When Empathy Goes Viral: The Emotional Loop in Human Rights Advocacy

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Abstract How do some human rights issues spark large-scale individual mobilization that generates transnational pressure, while others fail to do so? Existing research explains successful advocacy movements primarily through top-down information dissemination strategies, but the micro-level mechanisms that render those strategies effective remain largely unarticulated, despite their pressing importance as advocacy increasingly migrates to digital platforms. This paper introduces the "Emotional Loop" as a theoretical framework that specifies the microfoundations of transnational pressure by identifying empathy as the central psychological mechanism and social media as the structural catalyst that sustains and amplifies it. Drawing on a triangulated mixed-methods design, I find strong evidence that empathy constitutes the causal pathway through which information about an issue gains attention and is converted into participation. First, I trace the unfolding of the emotional loop in the case of Aylan Kurdi, drawing on search trend data and digital traces of social media reactions. Second, I report on a novel survey experiment that isolates the effects of empathy and social media engagement on mobilization, complemented by computational text analysis of open-ended responses. These findings have important implications for our understanding of the role of emotions and social media in public opinion and human rights advocacy.

Introduction

Throughout 2015, global media outlets engaged in daily coverage of the Syrian refugee crisis. Statistics of hundreds of thousands of casualties and photographs of suffering migrants saturated the daily news. In a sense, it was simply news—information we received passively as facts regarding events happening around the world. However, the story of Aylan Kurdi,[1] the three-year-old Syrian boy whose corpse washed ashore on a Turkish beach, was something different. People abruptly regarded the situation as unacceptable and began to recognize a normative conflict, ultimately generating tangible political pressure for change. What explains the capacity of certain forms of information to convert diffuse individual attention into sustained collective action?

Many will recall the photo of Aylan lying face down on a beach in a red shirt and blue shorts, first published on September 2, 2015. While the image itself served as a visceral focal point, what was remarkable was the extent to which ordinary people actively interpreted it and circulated it alongside empathetic narratives that amplified calls for participation. The image of Aylan's lifeless body spread globally within hours, provoking an unprecedented outpouring of empathy and calls for action. Within 12 hours of its release, the photo had reached an estimated 20 million people and been retweeted over 30,000 times (Slovic et al. 2017; Vis and Goriunova 2015). This emotional response quickly translated into substantial support, exemplified by reports from humanitarian organizations documenting a fifteen-fold increase in donations within a single day (The Guardian 2015c).

Crucially, this emotional wave quickly translated into substantial political pressure that compelled states to revise their refugee policies. The year 2015 became a watershed moment, as numerous governments pledged to resettle more than 160,000 refugees. German Chancellor Angela Merkel announced the opening of Germany's borders, and the European Union introduced a quota system to allocate asylum seekers among its member states. What began as dispersed individual

1. The boy's correct name is Alan, not Aylan. However, as the boy's name was first reported as Aylan, this misspelling was widely used in initial engagements with the issue. Because this research investigates initial media and public response, it uses Aylan, respectfully.

reactions grounded in shock and empathy thus crystallized into coordinated collective action and, ultimately, formal policy change.

How did Aylan Kurdi, one of countless victims of the Syrian refugee crisis, come to trigger such broad mobilization when so many advocacy efforts fail to elicit more than a ripple of response? This question touches on a core puzzle in human rights advocacy: among the myriad of information on atrocities and crises vying for attention, why do only a few spark global sympathy and action? Advocacy groups launch numerous campaigns to pressure the international community to address human rights abuses and adopt reforms, but such initiatives too often fail to achieve their objectives. Existing scholarship has significantly enhanced our understanding of how collective pressure can be harnessed and why certain issues attain prominence. However, this literature remains largely focused on aggregate outcomes and organization-level structures. A critical gap persists in explaining the micro-level mechanisms through which advocacy succeeds and political change occurs.

I argue that empathy, an emotional response grounded in compassion and solidarity with the suffering of others, forms the critical link between individual reactions and collective action. The case of Aylan Kurdi illustrates how emotionally resonant framing can activate widespread public empathy. Crucially, however, empathy alone was insufficient to produce political change. It was the amplification of this initial emotional response through online networks that transformed empathy into concrete political outcomes. To clarify this process, I introduce and empirically test "*The Emotional Loop*," a theory that identifies the bottom-up mechanism through which empathy is amplified within social media-based activism and translated into concrete political pressure. Within this loop, social media platforms recirculate and reinforce initial expressions of empathy, validating emotional engagement and rendering participation psychologically rewarding and relatively low-cost. Through this iterative feedback process, fleeting emotional responses are transformed into sustained collective engagement that ultimately generates political pressure.

This study contributes to scholarship on human rights advocacy in three key respects. First, it

provides a microfoundational framework for understanding transnational pressure, which is often assumed as an aggregate outcome in existing scholarship. Whereas earlier research links specific campaign strategies to successful movements, this paper identifies and empirically evaluates the underlying mechanisms through which such strategies exert their effects. Second, drawing on social movement theory, I conceptualize social media as a distinct mobilizing structure that enables bottom-up advocacy to emerge organically, circumventing traditional gatekeeping institutions. This paper thus demonstrates that the heightened individual agency afforded by the social media environment enables the microfoundations of transnational pressure generation to be most fully realized.

Finally, this study identifies the emotional dynamics underpinning digital advocacy, an issue of pressing contemporary relevance illustrated by activism surrounding Gaza. As a focal site of digital advocacy, Gaza demonstrates how user-generated content can transform individual empathetic distress into shared collective outrage, intensifying advocacy and prompting political responses (Dey, Luceri, and Ferrara 2024; Abushbak, Majeed, and Kusuma 2025; Buheji, Mushimiyimana, and Ahmed 2024). The paper contributes to International Relations scholarship by clarifying the role of emotions in norm diffusion, transnational solidarity, and the shaping of state responses to humanitarian crises.

The paper proceeds as follows. First, I develop the theoretical framework of the emotional loop, drawing on scholarship on framing, emotions, and digital advocacy. I specify empathy's pivotal role in converting information into mobilization through a feedback loop generated by the affordances of social media. Next, I trace the trajectory from the viral image of Aylan Kurdi to subsequent policy responses, demonstrating how this episode exemplifies the emotional loop mechanism in practice, using Google Trends and Twitter reactions to illustrate the loop unfolding in real time through an analytically revealing extreme case. Subsequently, I present results from an original survey experiment that isolates empathy as the primary causal mechanism by manipulating strategic framing and social media engagement. Finally, I conclude by considering the broader implications of these findings for human rights advocacy in the digital age.

The Decentralization of Human Rights Advocacy

Microfoundations of Advocacy

Human rights advocacy ultimately seeks to reduce or eliminate human rights abuses by leveraging pressure against states or institutions that violate them. Classic models of transnational advocacy describe this process as a cycle: activists publicize an issue, generate international pressure, and leverage that pressure to name and shame violator governments into compliance (the *Boomerang* and *Spiral* model: Keck and Sikkink 1998; Risse, Sikkink, and Ropp 1999). The primary agents of this process are Transnational Advocacy Networks (TANs) that are anchored in principled norms and commitments (Beth A Simmons 2009; Keck and Sikkink 1998). Within these networks, Non-Governmental Organizations (NGOs) have typically assumed a leading role, coordinating large-scale initiatives that leverage information to mobilize global public opinion (Ron, Ramos, and Rodgers 2005; Becker 2012; Wong 2017; Beth A Simmons 2009). The transnational pressure generated by these efforts is crucial for ultimately extracting concessions from recalcitrant governments.

Yet, the existing literature mostly assumes that the pressure exerted on target states is either a given condition or a factor that will arise organically once information regarding abuses is disseminated. In practice, however, merely publicizing a cause does not automatically elicit a strong, engaged public response. The prominence an issue receives is not determined solely by its objective conditions but also by savvy marketing that capitalizes on favorable political openings (Ron, Ramos, and Rodgers 2005; Wong 2017; McAdam, McCarthy, and Zald 1996). Depending on how activists, elites, and the media strategically frame an issue, the same issue may either capture public attention and circumvent gatekeepers or fail to do so (Bob 2005; Carpenter 2007; Gildea 2024). Some abuses do not even reach the framing stage if their victims are regarded as subjects unworthy of concern or as illegitimate (Kreft and Agerberg 2024; McEvoy and McConnachie 2012). Consequently, the transnational pressure that many of our theories rely on is contingent upon a broader

ecosystem of lower-level mechanisms that determine issue salience. Despite their central importance, these microfoundations of how transnational pressure comes to be are rarely articulated and empirically tested (Kertzer 2017; Mcentire, Leiby, and Krain 2015).

Social movement scholarship widely recognizes the central importance of the mechanisms that spur individuals to take action. Scholars refer to the broader process through which individual engagement scales into widespread participation as *mobilization*, and analytically distinguish it into two stages (Tilly 1978; Klandermans 1984). The first stage, *consensus mobilization*, involves aligning individuals' interpretations and beliefs with the goals of the movement. Yet widespread sympathy alone rarely translates into participation, as only a small subset of supporters ultimately takes action. The second stage, *action mobilization*, concerns the conversion of sympathetic individuals into active participants. At the same time, scholars emphasize that mobilization is fundamentally contingent on individual-level dynamics, as people become involved when a movement's message resonates with their lived experiences and everyday concerns (Klandermans 1984; Snow et al. 1986; Gamson 1992). These processes are conceptualized as *micromobilization*, distinguishing them from institutional or macro-structural explanations of collective action (Hunt and Benford 2004; Ward 2016).

Uncovering these microfoundations in human rights advocacy is especially urgent in light of the changing landscape of activism. Human rights activism is undergoing a transformation from centralized leadership to decentralized, digitally coordinated activism (Hall 2022). Scholars assert that we are witnessing a transition from NGO-led activism to direct individual engagement through digital networks (Bennett 2005; Bennett and Segerberg 2012; Garrett 2006). This digitally enabled environment confers individuals a renewed sense of agency, empowering them to instigate movements from the bottom-up. Social networking platforms allow individuals to bypass traditional gatekeepers, sharing information and interacting with it on their own terms, allowing grassroots movements to scale rapidly and reach wider global audiences.(Hall 2022; Nekmat et al. 2019; Harlow and Johnson 2011).

Social Media as a Decentralized Catalyst

The emergence of digital activism has prompted scholars of social movements to reconceptualize the prevailing logic of mobilization, shifting from traditional models of collective action to what is now described as *connective action* (Bennett and Segerberg 2012; Bimber, Flanagin, and Stohl 2005). Under the classic model of collective action, even when individuals agree on a common objective grounded in a collective group interest, it remains rational for them to opt out of participation (Olson 1965). In contrast, connective action centers on personal resonance rather than collective identity. Digital platforms expose individuals to diverse viewpoints within their personal networks and allow them to interact with, reinterpret, and imprint their own opinion on the messages they share (Bennett and Segerberg 2012; Nekmat et al. 2019). Engagement thereby becomes an intrinsically rewarding act of personal expression, reducing incentives to free-ride (Bennett and Segerberg 2012). Moreover, by publicly articulating their emotions and opinions online, they perform and project their identities, thereby blurring the boundaries between public and private spheres that previously impeded participation (Bimber, Flanagin, and Stohl 2005; Nekmat et al. 2019; Papacharissi 2015).

Within connective action, social media operates as a meso-level foundation for advocacy efforts. In theoretical terms, the meso-level refers to the mobilizing structures situated between individuals and the broader society, including groups, social networks, and organizations (Calhoun 1991; Viterna 2013; Fine 2012; McAdam, McCarthy, and Zald 1996). In the domain of human rights advocacy, formal entities such as NGOs have traditionally been regarded as the central mesofoundation. More recently, social media has evolved into a core mobilizing structure in its own right by facilitating the emergence of online networks transcending national, geographic, and cultural boundaries (Hall 2022; Bennett and Segerberg 2012; Fine 2012; Greijdanus et al. 2020; Nekmat et al. 2019). These networks enhance individual autonomous agency by not only determining which information reaches individuals, but also curating its interpretation through the social relationships in which it is embedded (Viterna 2013; Isa and Himelboim 2018). Crucially, this

provides the structural autonomy necessary for everyday people to initiate and direct movements from the bottom-up, without reliance on traditional NGOs.

A distinctive feature of mobilization through social media is its capacity to leverage emotional responses among non-activist individuals. "Crowd-enabled elites," a set of hybrid actors often including celebrities, alternative news sources, or detached activists, play a crucial role in nudging individual participation by effectively translating campaigns into locally resonant narratives aligned with core values (González-Bailón and Wang 2016). These actors excel in generating a diverse and inclusive identity framework, using more personalized approaches to request individual expressions of solidarity through more personalized approaches (Shahin, Nakahara, and Sánchez 2021; Bhabha 1994). This facilitates connective action, a novel form of digitally networked participation that can adapt fluidly to diverse issues and political targets (Bennett and Segerberg 2012). Consequently, these actors provide the necessary bridge between personal emotional reactions and broader, sustained mobilization.

