motivations. Chicago police designate around half of homicide victims and two-thirds of perpetrators as "gang-related" (Kapustin et al., 2017), but these designations are criticized as unreliable (Sweeney and Buckley, 2019).

#### 4 Data and Measurement

I use open-ended interviews and survey-style questions to study individuals' emotional experiences after violence. Audio-recorded interviews covered: circumstances of the homicide, experiences with police and prosecutors, emotional experience, and post-homicide changes in behavior, plus standard demographic questions, questions about attitudes toward government and police, and three short clinical instruments to measure emotions (Watson, Clark and Tellegen, 1988; Vagg and Spielberger, 1979).

To recruit participants, I worked with Chicago Survivors, a 501(c)(3) social service organization serving families of homicide victims. Chicago Survivors has unparalleled access to families of people murdered in Chicago, contacting nearly 100% of victims' families in person at the crime scene, morgue, or hospital. Roughly 80% accept free services and are assigned to a

<sup>&</sup>lt;sup>2</sup> Respondents were parents, guardians, or siblings of the victim.

Family Support Specialist (FSS). Over six months, the FSS supports survivors through home visits, referrals to outside services, and assistance with government interactions—especially state victim's compensation. To enter the research context, I began with personal introductions: First, from a pre-existing professional contact to FSSs at Chicago Survivors, and then from FSSs at Chicago Survivors who introduced me to the families they served. As a researcher who did not share the "survivor of homicide" identity with interviewees, I first worked to build trust with the FSSs, many of whom are also survivors. I started the research process with participant observation—shadowing Chicago Survivors staff as they interacted with families—and then later relied on the trust that individual FSSs had built with families to negotiate and conduct interviews. These relationships were essential to the study: A number of interview participants made contact with their FSS to "check me out" after I asked for an interview.

Guidance from FSSs was critical for all aspects of research with such a sensitive population—from making introductions and explaining the interview process to potential respondents, to vouching for my commitment to protecting privacy. FSSs as trusted intermediaries were also important in helping me navigate power and identity dynamics that arise in all interview research (Brown, 2012). I discuss these issues more in Appendix F. I obtained written consent for interviews (and recording), following a conversation about the interview process, the intended purpose of the research, and the rights of participants. Respondents were reminded that participating was not a condition of their relationship with Chicago Survivors, nor would Chicago Survivors ever have access to personally identifiable data from the project.

I developed a three-pronged approach to monitor and mitigate harm. First, I developed the interview guide in consultation with Chicago Survivors staff. Their input led to changes that mitigated possible psychological risk, and to the identification of free counseling resources in case respondents felt psychological distress from participating. Second, all respondents received contact information for my institution's IRB. During the consent process, I reminded participants of their right to contact the IRB to report concerns. Third, following Wood (2006), I provided

IRB contact information to Chicago Survivors staff, and told respondents that their FSS could initiate a complaint on their behalf.

A long-list of interview candidates was constructed non-randomly by Chicago Survivors staff based on professional judgment about a) who could participate safely, b) who could offer informed consent and "understand what [the researcher] was trying to do," and c) who they thought a priori would be willing to participate. All candidates' families had already completed six months of Chicago Survivors services (no one whose family member died after July 2017 was interviewed). Additional sample characteristics are reported in the appendix.

Respondents were selected by stratified random sampling from the long-list. For each selected family, I reached out to Chicago Survivors' "primary contact." Primary contacts skewed older—often the homicide victim's parents—and included more women than men.<sup>3</sup> I typically interviewed this "primary contact," but some referred me to other relatives. Almost all respondents (and homicide victims) were either Black or Latinx, and most respondents were women. Women are over-represented among respondents because they are over-represented among these "primary contacts." Feminist scholarship on violence and coping in Black communities, suggests that women are often more likely to undertake the logistical and emotional labor (and attendant harm) that follows a violent death in the family (Smith, 2016), and that Black women are doing "humanizing labor" as mothers even after the death of their children (Threadcraft, 2016). Because women's voices are relatively under-represented in the literature on violence and emotions, focusing mainly on women's experiences is valuable even if the findings do not generalize to men. On generalizability, though, research suggests that gender differences in emotions (if any) are in modes of expression: women discuss anger more whereas men exhibit more aggressive behavior (Coleman, Goldman and Kugler, 2009). The results cut against what

<sup>&</sup>lt;sup>3</sup> I chose not to "oversample" men to correct for this imbalance. Accordingly, the conclusions of this study are more likely valid for women's behavior than men's.

we would expect if there were gender bias in measurement: In interviews, I find surprisingly inconsistent anger in a population theoretically more likely to discuss anger.<sup>4</sup>

#### 5 Results

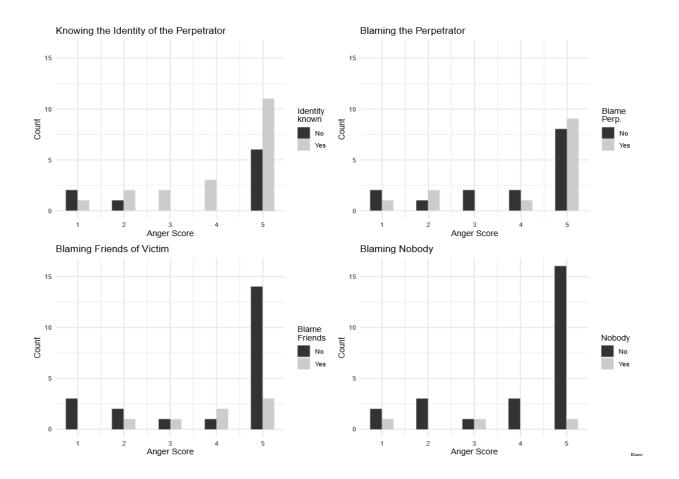
#### 5.1 Correlates of Anger

Respondents' emotional experiences do not support common assumptions about anger after violence. In a composite measure averaging self-reports for "angry," "upset," "hostile," and "irritable" from an adapted PANAS battery (Watson, Clark and Tellegen, 1988), respondents average 3.39 of 5, between "moderately" and "quite" angry, when thinking *specifically about their relative's homicide*.<sup>5</sup> Many respondents are surprisingly un-angry when thinking about the homicide, but this measure still undersells emotional diversity across respondents. Among respondents who report extreme anger, only half blame the perpetrator (See Figure 1). A quarter of all respondents report extreme anger when thinking about the homicide, but identify someone other than the perpetrator as the target. Many are angry at agents of the state. Appendix figure A.2 shows that half respondents who reported maximum anger also reported frustration with the detectives assigned to their relative's case, and focused blame on the police as well.

Evidence belies other common assumptions about anger and blame as well. A widelycited version of cognitive appraisal theory predicts that anger abates when perpetrators are punished (Goldberg, Lerner and Tetlock, 1999; Lerner and Keltner, 2001). This implies a negative association between anger self-reports and the perpetrator being caught, but I find the association is actually positive but insignificant. Interviews do, however, show a positive relationship between anger and knowing the perpetrator's identity. Whether survivors of violence know the perpetrator's identity is rarely measured in political violence studies of anger.

<sup>&</sup>lt;sup>4</sup> I discuss how my identities as a researcher may have influenced this trend in Appendix F.

<sup>&</sup>lt;sup>5</sup> One standard deviation ranges from "a little" angry to "quite a bit" angry. Average scores for "angry" alone are higher but the difference is not significant.



**Figure 1**: Self-reported anger levels plotted against other respondent characteristics. The horizontal axis of each plot shows self-reported anger levels from 1 to 5. The black and grey bars show the number of respondents at each anger level who do/do not know the perpetrator's identity. The top left pane shows that knowing the perpetrator's identity appears positively related to anger levels. This may seem trivial, but nearly 35% of respondents had no notion of the perpetrator's identity. This is likely an even more common condition in the general population of survivors in Chicago: Interviews oversampled respondents whose cases went to trial. The remaining panes show that distributions of anger levels are quite similar between respondents who do/do not blame perpetrators, friends, or the victim themselves. This suggests that simple measures of anger mask important variation in the targets of anger.

#### 5.2 Topic Models for Qualitative Research: A New Application

Survey data suggest that respondents' emotional experiences after violence are inconsistent with existing theories, but do not fully capture information shared in response to follow-up questions or during open-ended discussions. I describe these findings in detailed case studies in Section 6. Here, I use Structural Topic Modeling (STM) as a tool to show high-level patterns across all 31 interviews.

Topic models are typically used to analyze large corpora of publicly-available documents, but STM is useful for analyzing smaller, private corpora for two reasons. First, STM honestly presents evidence of patterns in any size corpus. Topic models fit to smaller corpora can "aid the researcher's memory" by correcting for the human tendency to inadvertently weight evocative, surprising interviews more heavily than others during qualitative analysis; STM has no such tendency. Second, STM is good for summarizing sensitive material. Respondents participated in interviews—with surprising candor—on the condition that audio and full transcripts would never be published, and quotations carefully limited. Using STM to present patterns in sensitive data allows me to fulfill this promise while still conducting transparent, reproducible analysis. The technical features of topic model workflows that make this possible are described in the appendix.

STM models words in a document as a function of an unobserved latent variable—the "topic" words are describing. It assumes each document is a mixture over unobserved "topics," and that a particular word's appearance can be attributed to the group that "explains" that word (Blei, Ng and Jordan, 2003). A topic model output summarizes each document with a vector of topic proportions. Document-level proportions can then be compared to other metadata to measure associations between topic prevalence and covariates of interest.<sup>6</sup>

STM-generated topics are a powerful tool for identifying patterns in text. Human language is a high dimensional representation of information: interviews, for example, transmit meaning through thousands of unique words. STM facilitates dimension reduction—it summarizes—by identifying groups of words that frequently co-occur, and treating cooccurrence as evidence that those word groups communicate one underlying idea. Topics can be interpreted as evidence of latent "ideas" across documents—the idea of memorial, for example, can be understood as the common cause behind words like "funeral," "homegoing," or "flowers."<sup>7</sup> Topic model interpretation is very involved. Researchers, not computers, determine

<sup>&</sup>lt;sup>6</sup> STM is an improvement that incorporates document-level metadata into the model fit (Roberts, Stewart and Airoldi, 2016).

<sup>&</sup>lt;sup>7</sup> Topic models ignore semantic structure, so they incorporate vernacular and slang easily. For example, STM associates Chicago Survivors-specific terminology like "homegoing" (funeral) and "angel-day" (death anniversary) with other descriptors of funerals.

what (if anything) the fitted topics mean in the context of a particular research question (Grimmer and Stewart, 2013).

#### 5.3 Topic Model Analysis

I find four trends in the interview text that shed light on what causes anger at perpetrators versus development of political grievances. First, there is a strong, positive association between discussion of the perpetrator's motive and expression of perpetrator-directed anger/blame in the same paragraph. Knowledge of motive seems important for attributing blame to the perpetrator. Second, self-reported anger levels (see Section 5.1) are not strongly related to extent of discussion about perpetrator-directed anger/blame: Anger and perpetrator-directed anger are not the same thing. Third, knowledge of motive and knowledge of identity, both important for attributing blame to the perpetrator, are separate in respondents' considerations of trauma. Fourth, relevant to the political consequences of anger, I find that when respondents know the perpetrator's identity, they systematically spend less time discussing topics like frustration at detectives. In other words, perpetrators and state agents seem to be *substitutable* targets in practice.

I fit a topic model with 10 topics on the complete corpus of interview transcripts (Roberts, Stewart and Tingley, 2018).<sup>8</sup> I model topic prevalence as a function of respondent ID even though each transcript is broken into 70 documents on average. The topics upon which the model converges are listed and interpreted in Appendix Table 1. To generate topic descriptions, I analyze the 25 highest-proportion documents for each topic. A small subset of those documents are in Appendix C. Researchers cannot prompt STM to converge on useful topics, but this model recovers a number of relevant topics.