Critics often dismiss enhanced personal agency through the lens of "slacktivism," arguing that online activism inadvertently reproduces traditional top-down hierarchies by displacing more substantive offline engagement and reducing the public to a mere quantitative indicator (Lee and Hsieh 2013; Budabin and Pruce 2018). However, while such vigilance is warranted, it should not obscure the significant innovation social media represents in enabling grassroots mobilization to emerge independently of established organizations. As an autonomous mesofoundation, social media enables the momentum of online engagement to generate social pressure independently. Recent research finds that exposure to online engagement aligns attitudes by providing social information about what is perceived as "appropriate" (Ecker-Ehrhardt, Dellmuth, and Tallberg 2025; Siegel 2013). This activates the crucial dynamic of "being asked" under conditions of peer pressure, allowing individuals who might never participate in a street demonstration to contribute meaningfully to collective solidarity in digital environments (Earl and Kimport 2011; Harlow and Johnson 2011; Stieglitz and Dang-Xuan 2013; Lee and Ma 2012). Research also demonstrates that online activism often reinforces subsequent offline activism by raising public awareness, shaping

norms, and connecting individuals to networks and resources for further involvement (Greijdanus et al. 2020; Noland 2017).

Consequently, the strategic framing of movement appeals acquires critical importance. Framing refers to the act of selecting and highlighting particular elements of reality to shape how a problem is defined, explained, and judged (Snow et al. 1986; Nelson, Oxley, and Clawson 1997; Iyengar 1987). Social movement scholarship regards framing as the central mechanism through which political opportunities are converted into movements by defining the problem, the solution, and the urgency of the moment (McAdam, McCarthy, and Zald 1996; Benford and Snow 2000; Snow et al. 1986). More recently, scholars have turned their attention to the distinct efficacy of *personal action frames* within the evolving logic of connective action. Personal action frames are articulated in inclusive, easily personalized, and digitally shareable themes—such as "We Are the 99%"—that can be easily adapted (Bennett and Segerberg 2012; Nekmat et al. 2019). This allows diverse individuals to connect to the broader protest network without having to adhere to the strict ideological coherence typically demanded in conventional collective action frames (Earl and Kimport 2011; Yasseri et al. 2016; Bennett and Segerberg 2012).

Framing has also been extensively examined in the human rights literature as a central instrument of information politics operating within TANs (Keck and Sikkink 1998; Risse-Kappen, Ropp, and Sikkink 1999). Despite this attention, comparatively few studies systematically evaluate the relative effectiveness of different framing strategies. McEntire et al. (2015) address this gap by identifying and comparing three dominant frames in human rights advocacy: informational frames, which rely on data or statistics to deepen understanding; motivational frames, which emphasize agency and perceived efficacy; and personal frames, which employ empathetic stories focused on particular individuals. Consistent with broader social movement scholarship, their findings indicate that personal frames are most effective in generating consensus, followed by informational and motivational frames (Mcentire, Leiby, and Krain 2015; Brysk 1993; Davis, Murdie, and Steinmetz 2012; Benford and Snow 2000). Taken together, these results underscore how the logic of connective action amplifies the importance of personal resonance.

The Hidden Mechanism of Empathy

Social media also reconfigured how information, and crucially, emotion, flows through society. While emotional contagion has conventionally been conceptualized as a result of face-to-face interactions, emerging empirical evidence demonstrates that individuals can, in fact, "catch" emotions from exposure to online content (Stein 2013; Kramer, Guillory, and Hancock 2014). When emotional expressions and narratives diffuse across users, individuals tend to internalize and reproduce these signals, manifesting emotional contagion (Hall and Ross 2015; Castells et al. 2009; Kramer, Guillory, and Hancock 2014). Consequently, posts characterized by strong affective content disseminate more widely and ripple outward more rapidly than affectively neutral posts (Stieglitz and Dang-Xuan 2013). This pattern highlights the inherent advantage of emotionally charged messaging in the attention economy of social media environments.

The affective architecture of digital advocacy aligns with previous findings demonstrating the effectiveness of personal framing. Personal frames operate explicitly through the emotional mechanism of empathy by presenting victims of abuse as identifiable individuals (Mcentire, Leiby, and Krain 2015; Valkenburg, Semetko, and De Vreese 1999). Foundational work on framing conceptualizes emotional engagement as the defining feature of personal frames, in contrast to the psychological distance typically produced by impersonal, fact-centered reporting(Valkenburg, Semetko, and De Vreese 1999; Brysk 1993; Iyengar 1987). Research in narrative and media psychology further identifies empathy induced through perspective-taking as the primary causal pathway linking narrative exposure to prosocial attitudinal change (Batson et al. 1997; Green and Brock 2000). Yet, although personal frames are widely theorized to operate through empathy, the mediating function of empathy itself has remained mostly assumed rather than empirically isolated and tested. Despite this theoretical consensus, the role of empathy has largely been treated as an assumed mechanism rather than being isolated and empirically tested.

Emotions are not merely passive responses to information but active catalysts for mobilization. A substantial body of psychological research demonstrates that emotions mediate the relationship

between framing and public opinion (Nelson and Oxley 1999; Tversky and Kahneman 1981; Gross 2008; Aarøe 2011; Marcus, Neuman, and MacKuen 2000). Empathy, in particular, is repeatedly highlighted as a key driver of altruistic behavior and solidarity-based responses (Klimecki 2019; Batson 2011). When individuals empathize with victims by projecting themselves into their situations, they exhibit a higher willingness to support aid for those affected (Sherman 1998; Bayram and Holmes 2020). Recent experimental studies further reinforce the causal significance of empathy. Haines et al. (2020) find that a visual campaign centered on a single, clearly identifiable victim generates markedly greater public engagement than a data-driven campaign addressing the same issue. This dynamic is also captured by the "identified victim effect," a counterintuitive phenomenon in which a single, recognizable victim provokes stronger compassionate responses than a large group of anonymous victims (Jenni and Loewenstein 1997; Kogut and Ritov 2005; Small, Loewenstein, and Slovic 2007).

However, whereas existing research highlights how to initiate individual empathy and consensus on an issue, it remains unclear how such initial engagement is converted into concrete and sustained forms of participation capable of generating political pressure. Many human rights movements successfully raise public awareness yet fall short of meaningful action, which is essential for exerting tangible pressure (Sheppard and Stein 2022; Risse-Kappen, Ropp, and Sikkink 1999; Conrad and Ritter 2019; Beth A. Simmons 2000). Individuals do not act on human rights concerns solely because they understand and agree with them. Even strong empathetic responses often do not lead to participation in donating, protesting, or contacting public officials, all of which require individuals to cross a higher threshold than mere agreement with a cause. Although personal frames are most consistently successful in generating consensus, their direct influence on concrete action is limited (Mcentire, Leiby, and Krain 2015). There is, therefore, a critical missing link in the process through which heightened empathy for a cause is translated into concrete participation.

The Emotional Loop: A Theory of Empathy-Driven Advocacy

For clarity, I distinguish three progressive levels of successful advocacy movements. (1) *Consensus*, where people are informed and sympathetic that "something should be done"; (2) *Participation*, where people shift stance to "I will do something" and take action themselves; and (3) *Pressure*, where those collective actions mount enough influence to send the message that "those in power must do something" (Becker 2012; Keck and Sikkink 1998; Wong 2017; Mcentire, Leiby, and Krain 2015; Risse-Kappen, Ropp, and Sikkink 1999; McCarthy and Wolfson 1996). Existing scholarship indicates that the challenge lies in moving from stage 1 to stages 2 and 3 (Mcentire, Leiby, and Krain 2015; Miller 2009; Charnysh, Lloyd, and Simmons 2015).

I introduce the emotional loop as a theoretical framework that accounts for the full trajectory of a movement by specifying empathy as the central mediating mechanism. While existing research offers valuable insights into affective advocacy strategies, it has yet to provide a comprehensive model specifying the conditions under which movements progress across stages. I argue that a movement's success hinges on the extent to which empathetic engagement is amplified and sustained, rather than dissipating over time. The emotional loop describes a self-reinforcing cycle: when emotionally resonant information is disseminated through networked media, it aligns public understanding (consensus), creating an environment where expressing empathy and engaging in sharing is encouraged (participation). This process continually reactivates online empathetic engagement, expanding its reach and intensifying validation, which ultimately exerts influence on political decision-makers (pressure). Consequently, by identifying empathy as the core variable underpinning mobilization, I demonstrate how human rights movements can evolve organically, even in the absence of centralized coordination.

The emotional loop theory advances existing scholarship by providing a microfoundational account of transnational pressure. While existing research offers valuable insights into specific strategies of advocacy, these approaches are often confined to discrete phases of movement development rather than explaining how movements sustain momentum over time. For example,

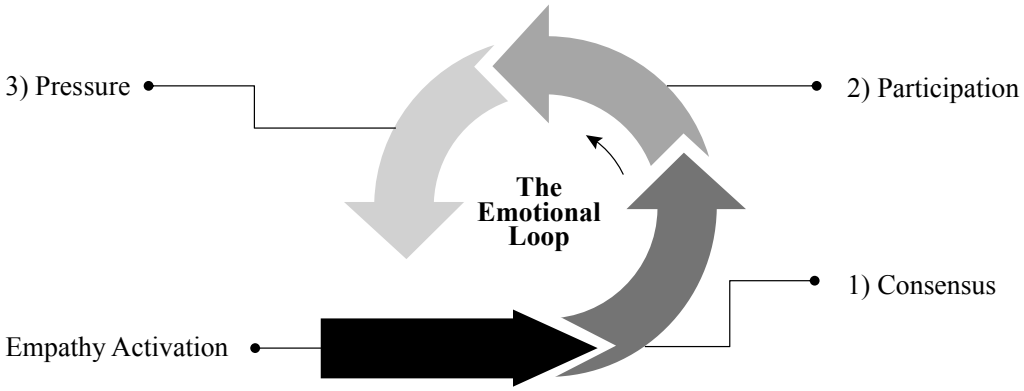


Figure 1: The Emotional Loop Theory

McEntire and colleagues (2015) find that personal framing reliably mobilizes consensus, but this effect does not carry over to participation. By contrast, the emotional loop theory explains causal continuity across advocacy stages by specifying how framing processes and social media, as a mobilizing structure, sustain and amplify empathy across stages. In doing so, it reframes the question of movement success from which strategies work at particular moments to how empathy can be sustained and intensified across stages.

The emotional loop is initiated when information about an issue is presented in a way that effectively activates empathy. Accordingly, the agent behind the frame and the medium through which it circulates are less consequential than its capacity to elicit empathy strongly enough to initiate the loop. In contrast to how framing was traditionally deployed strategically by activists to capitalize on political opportunities, social media ecosystems allow the most resonant and widely disseminated narratives to spread organically through virality, regardless of strategic intent. This dynamic enables even inadvertent frames introduced by hybrid actors to generate momentum, elevating them into the role of opinion leaders (Chadwick 2017). The medium through which these frames circulate is likewise hybrid. Scholars of visual politics emphasize that images alone do not determine outcomes, but rather set the conditions under which particular interpretations become

possible (Bleiker 2015; Hutchison 2016; Mitchell and Mitchell 1994). Although visuals are often especially effective in conveying emotion, their inherently polysemic character makes narrative text crucial for anchoring political meaning (Bleiker 2018; Sontag 2003).

Because personal frames are especially effective at eliciting empathy, they serve as a particularly powerful trigger of the emotional loop, helping explain their documented effect on mobilizing consensus (Mcentire, Leiby, and Krain 2015; Bennett and Segerberg 2012; Brysk 1993; Benford and Snow 2000). Once empathy activation initiates the emotional loop, the loop then unfolds interactively across the three sequential and interconnected movement phases. As empathy is activated, members of the public begin to establish a personal connection with the issue and support the movement on their own terms (Mcentire, Leiby, and Krain 2015; Bennett and Segerberg 2012; Nelson, Oxley, and Clawson 1997). In this moment, empathy transforms a passive observer into a concerned witness. This shift recasts a previously distant issue as one that is relevant and urgent, thereby generating a normative recognition that the situation is unacceptable (Nekmat et al. 2019; Batson et al. 1997; Klimecki 2019). Such consensus establishes the normative foundation that creates a permissive climate for activism.

Hypothesis 1a: *Participants exposed to the personal frame will report higher initial empathy than participants exposed to informational or motivational frames.*

Hypothesis 1b: *Initial empathy mediates the relationship between personal framing and consensus.*

Once consensus locks in, the social media ecosystem actively compels participation. On social media platforms, individuals do not experience empathy in isolation; rather, they respond socially. Individuals moved by an initial trigger are inclined to share or discuss it, especially given the personally relatable nature of the content (Haines et al. 2020; Siegel 2013). Moral emotional content is especially likely spread, thereby amplifying emotional contagion (Brady et al. 2017). As the message diffuses, it increasingly functions as social information, signaling that peers perceive the issue as salient and worthy of attention (Mutz 1998; Kertzer 2017; Ecker-Ehrhardt, Dellmuth, and

Tallberg 2025). This signal generates a bandwagon dynamic, where users increasingly experience peer pressure of "being asked" to participate (Earl and Kimport 2011; Harlow and Johnson 2011; Simon 1954). Engagement is further intensified as users personalize shared content by adding captions, hashtags, or explicit expressions of concern. In this way, connective action overcomes the free-rider problem, as the intrinsically gratifying practice of expressing empathy on social media directly constitutes concrete action (Bennett and Segerberg 2012; Nekmat et al. 2019).

As dissemination expands, a reinforcing feedback loop emerges. Repeated circulation of empathetic content, each time slightly reframed through personal perspectives or endorsements, gains momentum and amplifies its emotional resonance. Empathy thus produces further empathy by normalizing participation and fostering a sense of moral obligation to act (Klandermans 2004; Brysk 1993; Batson et al. 1997). Even relatively small acts of digital engagement can heighten perceived personal efficacy and strengthen connections to the cause, thereby increasing the likelihood of deeper involvement (Velasquez and LaRose 2015; Nekmat et al. 2019). As individuals increasingly view themselves as part of a broader, emotionally invested community, the collective impulse to act intensifies (Tajfel 1969; Mackie, Devos, and Smith 2000; Smith, Seger, and Mackie 2007). Through this process, empathy transforms a singular emotional episode into the foundation of a social movement.

Hypothesis 2a: *Social media engagement results in higher levels of reinforced empathy compared to passive consumption.*

Hypothesis 2b: *Reinforced empathy mediates the relationship between social media engagement and participation.*

Over time, these participatory acts accumulate into transnational pressure, the final output of the loop. The emotional loop reaches its apex as grassroots energies crystallize into clearly articulated political agendas. Once empathy-driven engagement attains critical mass, decision-makers confront a visibly mobilized public. In democratic contexts, this can impose reputation costs or electoral consequences for leaders who neglect the issue (Fearon 1994; Schultz 1998; Tomz 2007).

Even in less directly accountable settings, the virality of an issue often provokes intensive media coverage, sharp reactions from international organizations, or shifts in consumer sentiment (Masterson 2024; Weeks 2008). In this way, participation functions as a force multiplier, transforming diffuse individual emotions into a compelling pressure to act, grounded either in moral responsibility or in fears of unrest.

Crucially, the loop does not terminate at this stage but instead persists through its self-reinforcing dynamics. Once activated, collective emotions take on a momentum of their own. Emotions shared at the public level come to exist as a social phenomenon that is empirically observable and socially patterned (Mackie, Devos, and Smith 2000; Tamir 2016). Each new development or partial victory reignites empathetic engagement, and each successive wave of sharing not only preserves public attention but often extends it, thereby drawing in additional participants. Through this iterative process, empathy, consensus formation, participation, and political pressure operate as mutually reinforcing components of a continuous cycle. Because attention can be renewed through repeated emotional activation, engagement is sustained rather than following a single peak-and-decline trajectory. Once the loop is instigated, the outcome is often a prolonged period of public pressure that enhances the likelihood of a meaningful response to the original grievance.

In sum, the emotional loop theory provides a framework for explaining the microfoundations of transnational pressure. Rather than treating advocacy success as the product of discrete mobilization strategies, the theory identifies empathy as the central causal mechanism structuring the entire process. Empathy generates consensus by producing shared emotional recognition of injustice; digital engagement converts this consensus into active participation; and aggregated participation channels pressure toward political responsiveness. In this formulation, emotional engagement is not a singular event but a dynamic and recursive process that facilitates mobilization across stages. Importantly, not all movements generate the conditions necessary to activate the emotional loop, and weak triggers or limited emotional resonance may prevent the process from unfolding. Nonetheless, by specifying this mechanism, the theory foregrounds bottom-up pathways through which transnational pressure emerges. The following sections apply this framework to the case of

the Aylan Kurdi image and evaluate these mechanisms using survey experimental evidence.

The Journey of the Aylan Kurdi Image

In this section, I analyze the dissemination of the Aylan Kurdi image as empirical evidence of the emotional loop in operation. The image of Aylan Kurdi represents a landmark case widely recognized for its influence on subsequent policy change and has since been treated as a paradigmatic example of the political power of visual artifacts (Vis and Goriunova 2015; Prøitz 2018; Olesen 2018; Adler-Nissen, Andersen, and Hansen 2020; El-Enany 2016; Sajir and Aouragh 2019). In this paper, however, I shift the explanatory emphasis from visuality per se to empathy as the underlying causal mechanism. While the image's visual form plausibly facilitated attention and rapid diffusion, visuality alone cannot explain the scale of downstream mobilization and political pressure. This limitation is illustrated by the later viral image of Omran Daqneesh, which, despite its shocking content, did not generate comparable political pressure, in part because it primarily elicited pity rather than empathy and left audiences feeling psychologically distant and helpless (Sajir and Aouragh 2019). The transition from viewing to doing, I argue, hinges on the deeper psychological process captured by the emotional loop.

To examine this mechanism empirically, I trace the dissemination of the Aylan Kurdi image across the three stages of the emotional loop: consensus, participation, and pressure. Analyzing a real-world event offers a concrete demonstration of the proposed theory, especially as the expansive mechanism is difficult to capture in isolation. I first analyze early social media posts and contemporaneous Google search trends to demonstrate how the image, functioning as a highly salient personal frame, activated empathy and mobilized consensus. I then trace the narrative evolution of widely shared messages to demonstrate how peer-to-peer recirculation sustained the loop and converted passive sympathy into active participation. Finally, by linking these dynamics to subsequent elite responses, I demonstrate the loop's capacity to generate meaningful political pressure.

Activation: Empathy and Consensus Formation

The photograph of Aylan Kurdi is, whether intended or not, an archetypal example of personal framing. The toddler, dressed in a red t-shirt and blue shorts, appears as if he is sleeping, evoking a universal sense of childhood innocence and vulnerability. The composition—the small body dwarfed by the vastness of the sea and the empty beach—isolates the tragedy, stripping away complex political contexts and leaving only the immediate, visceral reality of loss. The image depicts the Syrian refugee crisis as a narrative focused on the death of an innocent young boy, effectively activating empathy without providing specific information. The visceral power of this personal framing was such that its affective reach transcended the boundaries of identity and distance. UK Prime Minister David Cameron testified to this unavoidable emotional impact, admitting: "anyone who saw those pictures overnight could not help but be moved and, as a father, I felt deeply moved by the sight of that young boy on a beach in Turkey" (BBC News 2015). Many individuals who had previously felt disconnected from the refugee issue were now able to personally identify with the plight of this child and his family.

Empathy activation is evident in the immediate public reaction. Google Trends data show that search interest notably shifted from the generic term "Syrian boy" to "Aylan Kurdi," reflecting a move from abstract categorization to personal identification (Google Trends 2025). The top related queries, from "What happened to Aylan Kurdi?" followed by "What is causing the migrant crisis?" to "Why are people migrating to Europe?" in several countries, suggest that the emotional trigger not only heightened attention but also stimulated political learning and public reflection (Google Trends 2025; Vis and Goriunova 2015). The top related searches for Aylan were "Aylan Kurdi photo" (36%) followed by "Aylan Kurdi story" (24%), and "Syria' (13%), indicating that the trigger extended to broader awareness of structural conditions (Google Trends 2025; Slovic et al. 2017).

It is important to note that the empathetic force of Aylan's image derives from its capacity to individualize suffering while remaining easily circulable across digital media ecosystems.

Throughout 2015, digital cadvocacy for refugees was already active through campaigns such as #RefugeesWelcome and #WelcomeRefugees, alongside continuous reporting of the numbing magnitude of aggregate death tolls. Yet, while these efforts helped cultivate a latent infrastructure of solidarity, they generated only limited public engagement (UNHCR 2015; Amnesty International 2014; The Guardian 2015a). The contrast is evident in the April 2015 Mediterranean shipwrecks, which resulted in the deaths of roughly 800 migrants, marking the deadliest shipwreck on record (The Guardian 2015a). Despite the scale of the tragedy and extensive media coverage, the event generated comparatively little political traction. Scholars attribute this failure to an empathy deficit associated with imagery that emphasizes vessels and anonymous crowds, which dehumanizes the crisis and reinforces perceptions of refugees as security threats rather than humanitarian subjects (2013). In contrast, the photograph of Aylan provided a personal and emotionally charged narrative centered on a child victim. Consistent with the identified victim effect, the image thereby generated the level of empathy conducive to consensus mobilization via the emotional loop .

The surge in empathetic engagement contributed to reframing the public discourse around the crisis. In search behavior, the dehumanizing label "migrant crisis" was increasingly displaced by "refugee," which carries a more sympathetic and rights-based interpretation (Google Trends 2025). This shift is substantively significant because it signals a broader recognition that those fleeing conflict are not simply migrants, but refugees entitled to protection. Consistent with this reframing, Google Trends data from early September 2015 show sharp increases in searches not only for "Aylan Kurdi" but also for the terms "Syrian refugees" and "refugee crisis," indicating a rise in public awareness about the broader context of the tragedy (Google Trends 2025). The emotional loop was thus set in motion: an empathetic trigger generated consensus on the issue, thereby fueling online engagement.

Reinforcement: Sustaining the Loop to Participation

The dissemination of Aylan's image exemplifies the pivotal role of hybrid actors within the social media landscape. Drawing on the timeline reconstructed by Vis and Goriunova (2015), the image initially appeared in a Turkish news outlet but remained relatively contained until it was shared on Twitter by Michelle Demishevich, a Turkish journalist and activist, without a link to a news source. Its viral trajectory commenced when Peter Bouckaert, the Emergency Director at Human Rights Watch, tweeted the image accompanied by an emotionally resonant caption and relevant hashtags. Within two hours, his post had reached half a million users in more than 100 countries. Minutes later, journalist Liz Sly personally shared the photo, generating comparable reach in just 30 minutes. The first international publication of an article on Aylan Kurdi occurred well after the image had already saturated global networks, when the Daily Mail published the first story on the matter later in the afternoon of September 2nd (Vis and Goriunova 2015). The media and elites responded to, rather than initiated, the public sentiment.

The dynamic of individuals engaging with social media displays how empathy is reinforced by personalization and identification. Bouckaert's viral tweet captivates with effective hashtags and perspective taking: "Just pause 4 moment & imagine this was your child, drowned trying 2 flee #Syria war 4 safety of #EU. #solidarity." Across countries, the hashtag #refugeeswelcome dominated discourse, while others like #CouldBeMyChild invited users to reflect on shared roles such as parenthood. Quotes such as "Someone like you was helping Aylan put on his shoes" circulated widely, allowing emotionally charged content to be recontextualized and reshared (Vis and Goriunova 2015). Users who might otherwise have moved on to the next news cycle were drawn back as they continued to see references to it in their feeds, reinforcing and validating their emotional response. This process of personalized sharing sustained the emotional trigger and facilitated the participation of non-activist newcomers to the campaign.

With the emotional loop activated, empathy was continuously reinforced and redirected into concrete forms of participation, from online advocacy to offline charity efforts. Within 48 hours,

multiple online petitions had been launched, gathering hundreds of thousands of signatures with the help of social media promotion (Vis and Goriunova 2015; Prøitz 2018). On Facebook, volunteer groups organizing aid for refugees in Europe observed a rapid increase in activity and membership during the same period (Prøitz 2018). The Swedish Red Cross experienced a 100-fold increase in daily donations compared to before the image was published (Slovic et al. 2017). Offline volunteer enrollments also spiked; in many communities, individuals organized collections of clothing, food, and toys to send to refugee camps. In several European cities, spontaneous vigils and rallies were held, often organized via Facebook or Twitter, where citizens gathered with signs bearing Aylan's name or messages of welcome to refugees (ITV News 2015; The Guardian 2015e). This striking transformation of emotion into action exemplifies the completion of the second phase of the emotional loop.