<sup>&</sup>lt;sup>8</sup> The interviews are broken into 2,300 paragraphs for model flexibility, but preserve correlation between paragraphs from the same interview via STM's prevalence covariate functions. Topic correlations are reported at the paragraph level—i.e. ideas discussed *together* within a paragraph—whereas other associations are reported at the respondent level. The estimations of other associations propagate uncertainty from the model fit, which includes respondent ID as a covariate, into the (conservative) errors.

Four important patterns emerge. First, respondents ruminate on perpetrator-focused anger/blame *together* with discussion of the perpetrator's motive, and they tend *not* to discuss perpetrator-focused anger when confused about the motive. Respondents ruminate more on anger at the perpetrator when they have specific information about the motive. Figure 2 shows the correlation for topics related to "Perpetrator Anger/Blame" with a coefficient greater than 0.1 or less than -0.1. Other emotionally evocative topics, like respondents discussing how they found out about the homicide, are negatively associated with discussing anger. Negative correlation between topics 4 and 5 suggests that anger is not automatically dominant in the immediate aftermath of the homicide. Whether anger develops, and whether it targets the perpetrator or not, is determined by additional moderators.

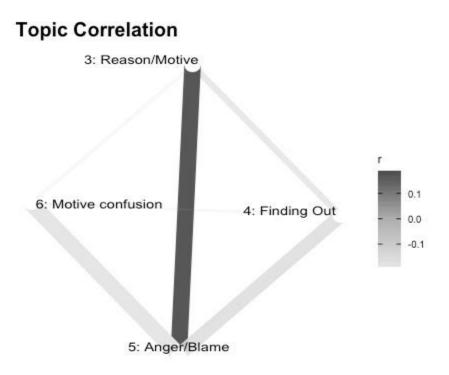
Second, overall anger is not significantly associated with discussion about anger/blame *at the perpetrator* (Topic 5, Figure 3). Measuring anger in general without specifically measuring targets and justifications would lead to substantively different conclusions about emotions after trauma. Qualitative analysis supports this suggestion: Some respondents are very angry, but angry at police or prosecutors.

Third, the STM shows that knowing the perpetrator's identity and knowing the perpetrator's motive are separate but related criteria. Respondents who do *not* know the perpetrator's identity talk less about the perpetrator's motive (Topic 3). Knowing the perpetrator's identity is also a good predictor of *perpetrator-targeted* discussion of anger and blame (Topic 5). Anger at the perpetrator seems to be driven by availability of relevant information about both identity and motive (Figure 3).<sup>9</sup>

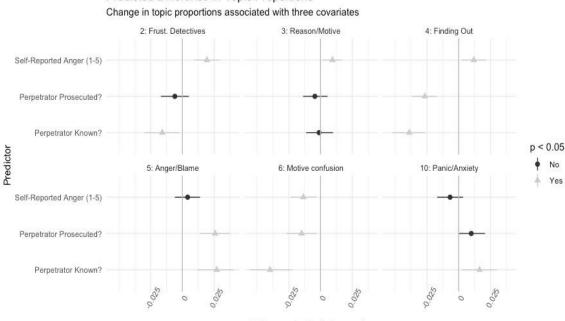
Finally, there is a strong relationship between frustration at detectives (Topic 2) and *not* knowing the perpetrator's identity. Respondents who lack important information that facilitates targeting anger at the perpetrator are *likely to focus more* on frustration or anger at the police. The

<sup>&</sup>lt;sup>9</sup> Topic prevalence should be un-affected by crowding-out, i.e. talking more about one emotion automatically reducing discussion of another. All ten topics happen to be associated with one or more questions in the interview guide, and responses were not time-limited. Talking more about panic, for example, would never lead to "skipping" an opportunity to talk about anger.

perpetrator and police seem to substitute for each other as possible targets for negative emotions felt in the wake of a homicide.



**Figure 2**: An inter-topic correlation plot for the structural topic model. Each topic is a "node" or point, that is labeled with the topic description. Dark lines connect topics that are positively correlated. Light edges connect topics that are negatively correlated. The plot only shows topics that are related to Topic 5 (Anger at the perpetrator) with a correlation coefficient |r| < 0.1. The plot shows that discussion of anger is positively associated with discussion about the perpetrator's motive, and is strongly negatively associated with expressing confusion about the motive, and with discussion about the immediate aftermath of the homicide. Other topics (shown in figure 3) are not strongly correlated with discussion of anger at the perpetrator either positively or negatively.



Predicted Difference in Topic Proportions

Difference in Topic Proportion

**Figure 3**: This plot shows the estimated associations between respondent characteristics (self-reported anger, whether or not the perpetrator was prosecuted, whether or not the perpetrator was known) and topics of discussion in the STM. The plot shows expected difference in topic proportion (amount of discussion) associated with difference between values of 0 and 1 for indicator variables, or with difference between the 25th and 75th percentile values for continuous predictors. Note in the bottom left pane that respondents who know the perpetrator's identity discuss anger at the perpetrator 2.5% more than respondents who do not, and also that respondents who have higher self-reported anger do not necessarily talk about anger at the perpetrator more than others. Estimates are generated using the STM package with the most conservative uncertainty estimation, which propagates uncertainty from the topic model estimation (which includes respondent ID as a prevalence covariate) into the estimated errors (Roberts, Stewart and Tingley, 2018).

Other associations are also worth mentioning. First, some topics are significantly associated with gender (See appendix Fig. A.3). Men talk less about frustration at detectives, and less about the immediate aftermath of the murder. They talk more about motive and reason, and more about anger, blame, and justice. Looking individually at transcripts from male respondents to interpret this finding, though, only half are angry at the perpetrator. The others are angry at friends of the deceased, or at the justice system. Second, there is a strong negative association between church attendance and discussion of anger at the perpetrator. The relationship between religious practice and emotion expression is worth exploration in another study. As detailed in Appendix A2, more religious respondents might express less anger as a consequence of messages

they hear in church services or faith communities. Focus on forgiveness and leaving vengeance to God is a central message promoted by pastors involved in anti-violence work in Chicago.

#### **6** Understanding Variation in Emotional Response

Interviews show substantial diversity in survivors' emotional responses after violence. In this section, I develop a new theory to explain the variation. I argue that cognitive clarity about three separate issues—the perpetrator's identity, the perpetrator's motive, and the perpetrator's culpability—is important in determining whether trauma survivors blame and express anger at perpetrators, or instead channel negative emotions into political grievance. After introducing the cognitive clarity framework, I present nine case studies showing how cognitive clarity accounts for variation in emotions and grievances.

#### 6.1 Cognitive Clarity Framework

A relative's murder is a clearly negative experience, but it does not always result in perpetratortargeted anger and blame. Comparing respondents' PANAS scores to a non-clinical reference population shows that interview respondents report more negative feeling and less positive feeling after their relative's homicide (Appendix D). But only half of respondents blame negative emotions on the perpetrator.

Why do people who virtually all feel negative feelings after similar traumatic events experience different emotions directed at different targets? I focus on the role of information and context in assigning meaning to feelings: "categorizing" affect into emotional experiences (Barrett, 2006). I use the Feldman-Barrett concept of "core affect," but also refer to empirical findings about the correlates of anger that come from a "natural-kind" view of emotion adopted in cognitive appraisal theory.<sup>10</sup> Focusing on *cognitive clarity* is in some ways an extension of cognitive appraisal theory to the specific circumstances of emotion formation after violent trauma.

<sup>&</sup>lt;sup>10</sup> These approaches differ over whether different emotions are naturally separate phenomena (Lerner and Keltner, 2000), or a single integrated process (Barrett, 2006). The disagreement is *not* about empirical findings linking anger to risk assessment, attitudes, etc. so I refer to both approaches.

I argue that some information is especially important for directing or attributing emotional experiences. Interpreting negative feelings as anger at a perpetrator of violence depends on *cognitive clarity*, or clear understanding of three issues: 1) the perpetrator's identity, 2) the perpetrator's motive, and 3) absence of blame-mitigating circumstances around the act of violence. Identity, motive, and circumstances may seem like foregone conclusions in many situations, but acquiring information about the causes and circumstances of violent trauma is easier in some contexts than others. In Chicago, and other settings where cohesive political narratives do not pre-attribute blame for injustice, I expect individual differences in emotional experience among people who survive similar violence to be especially pronounced.

#### 6.1.1 Identity

Knowing the perpetrator's identity facilitates anger at the perpetrator. Without identity, it is difficult to attribute negative feeling to a particular source, and difficult to envision restorative action/punishment against that source. Both are necessary for anger.

Emotional experiences are generally connected to people, objects, or processes that we believe caused an underlying feeling. Emotions provide templates for behavior, leading us to actions that are supposed to benefit us (Frijda, 1986). Anger—the emotional response to unjust harm (Frijda, 1994; Fischer and Roseman, 2007; Hutcherson and Gross, 2011)—promotes restoration and retribution: angry people formulate plans to restore fairness (Lerner and Tiedens, 2006), and feel anticipatory exhilaration about punishing transgressors (Tripp and Bies, 1997). The possibility of punishing is integral to anger: Reward centers in the left frontal cortex of angry subjects show increased activity *only if* the "cause" of anger can be punished (Harmon-Jones and Sigelman, 2001).

Accordingly, interview evidence shows that respondents have difficulty attributing negative feelings to unknown causes and envisioning vengeance against an unknown target.<sup>11</sup> Even if the perpetrator's individual identity is unknown, identifying them as a member of a specific group (a particular gang vs. "gangs" in general) helps respondents envisions punishment

<sup>&</sup>lt;sup>11</sup> Getting the attribution *wrong* is not an impediment to envisioning punishment (Clore and Gasper, 2000).

and experience anger at the perpetrator. Take for example, two respondents unaware of the identities of their son's killers. Neither expressed anger at the perpetrator. Both explained their feelings by saying they "did not know who to blame" for what happened (Respondent 75, Chicago, IL, January 2018; Respondent 90, Chicago, IL, January 2018).

#### 6.1.2 Motive

Knowing the perpetrator's motive also facilitates anger at the perpetrator. Knowing motive helps people perceive their situation as controllable and comprehensible. Laboratory experiments show that anger formation depends on understanding what happened and why it happened (Lerner and Keltner, 2000, 2001). It also depends on attributing the injustice to someone else's agency—not fate or chance—and believing the injustice is something that can be redressed (Halperin, 2008).

Not knowing the perpetrator's motive makes conceptual representations of certainty and control tenuous, interrupting the formation of anger. Interviews suggest this condition is separate from—albeit correlated with—knowing the perpetrator's identity. Respondents who are unclear about the perpetrator's motive seem frustrated at the cosmic unfairness of their situation, or at their own helplessness, but not angry at the perpetrator. One respondent, whose son was murdered by strangers on his commute home said she felt angry "at the situation" and the randomness of what happened. When asked about motive, she said: "I ask myself constantly...I can't think of a reason...I have no idea why it happened to him." After the murder, she tried hard to increase her sense of control by "pulling the reins in" on her surviving children to protect them from "random violence" (Respondent 89, Chicago, IL, January 2018).

#### 6.1.3 Mitigating Circumstances

Anger depends on perceiving "unfairness" or transgression, so perpetrator-directed anger is less likely when people believe the circumstances of the homicide mitigate the perpetrator's responsibility. One respondent, whose son was stabbed to death as retribution after winning a fight, was not angry at the perpetrator despite clear knowledge of his identity, and clear

knowledge of a revenge motive. She is angry at her son's friend for precipitating the situation that killed her son. She was most focused on the earlier betrayal by the friend: "If he had not set [my son] up...it would not have put [my son] in this predicament."