The Feedback Loop to Pressure and Change

The emotional response to the Aylan Kurdi photo quickly translated into political pressure. In the immediate aftermath, several governments adopted new measures to address the crisis in response to public and media pressure. For example, Germany accelerated its open-door policy for Syrians as Merkel famously declared "Wir schaffen das (We can manage this)." Denmark and the UK, initially reluctant to accept more refugees, pledged additional resources or loosened their intake restrictions (The Guardian 2015d). Even the Canadian federal election campaign candidates were pressed on how Canada should respond, with the winning candidate, Justin Trudeau, committing to resettling thousands of Syrian refugees (The Guardian 2015b). In Norway, local elections that month became a forum for debate on refugee reception, influenced by voter concern (Bjånesøy 2019). Within weeks, the United Nations called an emergency meeting on the crisis, and a coalition of states pledged to resettle over 160,000 refugees, which was a dramatic increase from prior plans (European Commission 2016). While implementation varied, these decisions reflected a clear disruption of political inertia in response to empathy-driven public demand.

This sequence illustrates the complete operation of the emotional loop. An initial trigger elicited empathy, which was amplified through networked diffusion and translated into participatory acts that aggregated into policy-relevant pressure. Notably, this pressure emerged primarily from bottom-up dynamics rather than a centrally coordinated NGO campaign. Humanitarian organizations contributed to the response, but the principal driver was the accumulation of individual empathetic reactions that recursively reinforced one another through social media. By sustaining attention and lowering the barriers to personalized action, the emotional loop facilitated the consolidation of a transient mass public mobilization capable of compelling a political response.

Nevertheless, the mobilizing capacity of the emotional loop also has its limitations. In the aftermath of the Paris terrorist attacks in late 2015, sympathy yielded to security concerns. The image of Aylan encountered anti-solidarity pushback as opponents undermined its empathetic narrative by shifting the focus from the child's innocence to his father's alleged culpability, portraying him as a people smuggler or economic migrant (Sajir and Aouragh 2019). This pattern reflects what communication scholars describe as the boom-and-bust cycle of compassion: dramatic events can produce sharp spikes in empathy and action, but durable change requires institutional follow-through before compassion dissipates (Boltanski 1999; Chouliaraki 2013). Thus, this case also highlights the contingency of the emotional loop. While empathy-driven mobilization can strongly stimulate engagement, the architectural affordances of social media simultaneously facilitate the rapid amplification of competing anti-solidarity sentiments (Ekman 2018; Van der Brug and Harteveld 2021).

Experimental Test of the Emotional Loop

Although the Aylan Kurdi case study vividly illustrates the emotional loop theory, it does not conclusively establish it as the primary causal mechanism. In this section, I address this by reporting on a survey experiment designed to identify empathy as the causal mechanism within a controlled setting. Rather than relying on visual imagery or spontaneous public reactions, the experiment

shifts the focus to textual narratives and structured appeals to enhance the internal validity and generalizability of the theory. By isolating the mechanism under controlled conditions, I demonstrate that the cycle of the emotional loop does not depend on the singular shock value of one exceptional case but instead constitutes a replicable psychological process driven by emotional engagement.

Methods and Data

The survey experiment was fielded in April 2025. A sample of U.S. adults (N = 839) was recruited through Cint, an online survey panel provider. Participants first completed an informed consent form and were subsequently exposed to the experimental stimuli. Two attention-check items were employed to screen for inattentive respondents, one administered early in the survey and the other near the conclusion. All participants were debriefed at the conclusion of the survey.

The experiment employed a 3 × 2 between-subjects design, randomly assigning participants to one of six conditions that varied along two dimensions: message framing (informational, personal, or motivational) and the presence or absence of a social media sharing prompt (see Figure 2).[2] Building upon McEntire et al.'s (2015) finding that framed appeals significantly outperform a no-exposure control condition, the present analysis does not employ a control group. Instead, it identifies the informational vignette, which reflects the typical approach used in advocacy appeals, as the reference category. To ensure realism and external plausibility, the framing treatments were designed to simulate a professional human rights campaign (Mcentire, Leiby, and Krain 2015). The message was introduced as coming from a fictitious NGO, the "Alliance for Human Rights," with a gray-scale logo designed with a dove, an olive branch, and an open palm. All participants saw the organization's name and logo to standardize source cues.

As the first treatment, participants were presented with information about the plight of politi-

2. Data collection for this experiment was not formally preregistered. However, the framing treatments were adopted from McEntire et al.2015 to replicate their established hierarchy of frame effectiveness in a new substantive context. As such, the expectation that personal narratives would outperform informational and motivational frames was determined ex ante based on their findings.

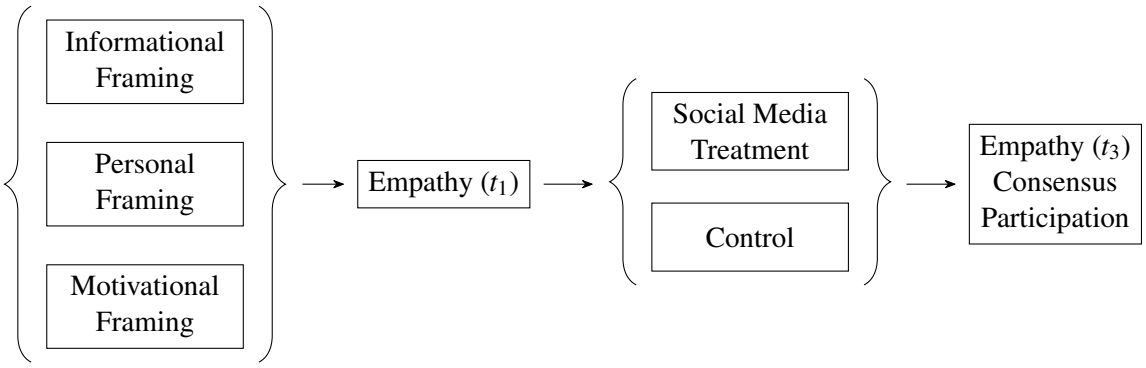


Figure 2: Design of Survey Experiment

cal refugees from Myanmar following the February 2021 military coup, framed as a human rights issue. Selecting Myanmar as the focal case provides a strategic advantage by reducing the influence of pre-existing attitudes toward immigration in the United States. U.S. public discourse often centers on immigration from neighboring countries, where entrenched stereotypes and polarized opinions prevail (Flores and Schachter 2013). Myanmar is relatively less prominent in the American public consciousness, making its political refugees less likely to trigger immediate, ideologically charged associations. This selection facilitates a clearer assessment of the causal factors shaping public support for human rights causes, unconfounded by well-established immigration frames.

To further ensure that the observed treatment effects are not driven by pre-existing individual differences, respondents completed a set of background questions prior to the experimental manipulation. These measures captured key sociodemographic and attitudinal characteristics commonly associated with immigration and human rights attitudes, including age, gender, education, political ideology, race or ethnicity, and region of residence. Consistent with McEntire et al. (2015), world news consumption and political efficacy were also measured. In addition, social media exposure was measured by asking respondents how frequently they use social media platforms for posting, reading, or interacting with content. These variables were used to assess baseline equivalence across experimental conditions and were included as covariates in subsequent regression analyses

Please read the following message from the Alliance for Human Rights about refugees from Myanmar. After that, we will ask you a few questions.

Figure 3: Informational Frame

to enhance estimation precision.

Following the collection of background measures, participants were randomly assigned to one of three framing conditions. The experimental vignettes were generated using GPT-4.5, which was provided with academic definitions of each frame and instructed to emulate the tone and stylistic conventions of major human rights organizations. To ensure comparability across conditions, all versions were similar in length and structure and presented the same core issue, varying only in framing (see Figures 3, 4, 5). After exposure to the message, participants first reported their emotional response by answering a scaled item that asked "How much did the message from the Alliance for Human Rights affect you emotionally?" This item was followed by an open-ended prompt inviting respondents to "Describe in your own words how this message made you feel, and why." These qualitative responses were used to capture the content and texture of participants' emotional reactions.

The second experimental factor manipulated exposure to a simulated social media sharing con-

Please read the following message from the Alliance for Human Rights about refugees from Myanmar. After that, we will ask you a few questions.

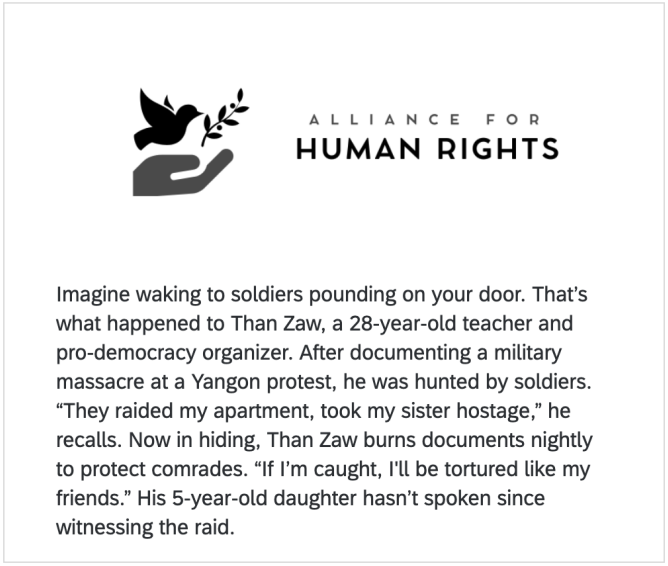


Figure 4: Personal Frame

Please read the following message from the Alliance for Human Rights about refugees from Myanmar. After that, we will ask you a few questions.

Figure 5: Motivational Frame

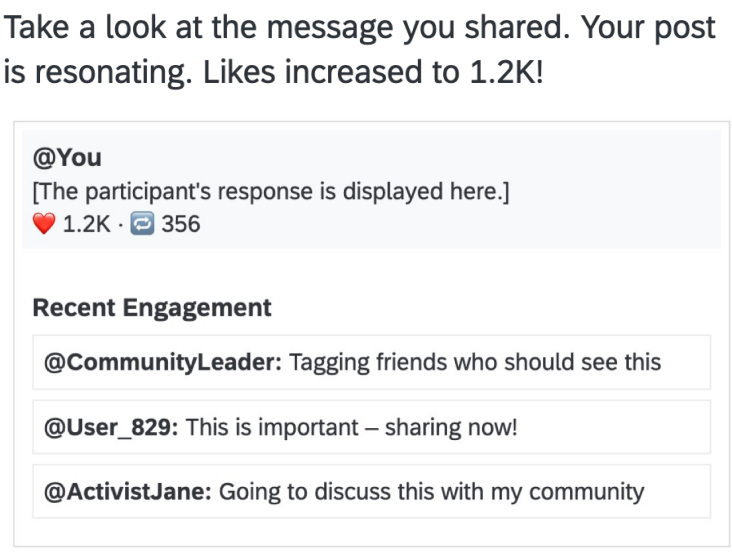


Figure 6: Preview of post created by participants.

dition. Participants assigned to the sharing condition were placed in a mock platform environment immediately after viewing the message. They were informed that the message had already been shared by more than 1.3 million users, with 87 percent choosing to reshare it, thereby portraying the issue as one with viral momentum. To enhance realism and encourage active engagement, participants were prompted to reflect on why they might share the message and with whom they would share it. They were then asked to compose a hypothetical social media post as if they were sharing the message on their own platform. Participants were informed that they would later have the opportunity to decide whether to share the message, reinforcing task engagement.

To operationalize the emotional loop, participants were subsequently exposed to a set of fabricated posts ostensibly written by other users. These posts were randomized and matched to the three framing treatments, ensuring that exposure to peer reactions did not confound the original framing manipulation. After reviewing these posts, participants completed a series of items measuring empathy, which both reinforced engagement with the social context and served as a manipulation check. At the conclusion of this exercise, participants were shown a preview of the post they had composed (see Figure 6).

All participants then completed the outcome measures. Empathy was measured using a multi-

item approach to improve reliability and construct validity. Participants first responded to a Likert-scale item measuring empathy: "I felt emotionally affected by the situation of political refugees in Myanmar." This item was supplemented with two additional measures capturing cognitive and self-referential components of empathy: "I feel like the issue of political refugees in Myanmar is relevant to my own life and values" and "Reading about political refugees in Myanmar made me try to imagine what their lives would be like." These items were adapted from the Basic Empathy Scale (Jolliffe and Farrington 2006; Cabedo-Peris et al. 2021), consistent with best practices in psychological measurement that favor multi-item scales over single-item indicators.

Consensus and participation were measured using Likert-scale items to capture gradations in support and behavioral intention. Consensus mobilization was assessed by participants' agreement with the statement: "Granting refugee status to individuals fleeing political persecution in Myanmar is a necessary humanitarian action." This item was embedded within a broader battery of questions measuring both direct and indirect knowledge of the issue. The presentation order of all items in this battery, including the consensus question, was randomized across respondents to reduce response priming. Participation was measured through three behavioral intention items: "How likely are you to add your name to a petition to the United Nations Special Rapporteur for Human Rights?", "How likely are you to share the message about political refugees from Myanmar on your social media platform?", and "How likely are you to donate to trusted humanitarian efforts supporting political refugees from Myanmar?" At the conclusion of the survey, all respondents were directed to a debriefing screen that disclosed the fictitious nature of the Alliance for Human Rights, clarified that the personal narrative was fabricated for research purposes, and explained that no actual social media sharing had occurred. Table 1 summarizes all variables used in the analysis, including their operationalization and measurement. A complete list of survey items is provided in Appendix A.

Table 1: Variables and Measurements

Variable	Survey Question	Measurement
Dependent Variables		
Initial Empathy	How much did the message from the Alliance for Human Rights affect you emotionally?	Ordinal scale 1-5
	Describe in your own words how this message made you feel, and why.	Open ended
Reinforced Empathy	I felt emotionally affected by the situation of political refugees in Myanmar.	Ordinal scale 1-5
	I feel like the issue of political refugees in Myanmar is relevant to my own life and values.	Ordinal scale 1-5
	Reading about political refugees in Myanmar made me try to imagine what their lives would be like.	Ordinal scale 1-5
Consensus	Granting refugee status to individuals fleeing political persecution in Myanmar is a necessary humanitarian action.	Ordinal scale 1-5
Participation	How likely are you to add your name to a petition to the United Nations Special Rapporteur for Human Rights?	Ordinal scale 1-6
	How likely are you to donate to trusted humanitarian efforts supporting political refugees from Myanmar?	Ordinal scale 1-6
	How likely are you to share the message about political refugees from Myanmar on your social media platform?	Ordinal scale 1-6
Independent Variables		
Framing	Informational/Personal/Motivational	Dichotomous
Social Media	Social Media treatment/Control	Dichotomous
Control Variables/Covariates		
Age	What is your age in years?	Ratio
Gender	Which of the following best describes your gender? (Male, Female, Non-binary, Other, Prefer not to say)	Nominal
Education	What is the highest level of education that you have completed?	Ordinal scale 1-7
News Consumption	How often do you follow world news?	Ordinal scale 1-5
Agency	How much influence do you think you can have in shaping public policy?	Ordinal scale 1-4
Social Media Usage	How often do you use social media platforms (such as Facebook, Instagram, X/Twitter, TikTok, etc.)? This includes posting, reading, or interacting with content.	Ordinal scale 1-5

Results

The experimental results provide strong support for the hypothesized emotional loop mechanism. To assess the multi-step mechanism posited by the theoretical framework, I employed a two-stage analytical strategy. First, I conducted a Confirmatory Factor Analysis (CFA) of the latent constructs of empathy and participation. This approach addresses the well-known limitations of self-reported measures of emotions and behavior. Self-reports are vulnerable to social desirability bias, and may therefore capture respondents' perceptions of appropriate reactions rather than their actual responses (Krueger and Osler 2019). CFA mitigates this concern by verifying that the multiple indicators designed to measure the latent constructs of empathy and participation accurately represent those underlying dimensions.

The CFA results in Table 2 indicate a good model fit for constructs of both empathy and participation. All standardized factor loadings exceed 0.78, are statistically significant at the $p < .001$ level, and the fit indices for both the Reinforced Empathy and Participation models are excellent. These findings support the use of the derived factor scores in subsequent structural analyses and confirm that the constructs are both conceptually coherent and empirically distinct. All indicators exhibited high internal consistency, with R^2 values ranging from 0.623 to 0.814, indicating that the indicators co-vary reliably as hypothesized.

In the second stage, I used the validated CFA results to generate factor scores for reinforced empathy and participation. These scores served as variables in regression analyses to test the hypothesized mechanisms of the emotional loop theory. Table 3 presents the main regression results. In the first model, I examined whether and how each framing strategy elicited varying levels of initial empathy. Relative to the informational frame, personal framing significantly increased initial empathy ($\beta = 0.411$, $p < .01$), whereas motivational framing significantly decreased initial empathy ($\beta = -0.342$, $p < .01$). Substantively, these results indicate that personal framing relatively increases empathic response, while motivational framing relatively dampens it. This pattern is consistent with the hierarchy of frame effectiveness identified by McEntire et al. and further

Table 2: Confirmatory Factor Analysis Results for Latent Variables

Latent Variable	Indicator	Standardized Loading (Std.all)	R^2
Reinforced Empathy	empathy3	0.902^{***}	0.814
	emotion1	0.789^{***}	0.623
	emotion2	0.825^{***}	0.681
Model Fit:	CFI = 1.000, TLI = 1.000, RMSEA = 0.000, SRMR = 0.000		
Participation	mobi1	0.835^{***}	0.696
	mobi2	0.892^{***}	0.796
	mobi3	0.853^{***}	0.727
Model Fit:	CFI = 1.000, TLI = 1.000, RMSEA = 0.000, SRMR = 0.000		

Note: Loadings are from separate CFAs using WLSMV estimator. CFA was estimated using maximum likelihood with robust standard errors to address potential non-normality in the data. $^{***}p < .001$

supports empathy as the central underlying mechanism (2015).

I next examined which variables significantly contributed to reinforced empathy. To address potential endogeneity between initial and reinforced empathy, I employed Seemingly Unrelated Regression (SUR), which permits the joint estimation of two related outcomes while accounting for correlation in their error terms. The results indicate that the social media sharing treatment significantly increased reinforced empathy ($\beta = 0.104$, $p < .05$). A separate model (reported in Appendix B, Table B.6) further shows that, even when controlling for initial empathy, social media activity continued to significantly reinforce empathy ($\beta = 0.111$, $p < .05$), and that initial empathy was a strong, positive predictor of reinforced empathy ($\beta = 0.405$, $p < .01$). Taken together, these findings provide evidence consistent with the emotional loop mechanism, highlighting that social media amplifies and sustains empathy beyond its initial levels.

Models 3 and 4 report regression estimates for the downstream effects of empathy on consensus and participation. These findings constitute an initial step toward evaluating the full emotional loop framework, which I further develop below by unpacking the mediating role of empathy. The results indicate that initial empathy exerts a significant positive effect on both consensus ($\beta = 0.071$, $p < .10$) and participation ($\beta = 0.082$, $p < .01$). In comparison, reinforced empathy emerges as

Table 3: Regression Results Predicting Key Outcomes

	(1)	(2)	(3)	(4)
	Initial Empathy (Numeric) OLS	Reinforced Empathy (Factor Score) SUR	Consensus (Numeric) OLS	Participation (Factor Score) OLS
Framing (Ref: Informational)				
Personal Frame	0.411^{***}		0.003	-0.006
	(0.090)		(0.070)	(0.045)
Motivational Frame	-0.342^{***}		0.003	-0.022
	(0.091)		(0.071)	(0.046)
Initial Empathy		—-[†]	0.071^{*}	0.082^{***}
			(0.033)	(0.021)
Social Media (Ref: Control)		0.104^{*}	0.022	0.019
		(0.044)	(0.057)	(0.037)
Reinforced Empathy (Factor Score)			0.793^{***}	0.547^{***}
			(0.046)	(0.029)
Controls				
Age	-0.004	-0.005^{**}	0.002	-0.005^{***}
	(0.002)	(0.002)	(0.002)	(0.001)
Gender (1=Female)	0.140	0.089	-0.038	-0.036
	(0.075)	(0.055)	(0.058)	(0.037)
Education	0.025	0.010	0.038^{*}	-0.009
	(0.023)	(0.017)	(0.018)	(0.011)
News Consumption	0.155^{***}	0.112^{***}	0.065^{*}	0.047^{**}
	(0.034)	(0.025)	(0.027)	(0.017)
Political Influence	0.212^{***}	0.139^{***}	-0.030	0.053^{*}
	(0.046)	(0.034)	(0.036)	(0.023)
Social Media Usage	0.023	0.046^{*}	0.038	0.013
	(0.032)	(0.023)	(0.025)	(0.016)
Intercept	1.788^{***}	-0.862^{***}	3.169^{***}	-0.247
	(0.243)	(0.173)	(0.211)	(0.135)
N	839	839	839	839
Adjusted R^2	0.146	0.094	0.435	0.523

Note: *p<0.1; **p<0.05; ***p<0.01 (two-tailed tests). Unstandardized coefficients with standard errors in parentheses. Models 1, 3, and 4 use OLS with robust standard errors. Model 2 uses Seemingly Unrelated Regression (SUR) to address potential endogeneity between initial and reinforced empathy.
[†] Initial Empathy coefficient was 0.412^{***} in the OLS model, but is excluded from the SUR model.

a substantially stronger predictor (consensus: $\beta = 0.79$, $p < .01$; participation: $\beta = 0.55$, $p < .01$), underscoring the importance of sustained emotional engagement for mobilization. Notably, social media sharing has no direct effect on these outcomes, suggesting that its influence operates primarily through amplifying emotional engagement.

The mediation analysis results clarify and substantiate the indirect pathways of empathy through framing and social media engagement. To thoroughly assess the pathways specified in the emotional loop, I computed average causal mediation effects (ACME) using 5,000 bootstrapped samples. Table 4 reports the main findings (the full mediation outputs appear in Appendix B, Table B.7). Together, these analyses demonstrate that once the framing conditions activate empathy, social media engagement amplifies this emotional response and converts it into meaningful participation.

Table 4: Mediation Analyses for Key Indirect Effects (ACME)

Indirect Pathway (X →M →Y)	**ACME**	**95% CI**
Mediating Role of Initial Empathy		
Personal Frame →Initial Empathy →Reinforced Empathy	0.173***	[0.098, 0.260]
Motivational Frame →Initial Empathy →Reinforced Empathy	−0.144***	[-0.220, -0.070]
Mediating Role of Reinforced Empathy		
Personal Frame →Reinforced Empathy →Participation	−0.005	[-0.064, 0.050]
Motivational Frame →Reinforced Empathy →Participation	0.041	[-0.019, 0.100]
Social Media →Reinforced Empathy →Participation	0.060**	[0.014, 0.110]

Note: *p<0.1; **p<0.05; ***p<0.01. Estimates are unstandardized Average Causal Mediation Effects (ACME). Confidence intervals are based on 5,000 bootstrap samples. Frame effects are relative to the Informational frame. Reinforced Empathy and Participation are factor scores derived from CFA.

The first mediation analysis shows that final levels of empathy are significantly shaped by the extent to which each framing condition initially evokes empathy. Personal framing led to significantly higher initial empathy, which in turn strengthened reinforced empathy and successfully increased participation (ACME = 0.173, $p < .01$). In contrast, motivational framing weakened

initial empathy and had a negative indirect effect on participation through the same path (ACME = -0.144, $p < .01$). Yet, neither personal nor motivational framing had a significant indirect effect on participation when mediated solely by reinforced empathy. This suggests that framing alone cannot fully account for changes in downstream behavior.

In contrast, the social media treatment exerted a significant positive indirect effect on participation via reinforced empathy (ACME = 0.060, $p < .05$). This supports the hypothesized role of social media as a decentralized catalyst of activism, which amplifies empathetic engagement and translates it into participation. Taken together, these results help explain the limited effect of personal framing on participation observed by McEntire et al. (2015). While personal framing initiates empathy, sustaining and amplifying that emotional response to the point of motivating individuals to take action requires the reinforcing dynamics enabled by social media engagement.

Figure 7 visualizes the patterns identified in the statistical analyses. The top panel displays the trajectory of mean empathy scores across three measurement points (t_1 = pre-sharing, t_2 = mid-sharing, t_3 = post-sharing), comparing the social media treatment to the control condition within each framing condition. While empathy generally increases over time, participants in the social media treatment condition exhibit a sharper increase during the sharing activity. This effect is particularly pronounced in the motivational framing condition, where mean empathy increases by 0.84 points (from 2.63 to 3.47), suggesting that respondents who initially were "somewhat likely" to participate became "very likely" to do so. While the increase in empathy in the personal framing condition was relatively modest at 0.09 points, it nonetheless corresponds to a 32% greater increase in empathy among respondents in the treatment group compared to the control.