Others deemed the perpetrator not responsible for their own actions. One respondent, whose younger brother was also killed after winning a fight, was convinced that the environment of the neighborhood contributed at least as much to his brother's death as the shooter did. He believed that "the kid with the gun is [a] victim...being brainwashed into believing that this is how you defend yourself." Blaming the environment was not a matter of forgiveness—he is not sure he will ever forgive the perpetrator. Instead, blame attribution follows from his belief that the perpetrator was not in control: "I've seen it happen to my friends, people I've been to school with. It's like it's some type of disease or something." (Respondent 27, Chicago, IL, January 2018).

Finally, some respondents believed the victim's behavior mitigated the perpetrator's responsibility. One respondent felt angry at her nephew about his own death, because she believed it was due to his own recklessness (Respondent 33, Chicago, IL, January 2018). Even after murder, a paradigmatic injustice, not all respondents felt the perpetrator had done the greatest harm.

Respondents who did not meet all three cognitive clarity conditions—knowledge of perpetrator's identity, knowledge of perpetrator's motive, absence of blame-mitigating circumstances—typically expressed some negative emotion other than *anger at the perpetrator of the homicide*. Respondents who lacked this information did not feel "better." Rather, they used the diminished set of available information to contextualize their negative feelings differently and attribute them to a different actor. This often manifested as anger at a non-perpetrator target like the police, but other times it appeared as anxiety or sadness. While respondents tend to prioritize anger and grievance at *either* the perpetrator *or* some other target, self-reports do not support the idea that all negative feelings are mutually exclusive. Anger and fear/anxiety levels, for instance, are rather highly correlated.

#### 6.1.4 Political Consequences of Diffusion

Many respondents who have less information than necessary for "cognitive clarity" describe their emotional experience as anger at some non-perpetrator target. These respondents are more likely to express political grievances. Their experiences are theoretically consistent with the core-affect-plus-context model of emotional experience—and indicative of an important pattern in the way survivors of non-state-perpetrated violence regard the state.

Respondents who are not angry at the perpetrator still experience emotions in non-random ways. Blame attribution follows the logic of cognitive clarity, but for the identity, motive, and culpability of some other target. Respondents still draw on contextual knowledge to explain the causes of their negative feelings.

The process of attributing blame to a non-perpetrator target, which I call *diffusion*, often results in anger at agents of the state like prosecutors or detectives. Why are agents of the state common non-perpetrator targets for anger? Availability is one answer. After a homicide, state agents are reliably present and often make mistakes (sometimes honest, sometimes malicious). Absent cognitive clarity about the perpetrator, state agents may appear as the people with the "last clear chance" to prevent or avenge the injustice of homicide. It is also possible that respondents are particularly attuned to police-perpetrated injustices based on their own previous experiences. Many respondents live in communities where interactions with police are "Janusfaced": Police are too present in everyday life, and then perversely absent or ineffectual when needed (Prowse et al., 2019; Weaver et al., 2020). Indeed, most respondents reported they neither trusted, nor expected fair treatment from, the police. The same respondents, though, often had high expectations about the police's *ability* to find perpetrators and bring them to justice. The Chicago Police and the Cook County States' Attorney regularly under-delivered against these expectations. When respondents were angry at the police and prosecutors, they detailed specific, tangible wrongs-done. The political implications of this pattern are expansive: As Bell (2017) shows in other American communities, active harms like excessive use of force or civil rights violations are not the only wrongs that make people in marginalized communities angry at police.

Anger and grievance can also come from equally real, less headline-grabbing injuries and sins of omission.

#### 6.1.5 Missing Explanations: Inequity and Race

Very few interview respondents invoked concepts like racism or structural inequity to explain their experience, even as some expressed anger at state institutions and police. Diffusion of anger has political consequences, but it is not clear that diffusion is *caused* by politics. Shared political narratives are not always central to the way people make sense of trauma.

Respondents express political grievances that are specific to their personal experiences. Two observable implications of a shared political understanding of trauma are missing. If political grievances were a response to "race-class subjugation" (Weaver et al., 2020), they would be very widespread among the respondents I interviewed. This was not even the case among the subset of respondents who lacked the cognitive clarity to blame the perpetrator. Further, if attention to structural inequity *drove* respondents' attributions and emotional experience in a consistent manner, I would expect respondents to more explicitly invoke experiences of racism or inequity, or at least contextualize their experiences as part of a pattern in the way state institutions treat Black and Latinx people in Chicago.

This happened in only a very small number of cases.<sup>12</sup> Even respondents who highlight racial inequity focused on specific personal experiences where police let them down or treated them poorly. It is difficult to attribute the political consequences of diffusion to a political cause even though centering racial inequity to explain trauma would be highly consistent with macro-level evidence about the lived experiences of Black and Latinx Chicagoans and about the deep causes of violence (Richie, 2012).

<sup>&</sup>lt;sup>12</sup> Jackson (2019) shows that perception of inter-group threat (racist treatment by the state) in Chicago varies by gender: Men often downplay the threat of racism and women are more likely to express fear and anxiety.

#### 6.2 Qualitative Cases

I present the experience, reasoning, and emotions of nine interview respondents in case studies, showing how the cognitive clarity framework explains variation in emotional experiences. Seven cases illustrate how emotions differ depending on the extent of cognitive clarity: two show examples of full clarity, five more show how emotion experiences work differently with partial or no clarity. Two additional cases show departures from the framework, where respondents are not angry at the perpetrator despite clearing the bar for cognitive clarity. Longer narratives for each are in an appendix.

#### 6.2.1 Full Cognitive Clarity

In two full-clarity cases, respondents explain anger at the perpetrator with specific reference to identity and motive. Both Mr. A (whose son was killed by a cousin) and Ms. B (whose son was killed by someone he had beaten in a fight) use available information to understand the murder as a) a transgression, b) caused by the perpetrator's agency, and c) avoidable. Mr. A and Ms. B report high levels of anger at the perpetrators. Their experiences are characterized by specific rumination on their knowledge of identity, motive, and nature of injury. Ms. B says thinking about how socially connected she is to the perpetrator makes her angry. She put off learning his real name (she knew his nickname); speaking his real name in court made her want to "walk over there and kick him in his face with my boot." She also refers to motive to explain her anger: the "fair" thing would have been learning to fight better instead of shooting (Respondent 68, Chicago, IL, January 2018). Cognitive clarity also informs Mr. A's response. He is angry at the cousin because killing a blood-relative is a more serious transgression than killing in general. Mr. A says his son's behavior—gang involvement—put him at risk generally speaking, but he is angry because his knowledge of the perpetrator's identity shows that his son's death was a transgression against the norms of family (Respondent 95, Chicago, IL, January 2018).

Knowing the perpetrator and motive help Mr. A and Ms. B form coherent narratives in which their son's deaths were a violation, carried out by someone who could have made a

different choice. The connection between cognitive clarity and anger is not lost on respondents: Ms. B says knowing the motive is the specific thing that makes her angry. Respondents who have cognitive clarity actively use it to describe and justify their emotions.

#### 6.2.2 Partial or No Cognitive Clarity

Five cases where respondents lack at least one key piece of information show how emotions develop without cognitive clarity, and how information shortfalls often lead respondents to attribute negative emotions toward more politically-consequential targets. Ms. C and Ms. G, whose nephew and son, respectively, were murdered, are unclear about the perpetrator's identity and have "worked backward" from the little available information to guess about motive. They come to different conclusions about motive, but use available information in similar ways. Both women discussed the unknown perpetrators as quasi-structural forces, not actors with agency. Accordingly, they talked about violence as an ever-present environmental threat that people must work to avoid. Both blame people who they think had agency—Ms. C blames the victim, who might have refrained from antagonizing a rival crew (Respondent 33, Chicago, IL, January 2018), and Ms. G blames the victim's friends who she thinks could have prevented the violence (Respondent 10, Chicago, IL, January 2018). Unknown perpetrators are absent from their explanations.<sup>13</sup> Lack of cognitive clarity about the perpetrator's identity changes emotional processes: not knowing the perpetrator inhibits Ms. C and Ms. G from reasoning about the perpetrator's culpability and agency, so they focus on what others could have done differently.

Ms. D knows who killed her son, but doesn't believe what she has heard about motive: a botched robbery. Robbery does not fit with her other knowledge about the perpetrator (attended private school) or the sequence of events (shot before trying to take money), so she lacks cognitive clarity about motive. Ms. D has a competing theory: She believes the real cause of her

<sup>&</sup>lt;sup>13</sup> Ms. G accuses the perpetrators of a secondary wrong—what Fujii (2013) calls "extra-lethal" violence. She says that sometimes people "catch a bullet," but is upset that someone "unloaded" a whole magazine into her son, who was likely not the intended target.

son's death was the killer's mental illness. She is angry at the government for not helping people like her son's killer get treatment, and for not preventing them from getting guns. Ms. D's emotional response—anger diffused onto a new target—follows from confusion about motive. She makes sense of the situation by stipulating, without evidence, that the killer cannot control his behavior. She blames the people and institutions she thinks could have kept him from hurting others (Respondent 22, Chicago, IL, January 2018).

When respondents have partial cognitive clarity—knowing either identity or suspected motive—they use what they know to try and fill in blanks. Ms. E and Ms. F, however, lack information about both identity and motive. They assume their brother and son (respectively) were accidental victims, and neither knows who to blame. Ms. F explains that not knowing "the who or the why" means she can't be angry at the perpetrator. She says: "anger needs a target, so I'm not angry." Both say there are too many unknowns for them to focus on blame. They express extreme anger, though, at subsequent transgressions by detectives and funeral directors, with both having more to say about these subsequent indignities than the causes of the homicide itself. Neither woman has enough information to make sense of the homicide, and, as Ms. F says, it's hard to be angry at something you know so little about (Respondent 101, Chicago, IL, January 2018). Ms. E and Ms. F direct their anger at tangible and understandable things, like the wrong color casket, or a detective who never calls. Both express frustration at feeling impotent, not only when they couldn't protect the brother and son who died, but also because they couldn't "be in control" of the situation after the fact (Respondent 73, Chicago, IL, January 2018).

#### 6.2.3 Departures from the Cognitive Clarity Framework

Ms. H and Ms. J have full cognitive clarity but are not angry at the perpetrator. Variables other than cognitive clarity, like their different senses of what constitutes injury, seem to mediate their emotional experiences. Both Ms. H's grandson and Ms. J's daughter were killed because, the respondents believe, cousins put them at risk. Though perpetrator's identity, motive, and a sense of transgression are clear to both women, they are angry at the reckless cousins more than the perpetrator. One possible explanation for the departure from the cognitive clarity framework

here is a different understanding of what constitutes an "injury"—in other words, a different importance placed on the norms of family. Since anger is a response to a transgression, variable interpretations of what behavior constitutes a transgression against important norms might lead to these departures from the cognitive clarity framework.

Ms. H and Ms. J perceive the nature of the injury differently from other respondents. They focus on the cousins' transgression of putting victims at risk in the first place (Respondents 74 and 96, Chicago, IL, January 2018).<sup>14</sup> Still, the content of information about injury, perpetrator, and motive are not just permissive conditions for anger. They are integral to emotional experience and the attribution of blame to the cousins.

### 7 Narratives of Violence: Generalizability of the Cognitive Clarity Framework and Future Research

Chicago is different from many common contexts for studying political violence. It has a strong state, moderately functional public service provision, and much of the violence is facially a-political. 2010s Chicago, unlike two-sided conventional or unconventional wars or situations of highly institutionalized criminal violence, does not have a shared narrative that pre-designates information about homicide-specific motive and perpetrator.<sup>15</sup> Survivors of violence in Chicago sometimes lack the information to explain who/what is responsible for their trauma. At a loss for anger at the perpetrator, some survivors make sense of their situation in ways that lead to the formation of political grievance as their primary emotional response.