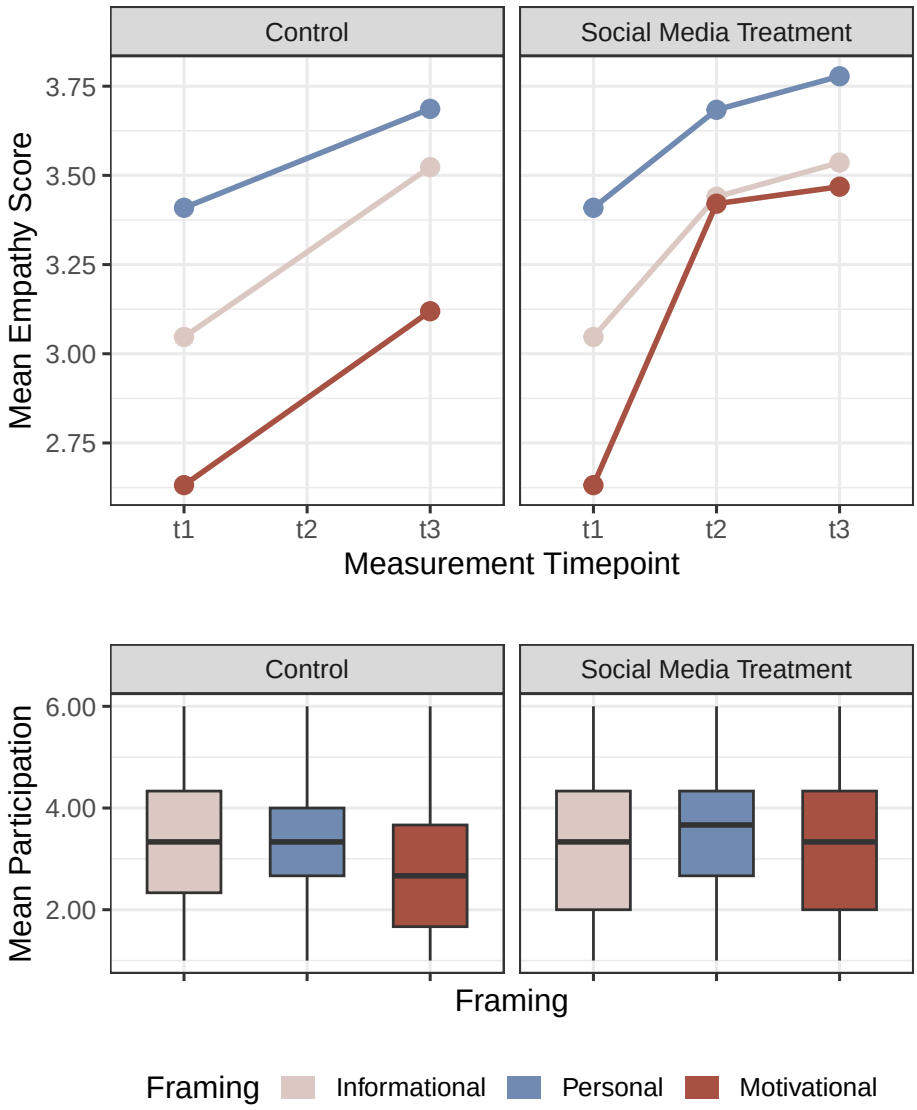
The bottom panel displays average participation scores across framing and sharing conditions. Participation is highest in the personal framing treatment group, with a mean score of 3.48. While participation levels generally increase in the social media sharing condition, the informational framing condition shows no meaningful difference between treatment and control (3.29 vs. 3.25). This suggests that for social media to serve as an emotional amplifier, a substantial level of em-

pathy must first be activated. Although the differences in mean participation may appear modest, they are not only statistically significant but also substantively meaningful, particularly given the hypothetical nature of the experiment. In real-world contexts, social media exposure is rarely a one-time event. Instead, users repeatedly encounter emotionally framed messages on issues they care about, often reinforced through social feedback and peer engagement. The fact that these results emerge despite the artificiality of a controlled survey experiment underscores the strength of the underlying mechanisms of the emotional loop, suggesting substantial potential for real-world settings.

An important pattern emerging from Figure 7 is the interactive effect between motivational framing and social media engagement. Before the social media sharing treatment, motivational framing appears to be the least effective of the three approaches, consistent with expectations (2015). However, once those primed with motivational framing engaged in social media activity, their empathy and participation levels rose more sharply than in any other condition. This suggests that the emotional and mobilizing potential of motivational framing is activated not simply through receiving the message, but by sharing it. For such motivational cues to be effective, they must be accompanied by a clear, actionable outlet; otherwise, audiences may respond with frustration or disengagement rather than mobilization.

Finally, I conducted subgroup analyses to assess the generalizability of the findings by examining whether the treatment effects varied across key demographic and psychological characteristics. The emotional loop mechanism was consistent across gender, age, and baseline empathy levels, with no significant three-way interactions involving these variables. A marginal interaction emerged with social media usage frequency ($F(2,821) = 2.82$, $p = 0.06$), suggesting somewhat stronger effects among frequent users. However, the direction and pattern of effects remained stable across all subgroups. These results support the generalizability of the emotional loop framework across diverse populations.

Figure 7: Empathy and Participation Across Framing and Sharing Conditions.



Note: The top panel shows average empathy scores over three sequential measurement points (t1 = pre-sharing, t2 = mid-sharing, t3 = post-sharing). Because t2 was designed to capture emotional responses specific to the simulated sharing experience, it was excluded from the main analyses to maintain comparability across experimental conditions and avoid bias in estimating latent constructs. The bottom panel displays the distribution of individual participation scores by framing and sharing condition, with colors indicating the message frame.

Qualitative Insights: Sentiment and Themes in Emotional Responses

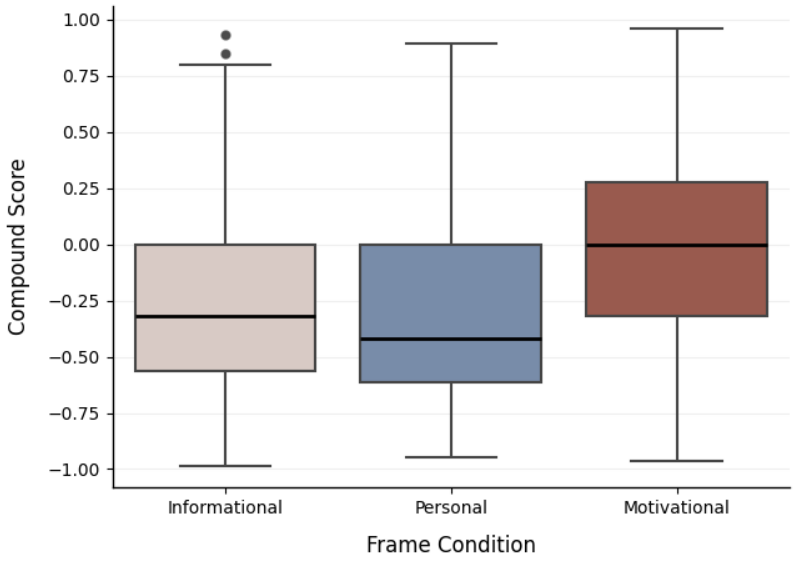
To supplement the quantitative analysis and gain deeper insights from the open-ended responses, I conducted computational text analysis. First, I employed sentiment analysis using the Valence Aware Dictionary and sEntiment Reasoner (VADER; Hutto and Gilbert 2014), a lexicon and rule-based tool for analyzing expressions of emotion. VADER provides scores for positive, negative, neutral, and overall compound sentiment for each response.

Second, I performed topic modeling using Latent Dirichlet Allocation (LDA; Blei, Ng, and Jordan 2003), implemented via the 'scikit-learn' library in Python. Three topics were specified following the results of the coherence analysis test, which revealed diminishing coherence scores with the inclusion of more than three topics. To understand the impact of the experimental manipulation on qualitative responses, I compared both the VADER compound sentiment scores and the distribution of the identified LDA topics across the three framing conditions, employing appropriate statistical tests (Kruskal-Wallis and Chi-squared, respectively).

The analysis of participants' open-ended descriptions of their feelings provides further nuance to the quantitative findings. The sentiment scores depicted in Figure 8 range from -1 (highly negative) to $+1$ (highly positive). Results reveal an overall tendency towards negative sentiment in response to the messages (Mean VADER Compound Score $= -0.13$), reflecting sympathy toward the unfortunate subject matter. Notably, the emotional valence differed significantly across each framing method (Kruskal-Wallis H $= 25.8$, $p < .001$). Respondents in the motivational framing condition exhibited significantly less negative sentiment (median $= 0.000$) when compared to the informational (-0.318) and personal framing conditions (-0.421). This difference implies that personal framing effectively engaged respondents emotionally, increasing negativity by roughly 42% of the entire sentiment range.

Topic modeling using LDA identified three distinct themes within the emotional responses, summarized by their top keywords in Table 5. Topic 1 focuses on the situation itself, including

Figure 8: Distribution of VADER Compound Sentiment Scores by Framing Condition



references to Myanmar, democracy, and refugees, indicating an analytical and detached understanding of the issue. For instance, a respondent exposed to the informational frame remarked: "*We have too much to worry about at home. I have empathy for Myanmar but the US is struggling themselves.*" Topic 2 pertains to human rights discourse and moral considerations, characterized by keywords indicating normative judgments and cognitive reasoning. Responses in this category acknowledge the gravity of the situation but refrain from expressing strong emotions, as illustrated by: "*Human rights essential. I well understand plight of refugees.*"

Topic	Top Keywords
#1	situation, country, happening, myanmar, concerned, sure, thing, refugee, democracy, military
#2	people, right, dont, feel, know, human, country, really, think, help
#3	feel, sad, people, like, bad, felt, little, make, world, angry

Table 5: Top Keywords for LDA Topics Identified in Open-Ended Responses

Topic 3, by contrast, is characterized by visceral emotional expression, encompassing sadness, anger, and personal identification with the victims. These responses demonstrate affective immer-

sion and self-projection into the scenario. For example, one participant wrote: "*This message made me feel sad and angry because that's how to would feel if I had a sibling taken hostage and the raid effecting my daughter like that*." Others indicated that these emotions translated into a willingness to act, stating: "*It made me sad and want to do something.*" Together, these themes reflect a continuum of emotional engagement, ranging from detached analytical commentary to deeply empathetic responses, mirroring the intensity levels captured by scaled measures of empathy.

The highly emotional responses captured in Topic 3 were most frequently expressed by respondents in the personal framing condition (43.2%), followed by those in the informational (34.3%), and motivational (22.5%) conditions. Notably, within the motivational frame condition, responses were more likely to reflect human rights discourse (Topic 2, 38.8%) and situational assessments (Topic 1, 33.0%). This stands in sharp contrast to the proportion of situational responses in the informational (19.3%) and personal (17.4%) conditions. A chi-squared test confirmed a statistically significant association between message framing and topic distribution ($\chi^2(4) = 65.03$, $p < .001$). This suggests that framing influenced not only the valence of empathy but also the specific themes on which participants focused while expressing their feelings.

By integrating text analysis results with quantitative variables, I identify significant relationships among topics, empathy, and key outcome variables. The VADER sentiment scores revealed significant negative correlations with empathy measures, suggesting that empathy scales are associated with expressing grief. Additionally, the emotionally-focused Topic 3 was consistently associated with the highest levels of empathy, mobilization, and consensus outcomes across all measures (all $p < .05$; see Appendix C for detailed statistics). This pattern further supports the emotional loop mechanism, as the most emotionally expressive responses are also linked to the strongest downstream effects.

In short, the results support the proposed emotional loop mechanism. Framing influences initial empathy, which, along with the act of sharing on social media, enhances reinforced empathy. This heightened empathy, in turn, is a key driver of both consensus generation and participation

mobilization in collective action. Qualitative findings complement the main regression results. The distinct sentiment patterns and thematic focuses across frames provide a richer context for understanding how framing manipulations shape emotional responses, which subsequently drive the downstream effects observed in the emotional loop.

Conclusion

Transnational advocacy is at the forefront of the struggles to define moral and institutional world politics in defense of human rights. At the heart of this system lies the concept of pressure, which serves as the political leverage that constrains governments that may disregard domestic constituencies by exposing them to sustained international scrutiny. Reflecting this centrality, human rights scholarship has long emphasized information politics, particularly how issue framing shapes the scale of international response. In the contemporary landscape of digital activism, the strategic importance of framing is further amplified, as narrative resonance increasingly determines which abuses provoke global outrage and which are lost in the noise of the digital landscape. Yet, despite its practical and normative importance, the microfoundations through which framed information is converted into tangible political pressure remain conceptually underdeveloped and have received limited systematic empirical attention.