Evidence from Chicago should be instructive for other contexts, including those where shared narratives pre-designate the motive and identity of the perpetrator and obviate information-seeking, making cognitive clarity easy to achieve. First, it demonstrates the breadth of possible emotional responses to trauma. Second, Chicago provides insight about the

<sup>&</sup>lt;sup>14</sup> I also interviewed Ms. H and her son Mr. H about the murder of a different son, killed by his girlfriend. Here, both were unequivocally angry at the girlfriend; as the cognitive clarity model predicts. This further suggests that "family" norms are an appropriate alternative explanation for Ms. H's case.

<sup>&</sup>lt;sup>15</sup> Chicago violence perhaps had a shared narrative in the past, but the breakdown of cohesive drug gangs since the 1980s has complicated the violence landscape (Stuart, 2020).

simultaneous power and weakness of structural narratives. A strong, valid *latent* narrative exists in Chicago to explain violence-in-general as a product of racism and structural inequity, but the narrative does not account for all individual instances of violence, and is infrequently invoked by survivors making sense of their situations.

Political scientists know that macro-political interpretations and individual interpretations of a conflict, a cause, or even a single event do not necessarily match (Scott, 1985). This paper supports a newer, related observation: Interpretations of violence depend on access to information, which varies across individual events in a broader context. Broad versus individual interpretations may even support opposing conclusions about why violence has happened, who is to blame, and how to respond.

Emotional responses to violence are more variable than often assumed. Focusing on information and cognitive clarity may explain some portion of that variation. Using a more nuanced understanding of emotional responses to violence could provide significant benefits for understanding post-violence behavior, revenge seeking, and grievances against the state in both low-intensity contexts like Chicago, and in canonical situations of political violence like conventional wars.

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## **Supplemental Information**

Facts Shape Feelings

Α	- Supplemental Plots
A.1	- Diffusion and Retargeting 1
A.2	- Expanded Topic Association Plots + Religion Effects
B	- Single Case Vignettes
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С	- Topic Model Diagnostics
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D	- T-Tests for PANAS Scores
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F	– Research Context and Research Partner

#### **A** Supplemental Plots

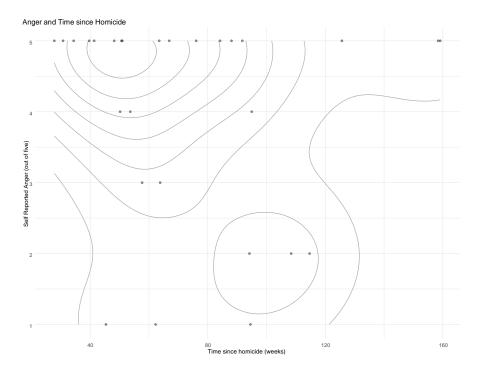


Figure A.1: Plot of self-reported anger scores against time since homicide in weeks. Respondents who self-reported their level of anger more weeks after the homicide were slightly more likely to report lower anger scores, but contour lines show the trend is very weak. Most respondents report very high anger scores no matter how much time has passed.

#### A.1 Diffusion and Retargeting

When respondents lack the cognitive clarity to be angry at the perpetrator, they sometimes diffuse anger onto another target of convenience. Closed-ended responses have some shortcomings in terms of identifying this relationship, but anger distributions do still seem strongly related to respondents' perceptions of how they were treated by the court system and prosecutors after the fact. Respondents who report that prosecutors represented them poorly are more likely to report extreme anger than those who felt prosecutors represented them well. Interestingly, this difference does not seem to hold for respondents who do/do not think the detectives in the case did a good job. This evidence is consistent with the qualitative cases—some but not all respondents who aren't angry at the perpetrator diffuse their anger to agents of the state.

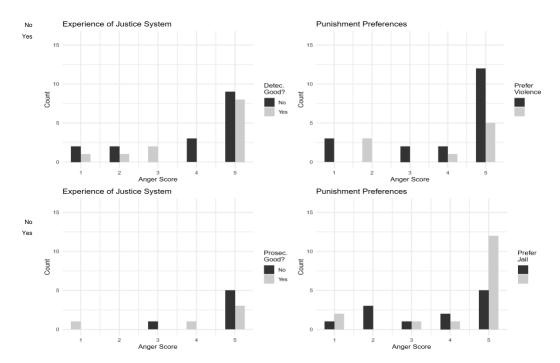


Figure A.2: Bar plots of bivariate associations between respondent self-reported anger related to a) experience of the justice system, and b) respondent's preferences for how to punish the perpetrator. Fewer responses are shown for the relationship between anger and satisfaction with the prosecutor because roughly 1/2 of respondents were discussing unsolved, unprosecuted cases.

Finally, this figure also shows the relationship between anger self-reports and respondents preferences for how the perpetrator ought to be punished. These two plots do not support the idea that general anger is associated with preferences for harsher punishment. If anything, the plot on the bottom left shows that individuals who desire violent punishment might be slightly less angry on average, and that individuals who want the perpetrator to go to jail are often extremely angry. Given that these distributions represent a sample of 31, this is not exactly evidence against existing work, but it certainly supports the notion that anger formation and targeting ought to be theorized about and taken into account in attempts to test the standard model of anger formation.

#### A.2 Expanded Topic Associations Plot + Religion Effects

There is a strong and large-magnitude association between respondents who attend church weekly (or more frequently) and a decreased topic prevalence for anger and blame. The association between church attendance and decreased discussion of anger, blame, and justice is about the same magnitude (and opposite sign) as the association between knowing the perpetrator's identity and increased discussion of anger, blame, and justice. Beyond negative associations with anger, church attendance is not associated with broader sang froid: respondents who attended church at least weekly were associated with a significantly higher topic proportion for panic and anxiety. The cognitive clarity theory does not speak directly to the issue of religion, which does seem to be somehow important in mediating emotional response. Beyond this correlation, respondents' faith and beliefs about the eventuality of divine justice were an important part of many interviews. Both respondents who did and respondents who did not know the identity of the perpetrator talked about God and divine justice.

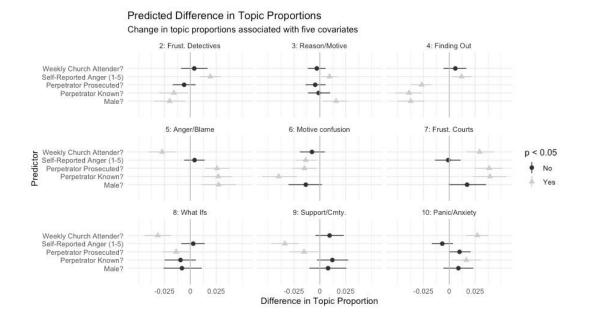


Figure A.3: Change in predicted proportions of topics 2-10 associated with five predictors. The difference plotted in the figure is the expected change in topic proportion associated with either moving from 0 to 1 if the predictor is an indicator variable, or from the 25th to the 75th percentile if the predictor is continuous. In this figure, all variables besides self-reported anger are indicators. Predicted differences are calculated from separate bivariate associations comparing a single predictor to each of 10 topics. Topic 1 (simple, factual description of the homicide) is omitted because it is not significantly associated with any predictor; such a description was elicited in every interview.

The effect of religion is not accounted for in the cognitive clarity theory because its appearance in interviews seemed to be mostly about justice and punishment, not about the formation of emotion. Unfortunately, interviews simply did not yield enough information about how religion acts on the formation of blame and emotional response for this paper to treat faith as a separate mechanism in a theory of emotional response to victimization. Where respondents did talk about religion, references to God did not focus so much on religion as a social institution, but rather on how the respondent's belief about God's will and God's plan factored into their understanding of why they had become victims of violent trauma and what in particular they ought to do in response. Over half of respondents talked in detail about God when asked what sort of punishment the perpetrator deserved or when asked to think about why their family member had been killed.<sup>1</sup> The particular

<sup>&</sup>lt;sup>1</sup> Respondents who brought up God when asked about motive were generally respondents who lacked cognitive clarity about the motive.

understanding of New Testament scripture espoused by the respondents who talked about God (all respondents who identified themselves as religious were part of a Christian denomination) is incompatible with vengeance and retaliation: multiple respondents quoted Romans 12:19 at some point in the interview ("It is mine to avenge; I will repay, says the Lord"). This interpretation itself is an interesting puzzle. We might expect affirmations of faith in the context of discussing a relative's homicide to be a way of talking about Christian forgiveness. Some respondents did talk about knowing they ought to forgive the perpetrator, but more often, respondents' invocation of God was about knowing they had to refrain from trying to punish the perpetrator themselves and about trusting in divine justice.

Based on where in the interviews religion most often arose, it seems like respondents faith has more to do with mediating the expression and action tendencies of anger—a process that occurs after the cognitive clarity theory has run its course. This notion is consistent with the association in the STM, and consistent with predictions about regulation of anger expression that surface in Phoenix (2019). In any case, the frequency with which respondents explained their beliefs and actions with extensive and internally consistent reference to their faith suggests that it is worth learning more in future research about the effect that religious belief has on emotions and behaviors after trauma.

#### **B** Single Case Vignettes

#### **B.1** Full Cognitive Clarity + Anger at Perpetrator

#### **B.1.1** Mr. A

Mr. A's son T was killed, and Mr. A believes the killer was one of T's cousins on his mother's side of the family, and that the cousin set T up to be killed on account of a gang-related beef. Both T and his cousin were members of different factions of what used to be the same gang; Mr. A was a member of the precursor gang earlier in his life, but left when T was young. Mr. A does not know exactly what the beef was about—he says he could envision T's death as being the result of something T had done. Mr. A knows that T was in a gang, carried a weapon, and sold drugs. He is not sure whether or not T ever killed anyone, but he is aware of the possibility that his death was "coming back around to him." All the same, based on what he knows about the circumstances of T's death and what he has heard from connections in the neighborhood, he is convinced that T was set up on account of some beef. T and his girlfriend were hanging out across town in a house that Mr. A thought belonged to another relative of T's cousin. He found out after the fact that the house was abandoned and had been turned into a trap house:<sup>2</sup>

"Every night in this trap house, there's about 20 [people] partying, kicking it, drinking. Then all of a sudden this night, there's three people: my son, his girlfriend, and this crackhead. His cousin's uncle, who was going with the crackhead, 15 minutes before this happened he has an asthma attack...that was just to get him out of the house or whatever...The crackhead opened the door...everybody got shot except her."

T was shot seven times in the face and torso and died on the scene, his girlfriend was shot eight times but survived. Mr. A got information "from the joint" that T's cousin had been "one of the trigger men," and has talked to the witness (the woman he calls the "crackhead") on Facebook. Mr. A believes she was part of the setup, or was paid off to open the door. She's stopped responding to his

 $<sup>^{2}</sup>$  Mr. A hinted that people like T's girlfriend or the "crackhead" knew the specific beef/jealousy over which T had been killed, but would not tell him.

messages because, despite his assurances, she's afraid that Mr. A's family will retaliate against her if she says what she knows. He blames T's cousin and is confident that he has identified the right perpetrator, but is still looking for more specific answers and witnesses.

Mr. A has cognitive clarity about a) the identity of the perpetrator, b) the perpetrator's motive and c) the sense that T's death was an undeserved injury even if it might have been "fair" in some sense. Mr. A said that he blamed himself at times for having let T see "too much too soon" when he was young, but first and foremost he blamed T's cousin for "two wrongs": killing T of course, but also for betraying T's trust that his blood relative would "have [his] back and protect [him]." To Mr. A— who lost another son to homicide years ago—this death feels worse because T's cousin broke a fundamental norm of what it means to be a blood relative. Mr. A asked: "how could you do your own family like that?"