To address this gap, I propose the emotional loop as a theoretical framework that specifies the psychological mechanism through which fragmented moral appeals are translated into transnational political pressure. This framework shifts the analytical focus from top-down information strategies to the bottom-up psychological processes that enable them, identifying empathy as the primary motivational engine of mobilization. Within this framework, framing operates as the primary trigger, effective to the extent that it elicits empathy. The emotional loop elucidates how this initial empathy develops into active participation through a self-reinforcing cycle of empathetic engagement, amplified by social media. Through repeated exposure to an issue and the subtle imposition of social expectations for engagement, digital networks transform the initial spark of

empathy into large-scale mobilization that is difficult to extinguish. I evaluate this framework using a triangulated mixed-methods design, drawing on evidence from a case study, a vignette-based survey experiment, and text analysis.

The findings converge across multiple forms of evidence and provide strong empirical support for the emotional loop. The case study of Aylan Kurdi illustrates the real-world mobilizing power of empathy, yielding significant advocacy outcomes that many organized campaigns struggle to achieve. Digital trace evidence demonstrates how the sharing of individual empathetic reactions aggregates into social information about the urgency and moral stakes of the issue. This, in turn, generates peer pressure among users that, once accumulated, translates into pressure on state actors to respond. The survey experiment demonstrates that these dynamics are primarily driven by empathy, thereby establishing it as the micro-level causal mechanism. Statistical analyses indicate that stronger empathy elicitation through framing promotes consensus formation on the issue and that continued empathy reinforcement enhances individuals' willingness to participate. Consistent with this claim, text analysis results indicate that emotional discourse surrounding the issue predicts stronger downstream effects on consensus and participation, underscoring the disproportionate role of empathetic engagement. In addition, formal mediation analyses demonstrate that social media activity reinforces and sustains the initial spark of empathy, thereby facilitating the crucial shift from passive sympathy to active participation. These findings confirm social media's hypothesized role as a crucial enabling meso-level structure and challenge critiques that characterize social media engagement as superficial.

Other findings, however, point to important boundary conditions and avenues for future research. The case study of Aylan Kurdi vividly highlights what is attainable when conditions align. However, narratives featuring an innocent victim, particularly a child, combined with a clear moral contrast, are rare and not consistently available across human rights issues. Moreover, although this case prompted governments to make concessions in refugee policy, those effects were fragile. Following the Paris attacks, governments that had briefly opened their borders reimposed restrictions amid an anti-solidarity backlash. This suggests that while the emotional loop can generate

rapid and intense mobilization, it is also highly volatile and susceptible to political contestation. Future research should examine the emotional loop using observational data from ongoing advocacy campaigns, evaluate the long-term durability of empathy-driven mobilization, and assess whether its effects vary across different types of human rights violations. In addition, investigating potential downsides, including compassion fatigue and agenda displacement, remains an important avenue for inquiry.

Taken together, this paper makes three core contributions. First, by isolating empathy as a causal mechanism, it specifies the conditions under which individuals exposed to information about human rights violations become motivated to express sympathy and undertake political action, thereby helping to overcome collective action dilemmas in advocacy. This advances human rights scholarship by providing a microfoundational account of transnational pressure generation, the essential kinetic force of the broader structure. Furthermore, the findings extend practical implications for human rights advocacy in practice. They suggest that encouraging individuals to share their emotional reactions, facilitating visible discussions, and amplifying shared responses can help generate and sustain engagement. Policymakers, in turn, should recognize the political force of empathy-driven waves of public opinion and respond through coordinated engagement with international and transnational actors, rather than reacting defensively to episodic surges of public outrage.

Second, the emotional loop advances our understanding of the rapidly expanding role of social media in transnational advocacy movements. The framework explains how the individual agency afforded by social media has facilitated the emergence of grassroots movements. By decentralizing information, social media allows personal narratives to challenge elite political rhetoric directly, reducing movements' dependence on traditional gatekeepers and increasing their responsiveness to public opinion. Recent advocacy surrounding Gaza illustrates the growing significance of this bottom-up mobilization mechanism. Here, the role of empathy is more pronounced, as new forms of communication, including unedited footage of civilian suffering and digital testimonies, generate an immediate emotional proximity that conventional reporting has often struggled to achieve.

Interactive features such as live streaming enable audiences to perceive themselves as actively engaged participants offering direct moral support to affected populations, thereby facilitating the shift from sympathy to action. Similarly, direct peer-to-peer crowdfunding platforms increasingly supplant traditional institutional aid, further lowering barriers to participation.

Finally, the emotional loop has broader implications for how emotions are conceptualized within international relations. International relations scholarship has increasingly examined the role of emotions in generating concrete political pressure on foreign policy. This paper's findings help clarify the causal mechanisms through which emotional dynamics are translated into political pressure. They also extend existing explanations beyond the domestic foreign policy arena by demonstrating how emotionally mobilized pressure can lead multiple states and international institutions to reweight policy priorities and recalibrate their responses to global issues. This dynamic is especially consequential in the contemporary international environment, marked by norm volatility and rapid digital information diffusion. At the same time, the dependence of this dynamic on the often unpredictable affordances of social media underscores the risks it entails. Although the Aylan Kurdi case illustrates the constructive potential of empathy-driven mobilization, these mechanisms remain vulnerable to exploitation through manipulation and disinformation. Continued research into emotional dynamics in contemporary international relations is therefore essential for understanding both the mobilizing and destabilizing potential of emotional politics.

References

Aarøe, Lene. 2011. "Investigating frame strength: The case of episodic and thematic frames." *Political Communication* 28 (2): 207–226.

Abushbak, Ali M, Tawseef Majeed, and Krishna Sankar Kusuma. 2025. "Mobile phone activism during Israel's 'Operation Guardian of the Wall'in Gaza." *Media, War & Conflict* (London) 18 (1): 45–62.

Adler-Nissen, Rebecca, Katrine Emilie Andersen, and Lene Hansen. 2020. "Images, emotions, and international politics: The death of Alan Kurdi." *Review of International Studies* 46 (1): 75–95.

Amnesty International. 2014. *The world's pitiful response to Syria's refugee crisis.* Accessed January 28, 2026. https://www.amnesty.org/en/latest/news/2014/12/world-s-pitiful-response-syria-s-refugee-crisis/.

Batson, C Daniel. 2011. "The empathy-altruism hypothesis: Issues and implications." *Emotion Review*.

Batson, C Daniel, Marina P Polycarpou, Eddie Harmon-Jones, Heidi J Imhoff, Erin C Mitchener, Lori L Bednar, Tricia R Klein, and Lori Highberger. 1997. "Empathy and attitudes: Can feeling for a member of a stigmatized group improve feelings toward the group?" *Journal of Personality and Social Psychology* 72 (1): 105.

Bayram, A Burcu, and Marcus Holmes. 2020. "Feeling their pain: affective empathy and public preferences for foreign development aid." *European Journal of International Relations* (London) 26 (3): 820–850.

BBC News. 2015. *"Migrant Crisis: PM Says UK Will Fulfil Moral Responsibilities"*. Accessed February 15, 2026. https://www.bbc.com/news/uk-34135870.

Becker, Jo. 2012. *Campaigning for justice: human rights advocacy in practice.* Stanford University Press.

Benford, Robert D., and David A. Snow. 2000. "Framing processes and social movements: An overview and assessment." *Annual Review of Sociology* 26 (1): 611–639.

Bennett, W. Lance. 2005. "Social movements beyond borders: understanding two eras of transnational activism." *Transnational Protest and Global Activism* 203:26.

Bennett, W. Lance, and Alexandra Segerberg. 2012. "The logic of connective action: Digital media and the personalization of contentious politics." *Information, Communication & Society* 15 (5): 739–768.

Bhabha, Homi K. 1994. *Anxious nations, nervous states.*

Bimber, Bruce, Andrew J. Flanagin, and Cynthia Stohl. 2005. "Reconceptualizing collective action in the contemporary media environment." *Communication Theory* 15 (4): 365–388.

Bjånesøy, Lise Lund. 2019. "Effects of the refugee crisis on perceptions of asylum seekers in recipient populations." *Journal of Refugee Studies* 32 (Special_Issue_1): i219–i237.

Blei, David M, Andrew Y Ng, and Michael I Jordan. 2003. "Latent dirichlet allocation." *Journal of Machine Learning Research* 3 (Jan): 993–1022.

Bleiker, Roland. 2015. "Pluralist methods for visual global politics." *Millennium: Journal of International Studies* 43 (3): 872–890.

———. 2018. *Visual Global Politics.* Routledge, February.

Bleiker, Roland, David Campbell, Emma Hutchison, and Xzarina Nicholson. 2013. "The visual dehumanisation of refugees." *Australian Journal of Political Science* 48:398–416.

Bob, Clifford. 2005. "Rights on the rise: International mobilization for new human rights." *Available at SSRN 902692.*

Boltanski, Luc. 1999. *Distant suffering: Morality, media and politics.* Cambridge University Press.

Brady, William J, Julian A Wills, John T Jost, Joshua A Tucker, and Jay J Van Bavel. 2017. "Emotion shapes the diffusion of moralized content in social networks." *Proceedings of the National Academy of Sciences* 114 (28): 7313–7318.

Brysk, Alison. 1993. "From above and below: Social movements, the international system, and human rights in Argentina." *Comparative Political Studies* 26 (3): 259–285.

Budabin, Alexandra C, and Joel R Pruce. 2018. "The elite politics of media advocacy in human rights." *New Political Science* 40 (4): 744–762.

Buheji, Mohamed, Emmanuel Mushimiyimana, and Dunya Ahmed. 2024. "Empathic engagement with Gaza: dynamics, impact, and prospects." *International Journal of Management* 15 (1): 132–156.

Cabedo-Peris, Javier, Manuel Marti-Vilar, Cesar Merino-Soto, and Mafalda Ortiz-Moran. 2021. "Basic empathy scale: a systematic review and reliability generalization meta-analysis." In *Healthcare,* 10:29. 1. MDPI.

Calhoun, Craig. 1991. "The problem of identity in collective action."

Carpenter, R. Charli. 2007. "Studying issue (non)-adoption in transnational advocacy networks." *International Organization* 61 (3): 643–667.

Castells, Manuel, Mireia Fernandez-Ardevol, Jack Linchuan Qiu, and Araba Sey. 2009. *Mobile communication and society: A global perspective.* Mit Press.

Chadwick, Andrew. 2017. *The hybrid media system: Politics and power.* Oxford University Press.

Charnysh, Volha, Paulette Lloyd, and Beth A. Simmons. 2015. "Frames and consensus formation in international relations: The case of trafficking in persons." *European Journal of International Relations* 21 (2): 323–351.

Chouliaraki, Lilie. 2013. *The ironic spectator: Solidarity in the age of post-humanitarianism.* John Wiley & Sons.

Conrad, Courtenay R., and Emily Hencken Ritter. 2019. *Contentious Compliance.*

Davis, David R., Amanda Murdie, and Coty Garnett Steinmetz. 2012. ""Makers and Shapers": Human Rights INGOs and Public Opinion." *Human Rights Quarterly* 34:199–224.

Dey, Priyanka, Luca Luceri, and Emilio Ferrara. 2024. "Coordinated activity modulates the behavior and emotions of organic users: A case study on tweets about the Gaza conflict." In *Companion Proceedings of the ACM Web Conference 2024,* 682–685.

Earl, Jennifer, and Katrina Kimport. 2011. *Digitally enabled social change: Activism in the internet age.* MIT Press.

Ecker-Ehrhardt, Matthias, Lisa Dellmuth, and Jonas Tallberg. 2025. "Peer opinion and the legitimacy of international organizations." *The Review of International Organizations,* 1–29.

Ekman, Mattias. 2018. "Anti-refugee mobilization in social media: The case of soldiers of Odin." *Social Media+ Society* 4 (1): 2056305118764431.

El-Enany, Nadine. 2016. "Aylan Kurdi: the human refugee." *Law and Critique* 27:13–15.

European Commission. 2016. *Relocation and Resettlement: State of Play.* Official Press Release.

Fearon, James D. 1994. "Domestic political audiences and the escalation of international disputes." *The American Political Science Review* 88 (3): 577–592.

Fine, Gary Alan. 2012. "Group culture and the interaction order: Local sociology on the meso-level." *Annual Review of Sociology* 38 (1): 159–179.

Flores, René D., and Ariela Schachter. 2013. "Stereotypes and Immigration Attitudes: The Impact of Ethnic Identity, Emotions, and Political Ideology." *Cultural Diversity and Ethnic Minority Psychology* 19 (3): 342–356.

Gamson, William A. 1992. "The Social Psychology of Collective Action." In *Frontiers in Social Movement Theory,* edited by Aldon D. Morris and Carol McClurg Mueller, 53–76. New Haven, CT: Yale University Press.