In line with the common sense theory, Mr. A is angry at the perpetrator (he self-reported "anger" at 4 out of 5) and does want revenge. Though he says he would be satisfied if someone else punished T's cousin (even satisfied to find out the cousin had "gotten sick and died") he has also undertaken his own preparations. Mr. A heard that T's cousin was briefly in jail on an unrelated charge, and tried to use a connection in the Cook County Jail to find out where he was serving his house arrest.<sup>3</sup> At various times in the year between T's death and the interview date, Mr A. went driving through the area where T had been killed and where the cousin supposedly stayed (across the city from Mr. A's house). Mr. A was armed during these drives, and said that he figured if he saw T's cousin while he was out driving he "would've been forced" to kill him. He assumed that T's cousin would try to shoot him first. The day before our interview, Mr. A and a friend had driven through the neighborhood, looking for the cousin on the way to visit the cemetery where T is buried. After that ride, Mr. A told his friend he was "not going to go looking for him anymore." (Respondent 95, Chicago, IL, January 2018)

<sup>&</sup>lt;sup>3</sup> This attempt failed. Mr. A said very directly that his friend at the Cook County Jail either did not know the address, or knew and would not tell Mr. A. As of the time of our interview, he did not know where to find the cousin, and said that after visiting T's headstone at the cemetery the day before our interview, he was done trying to look for the cousin.

# B.1.2 Ms. B

The same points of cognitive clarity seem to be enough to facilitate anger at the perpetrator even outside of the kind of social networks and informants in which Mr. A is embedded. Ms. B's son J was killed outside a currency exchange near her home. By the time of our interview, the killer had already been convicted and given a long prison sentence. Ms. B knew the killer—he and J were roughly the same age and grew up in the same neighborhood—but didn't consider him to be one of J's friends. Months before he was murdered, J and his killer had gotten into a fist fight, where J "beat the crap out of him." Ms. B believes that by winning the fight, J embarrassed the killer in front of "all the guys" and that in response, "instead of learning how to fight...[he] chose to shoot my son four times."

Ms. B satisfies all three conditions of the theory in this paper: she knows the identity of the perpetrator, she has a \*very\* clear idea of the motive, and she has no doubt that her son's death was unjust. Though Ms. B equivocated on the question of whether or not her son was affiliated with a gang—she drew a distinction between "his own crowd" of boys he grew up with and true gang affiliation—it was clear that she herself was not connected to social/informational networks through gangs. Ms. B is still angry, even after the trial yielded a sentence that she was "pretty much happy with." Ms. B scored five out of five on self reported anger, and said that anger makes her wish they would "let her in the jail and just punch him in his face." More practically, she says that she wants the killer, who will be in jail until J's young son is in his 50s, to wake up every day and think "I'm in here because I killed Ms. B's only child." According to Ms. B, the only thing that calms her anger now is thinking that the killer will eventually have to "answer to a higher power."<sup>4</sup>

Other hints in Ms. B's recollection of her grief and her experience of attending the trial suggest that knowing the perpetrator's identity is a particular object of fixation for her. Ms. B is upset at how connected she and J's killer are, she feels uncomfortable knowing they have so many mutual friends

<sup>&</sup>lt;sup>4</sup> J's killer is in prison, and even though some family members "wish he wasn't breathing," no one has tried to punish him themselves. Ms. B did mention that one of the killer's friends was shot and killed two months after J, and that she wouldn't "put it past" some of J's friends to have done it. When asked directly if she thought the second murder was "someone's way of expressing their love for J," she responded "I don't even want to say what I think in my gut."

on Facebook and knowing that she went to high school with a lot of his family. She wishes she didn't have so many opportunities to think about J's killer: "It's bad enough that I know his name." She perceives knowing the perpetrator's identity, seeing his face in court (and beyond that, knowing the perpetrator as someone with family and friends), as angering. Ms. B did not learn the perpetrator's real name until she went to court (she had known him by a nickname), because she did not let anyone say it in her presence. She says: "I didn't want to know anything about the chump. It was the hardest thing for me, saying his name in court...I literally wanted to walk over there and kick him in his face with my boot and hit him with my crutches."<sup>5</sup> (Respondent 68, Chicago, IL, January 2018)

#### **B.2** Partial or No Cognitive Clarity + Anger Diffused

### **B.2.1** Ms. C - Perpetrator Unknown, Angry at Victim

Ms. C raised M and his siblings (including a brother, R, who was murdered a few years prior) after M's mother died of cancer.<sup>6</sup> Ms. C has an extremely clear idea of why M was killed. He was an aspiring rapper, and had released a music video called a "diss track" that mocked dead members of a rival crew and threatened those who were still living. In the video, M points a pistol with a laser sight and what looks like a 30-round magazine at a person wearing the rival crew's logo. Ms. C believes that M was murdered because of the track, and specifically because he had disparaged the dead members of the other crew. Because M was shot so many times at such close range, Ms. C is also positive that M was the intended target: "If they shot him up like that...they knew who they were coming for." Even though she has a clear understanding of M's death as unjust—"It's sad that they can kill somebody over something they say in a song...just say something back!"—Ms. C says she is not sure the identity of the perpetrator. The police have not caught or charged anyone for M's murder, and Ms. C is likewise unclear about who shot M. To the extent that Ms. C knows who was behind M's murder, it is because she has worked backwards from the known motive: "I figured it was a gang, I don't know what gang, but I

<sup>&</sup>lt;sup>5</sup> Ms. B broke her foot a couple months before the trial and was still in a boot cast and on crutches when she attended court.

<sup>&</sup>lt;sup>6</sup> M's father had also been murdered years previously

guess I just assumed it was a gang...I don't know for sure, but I just feel like if he made that diss of \*\*\*\*, that's who I feel like killed my nephew." Given that Ms. C does not have a clear sense of the perpetrator's identity, it makes sense that she does not focus much anger on the perpetrator. When I asked Ms. C who she blamed, her first response was to confess feeling guilty about having "lost [my sister's] kids and not mine." Ms. C believes that she did not fulfill her responsibility to keep her sister's children safe, and she thinks most of the other kids (her children and her sister's) blame her for how M and R turned out. She says it would have been better if she would've died instead of her sister.

When asked specifically about blaming the shooter, Ms. C had as much to say about the investigation as she did about the unknown perpetrator: "I never even thought about that person. I don't know why. I didn't even think about the people that shot him up. I get mad at the police because I feel like they're not doing anything to solve it...Another young black boy gone, who cares."

Ms. C scores five out of five on self-reported anger, but her anger is targeted at M ("Why weren't you paying attention?...Did you know the consequences that were going to come behind that song?"), at the rest of her family ("Everybody wants to look at me as if I didn't do a good job...nobody helped me."), and at the police ("Somebody knows something, somebody must've said something...how can you not find out?").<sup>7</sup> This is consistent with the idea that not knowing the perpetrator's identity is a significant impediment to feeling angry toward them. (Respondent 33,

Chicago, IL, January 2018)

# B.2.2 Ms. D - Motive Illogical, Angry at Government and Society

Ms. D's son J was killed driving in rush-hour traffic. He had stopped at a currency exchange to get cash, and two men followed him onto the freeway and into traffic in order to rob him; one of them shot into the car, killing J. Ms. D knows the identity of the perpetrator—he was caught very quickly—and perceives her son's death as unfair. She also has a nominal sense of motive: the killer

<sup>&</sup>lt;sup>7</sup> Part of what stokes her sense of guilt is seeing comments on YouTube that mock or celebrate M's death. Other research on violence in Chicago speaks more to this dynamic—cycles of insult and *sometimes* violence perpetuated through taunting music and its promotion on social media (Stuart, 2016, 2019).

says in his police statement that he was just trying to get the money that J was carrying when he walked out of the currency exchange. This explanation, however, is neither satisfying nor sufficiently clear to Ms. D. It does not make sense to her that a person would kill someone he did not know and had never seen before, nor does it make sense that he would shoot J \*before\* trying to take his money. Moreover, Ms. D cannot understand how a person who went to a private high school ends up killing someone to steal a few hundred dollars. When I asked why she thought J had been murdered, she said there was "no reason," and that it was "senseless."

Even though Ms. D can recite the explanation and motive that the killer gave, the fact that she is still searching for answers other than the money suggests that she does not feel like she has cognitive clarity about the motive. At various times in the interview, Ms. D characterized J's murder as a "horrific" mistake, the result of drugs and peer pressure, or symptoms of mental illness—the killer was admitted to the hospital right after he was caught because he tried to commit suicide. Because Ms. D is unsatisfied with the robbery-focused motive, she has thought of other motives consistent with the facts of the case, and has directed blame and anger based on her own hypotheses about the reason that J died.

Ms. D blames the killer's parents, saying that J might still be alive if "someone would've caught those [mental problems]" that she believes contributed to the killer's decision. She blames "society" for the fact that "kids in the inner city have mental problems and no one helps them." She blames the city of Chicago for the fact that the killer could get a hold of a gun: "before J, there have been hundreds and hundreds [of murders] and it's still happening." Ms. D says she knows she "will have to forgive" the shooter and that she "can't blame him all the way," because so much of what happened to get him into the situation where he killed J was not his fault. If the shooter had grown up in a good neighborhood like J did, she says, "he wouldn't have even thought about doing something like that." Ms. D says that when she sees the killer in court, she can tell "he's hurt…he's lost…he didn't expect this."

Ms. D scores a five out of five on self reported anger (but much lower on peripheral anger measures like "upset", "irritable", "hostile"), but is not angry at the perpetrator. She even believes that the perpetrator can be rehabilitated; she wants him to show remorse and "commit to getting some

help...commit to change," but does not want him to spend ht rest of his life in prison. Instead she is angry at the fact (not at a person in particular) that J was shot "[number] times for no reason." Second, she is angry at "the way it was handled" procedurally. The police never called to tell her that

J was dead, when she arrived at the scene after hearing from a family member, detectives started to "interrogate" her about whether J had been involved in a gang. This was extremely galling to Ms. D because she took pride in the fact that she had worked hard so that her son could be a "little yuppie kid who grew up on the north side." She says she "wonders would they have asked that if [J] had been Caucasian." She is angry that the trial is moving so slowly, and that the police seem to have given up on finding the killer's accomplice.

Because Ms. D does not have cognitive clarity about the motive—or, more accurately because she does not believe in the possibility that J was killed over some cash and cannot hold the perpetrator fully responsible—the target of her anger has shifted to groups that she *does* hold responsible for her loss, and to individuals like the police, prosecutor, and judge, who she believes have treated her unfairly *after* J was killed. (Respondent 22, Chicago, IL, January 2018)

## **B.2.3** Ms. E - Motive and Perpetrator Unknown, Unclear if Angry

Ms. E's brother L was killed getting into his car outside a friend's house at the end of the night. Neither Ms. E nor her parents (who were in and out of the room during our conversation) know who killed L, or why he was killed. Ms. E cannot think of an explanation for why L was killed, and therefore thinks that his death must've been a situation where the shooter "thought they were getting someone else." At the same time, she is suspicious about the circumstances of L's death: whoever shot him waited until his friends watched him get into his car, waited until another car pulled away, and then began shooting immediately after the friends closed the door to the house. Because Ms. E has no clarity about the why L was killed, and because she has no knowledge of the perpetrator's identity, she "doesn't know who to blame. Nobody has answers."

Ms. E thinks the detectives treated her family unfairly and un-empathetically: "it's just another kid dead, that's how they managed it." She says she expected them to be more thorough because when

her older brother was killed (many years ago) the detectives came to the family's house, shared leads, and just "treated it so differently."

The emotions that Ms. E self reported are consistent with the theory that lack of cognitive clarity precludes anger at the perpetrator. Even though she scores the level of anger she feels as five out of five, she can't identify a target: "Nobody. I don't picture anyone specifically when I'm angry. I'm just angry." This is puzzling, especially since she seems to have plenty of reason to be angry at the police. The way Ms. E describes her anger provides some insight about this puzzle. Ms. E is angry at feeling impotent. After her oldest brother died (he too was killed in a seemingly random way and the killer was never caught), she and her parents "did everything differently with L...my older brother was out more, he was having more freedom. We did things way differently with my younger brother just because we didn't want it to happen again." What makes her angry is the feeling that she did her best, that L did his best, and that none of it mattered: "I feel like there's no point...nothing's going to stop it from happening if it happens...I feel like I could move to Jerusalem and [my sons] could still randomly get killed."

In a way, Ms. E is angry that her family's attempts to "be in control of the situation" did not work, and that no matter what she does, she feels at the mercy of random violence (she told me that weeks after L was killed, her car was shot up as she drove down the street). In another sense, what Ms. E and her family are feeling is very different from the kind of anger that other people in the cases above express. Ms. E was one of the only "angry" people I talked to who said "No, not this time," when I asked if feeling angry made her feel like she needed to do anything or change anything. Frankly, it seems like Ms. E has such a low appraisal of her own control over what happens to her and her family that she isn't able to express archetypical anger (i.e. wanting punishment or repair), or even archetypical fear (i.e. wanting protection). Ms. E's complex emotional response is basically consistent with the theory of this paper, and it also demonstrates the paramount importance of collecting information about attribution, action tendencies, and cognition when studying emotional responses to violence. Ms. E self-reported the same amount of anger as Ms. B; understanding their emotional responses as the same would be a mistake and would be detrimental to any attempt to understand behavioral or political consequences fueled by anger. (Respondent 73, Chicago, IL, January 2018)

### **B.2.4** Ms. F - Motive and Perpetrator Unknown, Angry at Funeral Home

Ms. F's son D was killed standing outside talking to two friends. Ms. F does not know the identity of the perpetrator, and as far as she can tell, D was not the intended target, but was rather "in the wrong place at the wrong time." D had just moved back from out of the state, and was killed in a neighborhood he hadn't lived in (or even visited) for years. Ms. F points out that if D had been the intended target, the perpetrator's wouldn't have had more than twenty minutes notice that he was even in the neighborhood. Detectives tell Ms. F that the perpetrator got out of the driver's side of a slow-moving car and immediately started shooting. D started to run and was hit in the leg. At that point, Ms. F says, "because he went down he became the target. Randomly. And they were going to make sure he didn't get up."

Because Ms. F does not know the perpetrator's identity or the motive behind D's murder, she doesn't blame anyone for what happened. She described this causal relationship very directly: "I don't blame anyone. I don't know anybody to blame. So if I had to blame somebody, the only person that was in charge was D. And I can't blame him for wanting to go and see a friend or trying to enjoy life." Similarly, Ms. F was very clear about why she couldn't feel angry at the perpetrator:

"I mean...I can't be angry at the way he died because I don't know who to be angry at. How can I be angry when I don't know. If I could say 'you killed him' then I could be angry because I'd know who killed my son. But I can't be angry without knowing who did it. So no, I don't like it, but anger? No. Anger needs a target. So I'm not angry."

This is not to say Ms. F was sanguine—she self-reported her level of anger as 5 out of 5, mostly because she was furious at the funeral home that handled D's memorial service.<sup>8</sup> Ms. F described a litany of mistakes and indignities, that made her angry enough that she thought if she had to go back

<sup>&</sup>lt;sup>8</sup> Ms. F also expressed disappointment at the police and the fact that they hadn't gotten any good evidence. Instead of angry, though, she was somewhat understanding and noted that the detectives are probably overworked given "everybody that's out here getting killed." Per Ms. F, younger members of the family are somewhat angry at the community for keeping quiet and not cooperating with the police to catch D's killer.

to the funeral home she would "set it on fire." Dealing with the funeral home made her angry because she felt like their mistakes were the product of bad intention, not incompetence: "They just treat you like you're nothing. The city's paying for it so who cares." She blames mistakes like the wrong sized casket (D was 6'8"), missing flowers, and no urn, for her feeling like she let D down: "You only get one time, one chance to do this, and to me, I failed my child as a parent."

The difference between the way that Ms. F feels toward the funeral home and D's killer is jarring. No one, Ms. F likely included, would argue that missing flowers and the indignity of an overcrowded funeral home are a more serious injury or moral wrong than murder, but the callous funeral director rather than the murderer is the focus of her anger. Ms. F is more animated and angry about the injuries done to her \*after\* D died because, as she says herself, she lacks the cognitive clarity necessary to blame and become angry at the perpetrator. (Respondent 101, Chicago, IL, January 2018)

## B.2.5 Ms. G - Perpetrator Ambiguous, Angry at Community and Detectives

Ms. G's son B was shot and killed, hanging out with a group of kids on the sidewalk a few blocks from Ms. G's home. As Ms. G tells it, a van drove up to the group and started shooting indiscriminately into the group. B "tried to get up and run with everybody else, but [a bullet] broke his leg, so he fell and took 16 bullets to his torso." Ms. G thinks that her son was most likely collateral damage in a cycle of retaliatory violence, but without knowing the identity of the perpetrator or the identity of their intended target, she acknowledges she is just speculating. People in the neighborhood have told her that the bullets "were not meant for B," and Ms. G has suspicions about who might have been involved in the attack, but doesn't have more than hunches, and definitely doesn't know the identity of the shooters. It seems like people in the neighborhood don't know either. When Ms. G talked about young men who at one point wanted to avenge B's death, she said they would have been just "shooting up everybody you can think of," because they didn't know who was responsible

either.

When it comes to blame, Ms. G's makes a complicated set of attributions. First and foremost, she blames B's family and "the neighborhood," for not pushing B harder to keep on the right path. She

thinks the boys out on the corner should've "pushed him" to keep away from the block because he was the only one out there still going to school. She blames the shooters too, but only for continuing to shoot after he fell: "He took 16 bullets for who? The entire block? The whole block?...If it's a drive by or something anybody could get hit, but to stand over somebody and just unload into them, that's something [else]."

Ms. G scores a five out of five on anger, but she spreads her anger over a variety of targets. She is "angry that nobody was there to protect him...angry that he was out there with a group and thought that's where he was safe...angry that somebody thought it was okay to come down here and start shooting...angry that the detectives haven't called...angry at [B] because it could've been avoided." She says that feeling angry makes her want to get young men to stop hanging out on the corner and making themselves targets. Ms. G says that at first not knowing who the perpetrator made her want to punish the people on the corner who carried their own guns and might have protected her son, the people who had the clearest chance to prevent B's death.

In light of this paper's theory, Ms. G's situation represents something of an edge case. She does not know the identity of the perpetrator, but has been able to learn a fair amount about the car they drove and where in the city they came from, and has developed something of a picture in her head. She does acknowledge being angry at the perpetrators and she does want them to be punished, but she devotes much more time in the interview to talking about anger at the community and at the detectives for not preventing B's death and not catching the perpetrators, respectively. (Respondent 10, Chicago, IL, January 2018)

# **B.3** Full Cognitive Clarity + Anger Diffused

The last two vignettes in this section present cases that fit the theory of this paper more poorly than most of the 31 interviews. In both, the respondent has cognitive clarity about identity, motive, and nature of injury, but she still focuses blame primarily on a target that is not the perpetrator. In both cases, the main object of blame is a family member who the respondent perceives as having dragged the victim into a situation that had nothing to do with them. Both of these cases represent type 1 errors for the cognitive clarity theory—the theory predicts that Ms. H and Ms. J should be angry at

the perpetrator and it is not immediately clear that they are—but still accord with the broader motivation of this paper: Anger and attribution after victimization is a less automatic process than we often assume in political science.

# B.3.1 Ms. H

Ms. H's grandson R was stabbed by the ex-boyfriend of his cousin's girlfriend.<sup>9</sup> R went to the girlfriend's house late at night to pick up his cousin, and as he approached the apartment door, the ex-boyfriend appeared with a knife and stabbed R in the abdomen. Ms. H thinks the perpetrator (who is now in jail) might have confused R for his cousin; both had dreadlocks. Ms. H knows the perpetrator's identity, she knows he was motivated by jealousy and a feud over a woman, and she is convinced that R didn't deserve what he got: "R wasn't the type...didn't like any fighting, any type of confusion. If he'd known that his cousin had problems with this woman, he would've never been over there."

Despite cognitive clarity on the three points that my theory suggests are important, Ms. H blames and is angry (five out of five) at R's cousin, not the killer. Specifically, Ms. H is angry at the cousin because the situation with the girlfriend and her ex was "his problem" and "he knew" that the ex had threatened to kill someone. She asks, "why didn't they tell R? Why did they have him come over?" Ms. H is not only concerned about the murder, but also about a separate precipitating injury: R's cousin not telling him about the threat posed by his girlfriend's ex.

Blame and anger in this situation is complicated. Ms. H believes that the threat of violence is omnipresent in her environment. In addition to R, her son was stabbed to death in 2017 by his girlfriend, and Ms. H is nervous about the safety of her surviving family members and herself because "every day somebody is getting killed." In such an environment, Ms. H seems to believe that relatives should not put relatives in dangerous situations, exposing them to violence that exists in the environment. Per this view, R's cousin violated a norm and in doing so put R at risk and

<sup>&</sup>lt;sup>9</sup> I also interviewed Ms. H and her son Mr. H about another murder of another son, who was stabbed to death by his girlfriend. In this case, both Mr. H and his mother Ms. H were unambiguous about blame and anger: their reactions both fit the standard model very well. This provides some support for the idea that emotional response to victimization is driven more so by attributes of the injury and the situation, less so by attributes of the person.

\*allowed\* him to be killed. It is possible that this sort of defensive ethic is not so rare in violent environments. (Respondent 96, Chicago, IL, January 2018)

#### B.3.2 Ms. J

Ms. J's daughter B was shot sitting in her van outside a restaurant. Ms. J says the shooter was driving around looking for a rival gang member to kill on the anniversary of the day one of his friends had been shot and killed. The shooter was leaning out the window of a car, throwing gang signs to see who would return with a rival gang sign. B's cousin was outside the van and returned the signs; when the shooter came after him, he ran around to the passenger's side of the van. Ms. J believes that in confusion, the shooter thought he saw B's cousin get into the driver's seat of the van. The shooter "emptied out the gun" at the driver's side, killing B.

More so than most respondents—even those who are angry at the perpetrator—Ms. J has cognitive clarity about the perpetrator's identity and motive. She knows the perpetrator's street name, what gang he ran with, that his brother was paralyzed by a gunshot wound years prior, not to mention the specific motive, the name of the dead friend whose anniversary it was, etc. Despite all of this, she primarily blames B's cousin, not the shooter. Ms. J "feel[s] like [the cousin's] actions caused B's death," because she never would have become a target if he hadn't returned the signs. Even worse, Ms. J doesn't think the cousin is remorseful about what he did; he has never apologized to Ms. J or her children.

Ms. J is angry at the shooter and wants the shooter to be punished (in fact, she is upset that the police didn't do more to catch and prosecute accomplices like the driver). She wants him to "take full responsibility" for killing B. But she is equally angry (four out of five) at the cousin for being reckless, and for hurting her children by not acknowledging what he did.

It seems like Ms. J is angry at the cousin because she identifies his actions as the pivotal cause of B's death. She believes that the fact that B was killed and the cousin was not most likely comes down to a case of mistaken identity in the heat of the moment. Though Ms. J did not explicitly say so in the interview, it seems like it might have been more "fair" to her if the cousin had died instead of B. At the very least, the fact that the cousin misrepresented what happened and tried to portray

himself as "a victim of circumstances" may have constituted an additional injury.<sup>10</sup> Like Ms. H, it seems like Ms. J perceives the existence of shooters and the possibility of gang violence as a constant threat in her environment, and sees B's cousin as having unnecessarily attracted the attention of that threat.

 $<sup>^{10}</sup>$  Ms. J got the real story (and found out the cousin was lying) when the detectives showed her surveillance footage of the shooting.

# **C** Topic Model Diagnostics

#### C.1 Top Documents by Topic

Top three documents by topic proportion for each of ten topics in the model presented in the text of the paper. Note that these documents are only a small subset of the top documents used for labeling the topics.

### C.1.1 Topic 1:

1. next thing i go back into the house to lay down, because i'd just got out of the hospital. i hear the gunshots. c\* was like "mom, z\* got hit." and i'm stuck, like, like what should i do. i don't know why i ran out the front door when i could've easily run out the back door. so i ran out the front door and around the corner and he was just laying on the ground. his eyes weren't open, there wasn't any blood. lift his shirt up and you could still see the bullet in his back.

2. so you know the immediate family, we gathered in there and they told me that i\* had died from multiple gunshot wounds. so i asked to see him and they told me, well we have to clean him up first. i think this was probably 8pm or something, and i didn't get the opportunity to see him until almost like probably 11:30nd they were transporting him to the morgue. i remember my patience being short then because it had been too long. they had already come out and told me that he was dead, so i'm like alright i want to see him. i want to touch his body while it's still warm. you know those were just my thoughts, but it took me to...i got a little irate because i was tired of waiting there and i wanted to see my son.

3. well, i remember plain as day. it was a sunday, we were getting ready for church, it was 53 degrees, on the \*\*\*. i had gotten ready, i was ready already, and his mom was still trying to get herself together so i decided to go to dunkin donuts, so i went to dunkin donuts, i came

back from dunkin donuts and i saw him on the block. he was on his way to the door, so i came to the door and let him in.

## C.1.2 Topic 2:

1. exactly, exactly. so no, i haven't had anything and it's been what, over a year and a half, a year and eight months? i haven't heard from a detective since october. and that's because i'm checking, they've got voicemails and all this other stuff.

2. so we called a press conference, and after the press conference everything changed. i got calls daily, i got updates daily. so i...i got a call that they had someone in custody, but it was just "i have someone in custody" but it still didn't sound like they were calling to inform me, it just...i almost felt like i was treated like i was part of the problem instead of i was the victim.

3. they never called. they never called me i had to call them. when i called the detective he was from...out south. he came. when i called him, he did reply with me, but before that, no one. i talked to no one. no one called me and told me my son had passed away. my sister, she called, she called screaming and i knew he was gone, she didn't have to say anything. that was the only call i got. that's how i knew my son was dead. when my sister called me screaming.

## C.1.3 Topic 3:

1. yeah. because a\* asked him "who are you" and the dude was like "i'm a g around here," at the time he didn't know my son was from around there. i'm not saying my sons are angels, i mean they were in a gang, but they didn't go around starting anything. you know, it was like if they'd see somebody messing with a friend they'd jump in, but as far as like "i'm going to kick your..." you know they didnt' do that. it was, it was hard. it hurt my brother because of the fact that my brother had walked over there with him. you know, it just hurt everybody in the family in different ways.

yeah. i was worried about all their safety because of living on the west side of chicago. now
 i have the \*\* year old i worry about, the \*\* year old that i worry about. the \*\* year old and the
 \*\* year old.

3. one of the young men did. so that's the part that puzzles me. because you knew who was standing in that park and you still decided to shoot? so what was your mindset? what was the connection to shoot at this group of people? when you knew...there were people telling me that there were people out there that they could've been shooting at, but...and i know like we look at it in our

community like most of these young guys that are shooting, they don't have any aim. so instead of them seeing who they want and aiming, they just spray the whole thing. i kind of think he just....was standing amongst some people that could've been the target, and he wound up being the person. as we say, they always get the wrong person, because nobody seems to know...like personally i didn't know of anything that was going on with him. he's not in a gang, he didn't sell drugs, he was a student at \*\*\* college, he worked, so i couldn't understand what street ties he would've had to make somebody want to shoot him in his head in broad daylight. so i think it was just the company he was with.

#### C.1.4 Topic 4:

1. i was...i was nervous. i was just nervous when i found out, i just knew people in places. so that helped. asking: do you guys have his keys, his clothes, how do i get this stuff. you know it's the whole...and i'm trying not to get emotional...um...the whole...it was like he was just a dog. from the time of him dying, from the way the funeral home handled him, it was like he was nobody. like he was a dog. like he was a gang banger. like he wasn't somebody out here working. if you knew he wasn't a gang banger...nothing was handled properly, from me having to pick his casket...my baby ended up in the wrong casket. his flowers were missing, he ended up coming home in a box instead of being in an urn. the whole situation, it was like he was just nothing. nothing. i mean, you say i spent all this money for him to be buried, and for his services. how? i didn't get an urn. his foot flower was missing. he was supposed to have been in an ocean blue casket, he ended up in a gray casket. he didn't even have a pedestal to put his book on. it was just...i never got the remaining obituaries. what else happened? they couldn't even cremate him because they said i didn't sign...the day he was supposed to have been cremated on a saturday, the day of his services, he couldn't even get cremated until monday.

2. and both of his friends ran out the gate at the same time and got stuck. at the same time, s\*, my fiancee, was coming out and he pushed them out the way. i ran down the stairs and bullets were flying all over. one of the bullets hit my jacket button and fell and hit my feet. i could feel the bullets hitting my feet. e\* was then running and all i hear is "i'm hit, i'm hit." i was hoping he was hit

somewhere else. but when he ran past me he lifted up his sweater. when he lifted up his sweater he was just holding the middle of his chest. and he told me "move, stupid, there's shooting." so when i moved out the way for him to get in the gate, he just looked me dead in my eyes and just fell out. and he was dead. he was gone.

3. i just know what the police said. m\* had just got off of work, he worked for the \*\*\* and his shift was like from 2pm to 4am, that was his shift. a lot of times he would work longer than that. anyway, this time he got off early. he worked from 2 to 2 and when he came in...his wife was the type that liked to party, smoke her weed and keep her company. so when he came in they must've got to arguing or something. they claim she was frying chicken or something so she just took the knife...she was just trying, she was just looking at snap on tv and seeing where the lady cut her husband or her boyfriend up or something and started doing the knife like that in front of my son and it slipped. they said that she went...cut the main artery. cut the main artery.

# C.1.5 Topic 5:

1. i wasn't there, but all i know is that the boy didn't know my grandson and stabbed him in the place of someone else. r\* was in the wrong place at the wrong time. the killing was meant the be, from what i understand, my nephew or his girlfriend. my nephew said that the boy knew him, but he just killed r\* because he was the first one who came up to his girlfriend's porch. r\* was there to pick up my nephew, and this guy just hauled off and stabbed my grandson in his stomach because he was mad, you know. my nephew was going with this guy's girlfriend that he had two kids with, the guy who killed my grandson.

2. j was there to pick up his cousin. and when he got to the door, the guy..from what i know, i wasn't there...jumped behind bushes and stabbed him to kill him because...the nephew told me he was out to kill him or his girlfriend. the one that killed my son has two kids from my nephew's girlfriend. they went with the same woman. so i wish my nephew had told my son don't come over because there was a guy threatening to kill them. it's just so sad.

3. i don't know. why did he kill my boy, he didn't know him, he didn't know my boy. if he finds out where i live and comes here, i'll be ready to kill him.

## C.1.6 Topic 6:

1. if and so they catch someone and the person was either...they asked at the time what and why and how. so if it was that information that was disclosed, then i would be fine. if they...i think the car windows was tinted so they may not even know he was in the car, so, you know, to say what had happened in their events and to listen to that, i mean that's however that...if the state's attorney had...it would be public knowledge at that point.

2. well the forgiveness came instantly because you want to heal. you have other children, other obligations, other things you want to do. if you don't allow the peace...there's nothing wrong with he people who march and protest, there's nothing wrong with that, but it's not a conclusion, it's not an answer. it's only a mockery, it's only a statement for identification, for the media.

3. i don't have any...i didn't have any...i didn't have any issues with anyone who questioned me about the loss of my son, and i think when you're high strung, when you get a high strung attitude, or you're more content and respectable, or you have a response that's not irate, then you don't get that type of, different kind of responses from individuals that you need to work with.

# C.1.7 Topic 7:

1. it's kind of weird, i know it's a money...a billion dollars...all marketing with the nra it's all marketing, it's all bullshit. because what are people protecting themselves from unless you are making some type of controversy. to me it's almost like a conspiracy. you're putting these guns out here in people's hands who are crazy, in areas where they want to rob people. these people aren't licensed...to create the chaos. so people will feel like they need to go buy guns to protect themselves from the people that you're letting get the guns illegally.

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2. so supposedly, she's still...kim foxx is still supposed to meet with our grief group. i'm done with the nrdc right now because i'm tired of fighting and it de-focuses me form the real fight. so that's my take on the damn state's attorney's office.

3. i thought the state was done with their discovery, and they're not. the strange thing about this whole thing is...the attorneys that are representing this chick are the attorneys that represented i\* with his gun case. same people. so i did my due diligence and talked to them...them being the asa...and i was like "don't you think that's a conflict of interest?" he was like "we'll mention it, we'll mention it." and i'm tired of him blowing me off so i wrote the nrade. and they're just protecting each other, but i have a piece of paper that says, you know i wrote my complaint. they sent my complaint in to the attorneys and the attorneys responded. when i got the response from the attorney, the letter from the nrdc said i had 14 days to respond. well they didn't give me 14 days to respond, they didn't even give me a week.

# C.1.8 Topic 8:

1. maybe if we would've surrounded him a little tighter, they wouldn't have had the opportunity to surround him out there.

2. when i get irritable, i get irritable because i feel like...my whole family maybe if we'd been a little bit stronger and came together and they would've helped me raise these kids, things would've been different. i get irritable because everybody wants to look at me as if i didn't do a good job. i was by myself. that makes me angry because now i'm sitting here with all this guilt about having done wrong, that i didn't raise them right, and then i get irritable because i'm like nobody helped me.

3. i don't know what reason there could be if chicago is a blooming city, and gun violence and different things like that. but gun violence and carjackings are the things that happen in chicago. they're cleaning up chicago, so...it's just an opportunity. so you can add that to what things will be done to protect our citizens, and the things that happen to our citizens. you can weigh which one is greater.

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# C.1.9 Topic 9:

1. i didn't really have a lot of community stuff, and then the area changed too because i know where i used to live i had a lot of interactions with the nuns from the big church on the corner because i used to donate a lot of stuff like stuff that j\* didn't use anymore. so they would always come and bring us food because i used to donate like totes with toys and clothes and shoes. the stuff that i do have of his now, i'm going to give it to his son.

2. who's been the biggest source of support for the family? who's needed the most help. they've always been the same supportive people. even when he was living, the sunday school teachers would, they always have been supportive.

3. s\* needs help. he needs a lot of help. he basically watched both of them die, and he lost himself a lot. he doesn't want to admit it, but he has, he's really lost himself a lot. my daughter has been acting out a lot, she's been in and out of mental hospitals five times since last september. she was 11 when e\* died. he became a father figure to her. because her father died when she was three. he was also murdered. e\* became a father figure to my kids. he loved them. so she's been acting out. and i'm not sure whether it's hormonal changes going through her body, or whether it's due to e\*'s death.

# C.1.10 Topic 10:

1. they still haven't changed. it's like....i mean, i know i have to forgive him and i've said i forgive him, but it comes and goes. i know for my own peace i have to forgive him. he has to ask for forgiveness, that doesn't have anything to do with me. like i said, it's been hard, he just doesn't know my whole world has been...it's like i've been in a box for the last two years and my son...he was loved by everybody, i mean at the funeral i couldn't even believe it. i said "who are half of these people?" and, i've just been in a box, in a shell for the last two years. he just doesn't know what he took from me. i mean i really just didn't know what this would feel like. i never even pictured what this would feel like, what i'm feeling right now. i still have really bad panic attacks, waking up out of my sleep because i didn't sleep at all last night. i woke up at like midnight, i was still awake until

like 6am when it was time for me to get up to go to work. so i ate before you got there. i have a whole thing for forensics, i'm addicted to the discovery channel so when you leave, i'm going to listen to some of that, and then hopefully it's going to be watching me because i literally need to be asleep. tomorrow i have a one on one and i have to have all the energy in the world because he has all the energy in the world. he's a real bad behavior case. highly autistic, profound, he doesn't talk, he's aggressive, he's a biter so i have to deal with all this tomorrow. so hopefully once you leave i can go to sleep. and that's the whole thing.

2. the irritability comes with anxiety. anxiety. i guess like during the holidays and his birthdays, that's when the irritability and anxiety comes. at court, i had an anxiety attack once. i had to keep the medicine in my bag. i had to take that. irritability comes with anxiety and the panic attacks. i don't know if it's more or less connected with emotions because i've never had anxiety, not like i had it after j\*'s death.

3. i don't know you're probably looking around like "wow she really likes wine" and this is the whole thing how the wine came about. my mom's oldest sister is a nurse; two of my mom's sisters are nurses and i was having, it was like literally to where i couldn't sit down. i was shaking, breathing, i had to go to the hospital numerous times and my aunt wanted me to get on medicine. and that was one of [Family Support Specialist]'s things, you know, like this is part of your grief that you know, you don't necessarily need to be on medicine right now. and you know i deal with this at work all day every day. i don't want to be on medicine for anxiety and panic attacks. so my auntie was like ok here's what you need to do is get yourself some red wine, and drink a couple of glasses at night and hopefully that's going to make you sleep.

### C.2 Diagnostic Plots

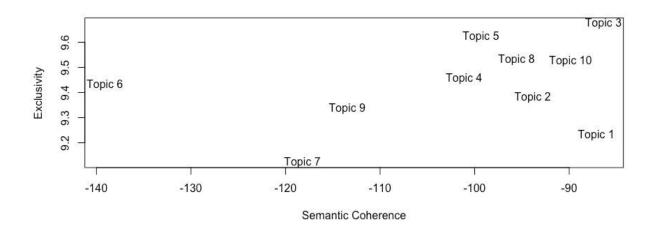


Figure C.1: Topic quality in the model used in the body of the paper, expressed in terms of semantic coherence and exclusivity.

### C.3 Topic Model Pre-processing

Topic model-based workflows simultaneously maintain differential privacy and transparency because they begin with pre-processing that strips word order from the corpus. This renders documents as "bags of words" represented in document-term matrices (DTMs). So long as important identifiers (proper nouns and locations) are stripped from documents before pre-processing, it should not be possible to identify respondents from information in DTMs. Standard pre-processing likely drops proper nouns and place identifiers automatically as "sparse terms" that appear in few documents. However, since the purpose of the workflow is to protect sensitive information, it is more conservative to use dictionary methods, named entity recognition models, or brute force to remove terms that could make respondents identifiable. Other workflows for transparent, reproducible *qualitative* inference do not allow researchers to protect sensitive data to the same degree.

<b>C.4</b>	Topic	Labels	and	Тор	Words
<b>.</b>				- ~ P	

Topic Description		Top Stems (FREX)		
1	Homicide Description phone, camera, station, lay, house, ambulance, tape			
2	Frustration at Detectives	contact, begin, name, store, pretty, talk, call		
3	Reason/Motive	yes, old, somebody, gang, daddy, worried, man		
4	Immediate Aftermath	funeral, crying, heart, miss, say, try, train		
5	Blame/Anger/Motivation for Justice	kill, guy, brother, nephew, girlfriend, grandson, stab		
6	Confusion about Motive/Reason	god, scare, fear, afraid, investigation, cop, van		
7	Frustration at Courts	court, attorney, state, judge, trial, bond, charged		
8	"What If"/Victim Blaming	feel, angry, anger, parent, shouldve, can, felt		
9	Support/Community	family, school, community, member, closer, lot, support		
10	Panic/Anxiety	hes, sleep, life, happy, gonna, hate, hell		

Table 1: Top stems (and researcher-provided descriptions) for 10 topics fit using the STM package in R. Stems are calculated using the FREX score measure (Airoldi and Bischof, 2016), which weights uniqueness more highly than other measures. The number of topics was pre-specified in order to generate a small number of high-level topics.

D	<b>T-Tests for</b>	r PANAS	Scores
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Question	Valence	Diff. In Means	SE	T-Score	P-Value
Present Day	Negative Affect	10.57	2.55	4.15	0.00021
Tresent Day	Positive Affect	-10.23	2.28	-4.49	0.00007
Immediate Aftermath	Negative Affect	10.85	3.15	3.45	0.00159
Initionale Atternation	Positive Affect	-18.46	2.07	-8.92	0.00000

Table 2: Difference between sample means and population mean for both positive and negative affect in both administrations of the PANAS instrument. Results of a two-sample T-test (shown in the three rightmost columns) suggest that the difference between the study's respondents and the nonclinical reference population is statistically significant for both positive and negative affect. As would be expected, respondents whose family members were killed in the preceding three years evince significantly less positive affect and significantly more negative affect when asked to think about their relatives death compared to average adults asked to think about their feelings over the past week.

# **E** Sample Characteristics

In the final list from which respondents were sampled, geographic distribution (across the North, Central, and South detective areas) roughly matched administrative data on homicide locations, with the North area somewhat underrepresented (See Figure A.3), likely due to a language barrier. The list *excluded* families in which no one was comfortable conducting a long interview in English; Victims in area North are more likely to be from families of non-native English speakers. The proportion of "cleared" or solved cases in the list (24.5%) matched the population rate for the time period (26.41%). Cases that were "cleared" by the CPD and referred for prosecution were oversampled.



Figure A3: Geographic distribution of homicides in Chicago and of interviews, split by CPD detective area. Interviews moderately oversample from area Central and moderately undersample from area North. Given patterns of racial segregation in Chicago, this imbalance can be roughly interpreted as oversampling Black homicide victims, and undersampling Latinx homicide victims.

### F Research Context and Research Partner

#### **Researcher Positionality**

Positionality, or the relationship between the identities of the researcher and the identities of the research subjects, is an important influence on social science research at all stages of the research process and for all types of data collection and analysis. Researcher identity influences the topics that receive attention, the questions that are asked, and the data that are collected whether through interviews, surveys, or even research on secondary data.

Though identity matters in all social science research, it is particularly important to discuss for this study for two reasons. First, the study asked people to share difficult and very personal stories and relied on developing short-term, situation-specific trust between the interview participants and the researcher, more so than a survey-based project might. Second, many of the people who participated in interviews are part of what Soss and Weaver (2017) call "race-class subjugated communities" that are not only disadvantaged in their interactions with the government and with structures of social hierarchy, but have received unwanted attention and interference from government and from more advantaged communities (including members of the academy) in recent history.

Out of respect for this history and the difficult subject matter the study covered, I structured entry into the communities of respondents in Chicago as a sequence of trust-building steps. First, as detailed below, I worked with Chicago Survivors staff, especially the front-line Family Support Specialists, to learn how they worked, to learn how to approach interviews with their clients, and to learn how to explain my work. One important tool in trust-building at this step was practice interviews. Many of the FSSs at the time were survivors themselves and a number conducted "dry run" interviews with me. The dry runs were extremely useful for improving the interview guide, but they also served to show the FSSs who would later introduce me to interview participants how I aimed to treat their clients and how I aimed to present myself. I relied on trust built in these interactions to translate into interviews.

Starting with initial contact with interviewees (usually a voicemail or a phone conversation) I tried to be straightforward about the nature of my work and tried to head off possible misconceptions that

I and FSSs thought might inhibit the process of building relationships with interviewees. I introduced myself as a graduate student from [a university outside Chicago], doing interviews that would 1) fulfill a school requirement, 2) potentially be published so that I could share what I found with other scholars and policy-makers and 3) help Chicago Survivors learn more about the people they served.<sup>11</sup> I tried to be clear throughout that I was not working for any sort of government, that Chicago Survivors had not hired me to do this research, and that they did not need to participate to continue their relationship with Chicago Survivors.

A number of aspects of my own identity may have mattered for how interviews were conducted. Some respondents had questions about my connection to the subject I was studying: having not grown up in their communities, not sharing the experiences of being a member of a racial minority, and not having direct experience with homicide violence, how did I end up in Chicago doing interviews? When this issue came up, I talked about [my connection to Chicago], and emphasized that I wanted to learn about their experiences in order to a) better understand how traumatic experiences affect people's lives and b) use that information to help Chicago Survivors understand their clients. FSSs were also critical in helping me navigate these questions and build trust with interviewees: many called respondents ahead of time to tell them I would be reaching out, who I was, and what I was doing with Chicago Survivors. Another identity that might have mattered is age. Most respondents (correctly) perceived me as younger than them. As Nadia Brown (2012) points out, being younger and being a student might lead interviewees to 'spell things out' in greater detail than if they were talking to someone they perceived as a contemporary. I would argue this tendency is somewhat helpful for research interviews, at least to the extent that it leads people to subconsciously be more explicit about what they mean in a conversation. Finally, gender identity may be relevant. Most respondents probably perceived me as a man, which could have led to different regulation of emotion expression than when speaking with women. Though the comparison sample of men is small, interviews with men do not suggest strongly different patterns of emotion regulation. Again, the trusted intermediaries are critical to understanding the implications of

<sup>&</sup>lt;sup>11</sup> I created and delivered reports to Chicago Survivors to fulfill this objective.

researcher identity: all FSSs I worked with are women, so all the introductions made on my behalf were made by women.

#### **Background on Chicago Survivors Partnership**

I was connected to Chicago Survivors through a professional contact who has worked as a journalist in Chicago for multiple decades. Through this connection, I was able to forge a partnership with Chicago Survivors. One of the key elements of this partnership was mutual exchange. In addition to the scholarly work that went into this paper, I used anonymized, aggregated interview testimony to create an extensive report to help Chicago Survivors learn more about their clients' emotional experiences, behaviors, efficacy beliefs, and relationships with their community. Respondents were aware, of course, that part of the goal of the interviews was to help Chicago Survivors learn how their services were working and what their population of families needed. As part of this exchange, I included a short interview module that was more-or-less irrelevant to my research question, asking respondents to provide feedback on their interactions with Chicago Survivors, and identify areas where they could use more support. These service-focused responses were anonymized and included in the report.

Before embarking on the interviews that are analyzed in the paper, I spent two weeks shadowing and speaking with Chicago Survivors staff both in their offices and as they worked with families. During this time, I also worked with Chicago Survivors staff to identify interview questions that they thought were important (or relevant to their work), and figure out the most appropriate and effective ways to speak with their families about difficult topics. I also consulted trauma psychologists who work in the same communities in Chicago during this process of creating an interview guide. Though there is no way to know for sure, I think the participant-observation work that preceded the interviews was critical to developing trust and rapport with the staff. Over time, they invited me to observe more and more sensitive and delicate parts of their work through the entire "life-cycle" of their program, from meeting families at a crime scene or the Cook County Medical Examiners' through individual home-visits and social service work in the following months. These relationships, as described above, were important for making the interview guide better, and equally important, for later building trust with the interview respondents to whom FSSs introduced me.