Garrett, Kelly. 2006. "Protest in an information society: A review of literature on social movements and new ICTs." *Information, Communication & Society* 9 (02): 202–224.

Gildea, Ross James. 2024. "Explaining the Selection Dilemma in Human Rights INGOs." *International Studies Quarterly* 68 (2): sqae041.

González-Bailón, Sandra, and Ning Wang. 2016. "Networked discontent: The anatomy of protest campaigns in social media." *Social Networks* 44:95–104.

Google Trends. 2025. "Search Interest for "Aylan Kurdi," "Syrian Boy," "Syria," and "Refugees"." Accessed April 7, 2025. https://trends.google.com/trends/explore?date=2015-09-01%202015-09-30&q=Syrian%20boy,Aylan%20Kurdi.

Green, Melanie C, and Timothy C Brock. 2000. "The role of transportation in the persuasiveness of public narratives." *Journal of Personality and Social Psychology* 79 (5): 701.

Greijdanus, Hedy, Carlos A. de Matos Fernandes, Felicity Turner-Zwinkels, Ali Honari, Carla A. Roos, Hannes Rosenbusch, and Tom Postmes. 2020. "The psychology of online activism and social movements: Relations between online and offline collective action." *Current Opinion in Psychology* 35:49–54.

Gross, Kimberly. 2008. "Framing persuasive appeals: Episodic and thematic framing, emotional response, and policy opinion." *Political Psychology* 29 (2): 169–192.

Haines, Alexandra, Michele Leiby, Matthew Krain, and Amanda Murdie. 2020. "Two sides of the same coin: can campaigns generate support for both human rights and retributive violence?" *International Interactions* 46 (3): 402–430.

Hall, Nina. 2022. *Transnational advocacy in the digital era: Think global, act local.* Oxford University Press.

Hall, Todd H., and Andrew A.G. Ross. 2015. "Affective politics after 9/11." *International Organization* 69 (4): 847–879.

Harlow, Summer, and Thomas J. Johnson. 2011. "The Arab spring— overthrowing the protest paradigm? How the New York Times, global voices and twitter covered the Egyptian revolution." *International Journal of Communication* 5:16.

Hunt, Scott A, and Robert D Benford. 2004. "Collective identity, solidarity, and commitment." *The Blackwell Companion to Social Movements* 433 (57).

Hutchison, Emma. 2016. *Affective communities in world politics.* Vol. 140. Cambridge University Press.

Hutto, C.J., and Eric Gilbert. 2014. "VADER: A parsimonious rule-based model for sentiment analysis of social media text." In *Eighth International AAAI Conference on Weblogs and Social Media.*

Isa, Daud, and Itai Himelboim. 2018. "A social networks approach to online social movement: Social mediators and mediated content in# freeajstaff twitter network." *Social Media+ Society* (London) 4 (1): 2056305118760807.

ITV News. 2015. *Syrian teenager holds city vigil for drowned Syrian three-year-old Aylan Kurdi.* Accessed January 28, 2026. https://www.itv.com/news/central/2015-09-06/syrian-teenager-holds-city-vigil-for-drowned-toddler.

Iyengar, Shanto. 1987. "Television news and citizens' explanations of national affairs." *American Political Science Review* 81 (3): 815–831.

Jenni, Karen E., and George Loewenstein. 1997. "Explaining the Identifiable Victim Effect." *Journal of Risk and Uncertainty* 14:235–257.

Jolliffe, Darrick, and David P Farrington. 2006. "Development and validation of the Basic Empathy Scale." *Journal of Adolescence* 29 (4): 589–611.

Keck, Margaret E., and Kathryn Sikkink. 1998. *Activists beyond borders: Advocacy networks in international politics.* Cornell University Press.

Kertzer, Joshua D. 2017. "Microfoundations in international relations." *Conflict Management and Peace Science* 34:81–97.

Klandermans, Bert. 1984. "Mobilization and participation: Social-psychological expansisons of resource mobilization theory." *American Sociological Review,* 583–600.

———. 2004. "The demand and supply of participation: Social-psychological correlates of participation in social movements." *The Blackwell Companion to Social Movements,* 360–379.

Klimecki, Olga M. 2019. "The role of empathy and compassion in conflict resolution." *Emotion Review* (London) 11 (4): 310–325.

Kogut, Tehila, and Ilana Ritov. 2005. "The "Identified Victim" Effect: An Identified Group, or Just a Single Individual?" *Journal of Behavioral Decision Making* 18:157–167.

Kramer, Adam DI, Jamie E Guillory, and Jeffrey T Hancock. 2014. "Experimental evidence of massive-scale emotional contagion through social networks." *Proceedings of the National Academy of Sciences* 111 (24): 8788–8790.

Kreft, Anne-Kathrin, and Mattias Agerberg. 2024. "Imperfect victims? Civilian men, vulnerability, and policy preferences." *American Political Science Review* 118 (1): 274–290.

Krueger, Joel, and Lucy Osler. 2019. "Engineering affect." *Philosophical Topics* 47 (2): 205–232.

Lee, Chei Sian, and Long Ma. 2012. "News sharing in social media: The effect of gratifications and prior experience." *Computers in Human Behavior* 28 (2): 331–339.

Lee, Yu-Hao, and Gary Hsieh. 2013. "Does slacktivism hurt activism? The effects of moral balancing and consistency in online activism." In *Proceedings of the SIGCHI conference on human factors in computing systems,* 811–820.

Mackie, Diane M, Thierry Devos, and Eliot R Smith. 2000. "Intergroup emotions: Explaining offensive action tendencies in an intergroup context." *Journal of Personality and Social Psychology* 79 (4): 602.

Marcus, George E., W. Russell Neuman, and Michael MacKuen. 2000. *Affective intelligence and political judgment.* University of Chicago Press.

Masterson, Michael. 2024. "Catching Fire: How National Humiliation Spreads Hostile Foreign Policy Preferences on Chinese Social Media." *International Studies Quarterly* 68 (2): sqae033.

McAdam, Doug, John D McCarthy, and Mayer N Zald. 1996. *Comparative perspectives on social movements: Political opportunities, mobilizing structures, and cultural framings.* Cambridge University Press.

McCarthy, John D., and Mark Wolfson. 1996. "Resource mobilization by local social movement organizations: Agency, strategy, and organization in the movement against drinking and driving." *American Sociological Review,* 1070–1088.

Mcentire, Kyla Jo, Michele Leiby, and Matthew Krain. 2015. "Human Rights Organizations as Agents of Change: An Experimental Examination of Framing and Micromobilization." *American Political Science Review* 109 (3): 407–426.

McEvoy, Kieran, and Kirsten McConnachie. 2012. "Victimology in transitional justice: Victimhood, innocence and hierarchy." *European Journal of Criminology* (London) 9 (5): 527–538.

Miller, Dale T. 2009. "From Moral Outrage to Social Protest: The Role of Psychological Standing."

Mitchell, W.J. Thomas, and William John Thomas Mitchell. 1994. *Picture theory: Essays on verbal and visual representation.* University of Chicago Press.

Mutz, Diana C. 1998. *Impersonal influence: How perceptions of mass collectives affect political attitudes.* Cambridge University Press.

Nekmat, Elmie, Karla K. Gower, Shuhua Zhou, and Miriam Metzger. 2019. "Connective-collective action on social media: Moderated mediation of cognitive elaboration and perceived source credibility on personalness of source." *Communication Research* 46 (1): 62–87.

Nelson, Thomas E., and Zoe M. Oxley. 1999. "Issue Framing Effects on Belief Importance and Opinion." *The Journal of Politics* 61:1040–1067.

Nelson, Thomas E., Zoe M. Oxley, and Rosalee A. Clawson. 1997. "Toward a psychology of framing effects." *Political Behavior* 19:221–246.

Noland, Aaron. 2017. "Social media activists: Analyzing the relationship between online activism and offline attitudes and behaviors." *The Journal of Social Media in Society* 6 (2): 26–55.

Olesen, Thomas. 2018. “Memetic protest and the dramatic diffusion of Alan Kurdi.” *Media, Culture & Society* 40:656–672.

Olson, Mancur. 1965. “The logic of collective action.” *Harvard University Press.*

Papacharissi, Z. 2015. *Affective publics: Sentiment, technology, and politics.* Oxford University Press.

Prøitz, Lin. 2018. “Visual social media and affectivity: The impact of the image of Alan Kurdi and young people’s response to the refugee crisis in Oslo and Sheffield.” *Information, Communication & Society* 21 (4): 548–563.

Risse, Thomas, Kathryn Sikkink, and Stephen C Ropp. 1999. “The socialization of international human rights norms into domestic practices.” *Domestic politics and norm diffusion in international relations,* 117–307.

Risse-Kappen, Thomas, Steve C. Ropp, and Kathryn Sikkink. 1999. “The power of human rights: international norms and domestic change.” *Foreign Affairs* 78:143.

Ron, James, Howard Ramos, and Kathleen Rodgers. 2005. “Transnational information politics: NGO human rights reporting, 1986–2000.” *International Studies Quarterly* 49 (3): 557–587.

Sajir, Zakaria, and Miriyam Aouragh. 2019. “Solidarity, social media, and the” refugee crisis”: Engagement beyond affect.” *International Journal of Communication* 13:28.

Schultz, Kenneth A. 1998. “Domestic opposition and signaling in international crises.” *The American Political Science Review* 92 (4): 829–844.

Shahin, Saif, Junki Nakahara, and Mariana Sánchez. 2021. “Black Lives Matter goes global: Connective action meets cultural hybridity in Brazil, India, and Japan.” *New Media & Society,* 14614448211057106.

Sheppard, Jill, and Jana von Stein. 2022. "Attitudes and Action in International Refugee Policy: Evidence from Australia." *International Organization* 76:929–956.

Sherman, Nancy. 1998. "Empathy, Respect, and Humanitarian Intervention." *Ethics & International Affairs* 12:103–119.

Siegel, David A. 2013. "Social Networks and the Mass Media." *American Political Science Review* 107:786–805.

Simmons, Beth A. 2009. *Mobilizing for human rights: international law in domestic politics.* Cambridge University Press.

———. 2000. "International Law and State Behavior: Commitment and Compliance in International Monetary Affairs." Accessed June 15, 2021, *The American Political Science Review* 94 (4): 819–835.

Simon, Herbert A. 1954. "Bandwagon and underdog effects and the possibility of election predictions." *Public Opinion Quarterly* 18 (3): 245–253.

Slovic, Paul, Daniel Västfjäll, Arvid Erlandsson, and Robin Gregory. 2017. "Iconic photographs and the ebb and flow of empathic response to humanitarian disasters." *Proceedings of the National Academy of Sciences* 114 (4): 640–644.

Small, Deborah A, George Loewenstein, and Paul Slovic. 2007. "Sympathy and Callousness: The Impact of Deliberative Thought on Donations to Identifiable and Statistical Victims." *Organizational Behavior and Human Decision Processes* 102 (2): 143–153.

Smith, Eliot R, Charles R Seger, and Diane M Mackie. 2007. "Can emotions be truly group level? Evidence regarding four conceptual criteria." *Journal of personality and social psychology* 93 (3): 431.

Snow, David A, E Burke Rochford Jr, Steven K Worden, and Robert D Benford. 1986. "Frame alignment processes, micromobilization, and movement participation." *American Sociological Review,* 464–481.

Sontag, Susan. 2003. "Regarding the pain of others." *Diogène* 201 (1): 127–139.

Stein, Janice Gross. 2013. "Psychological Explanations of International Decision Making and Collective Behavior." *Oxford Handbooks Online.*

Stieglitz, Stefan, and Linh Dang-Xuan. 2013. "Emotions and Information Diffusion in Social Media—Sentiment of Microblogs and Sharing Behavior." Accessed March 16, 2023, *Journal of Management Information Systems* 29 (4): 217–248.

Tajfel, Henri. 1969. "Cognitive aspects of prejudice." *Journal of Biosocial Science* 1:173–191.

Tamir, Maya. 2016. "Why do people regulate their emotions? A taxonomy of motives in emotion regulation." *Personality and social psychology review* (Los Angeles) 20 (3): 199–222.

The Guardian. 2015a. *700 migrants feared dead in Mediterranean shipwreck.* Accessed April 1, 2025. https://www.theguardian.com/world/2015/apr/19/700-migrants-feared-dead-mediterranean-shipwreck-worst-yet.

———. 2015b. *Canada meets target to resettle 25,000 Syrian refugees.* Accessed January 31, 2026. https://www.theguardian.com/world/2016/mar/01/canada-target-resettle-25000-syrian-refugees.

———. 2015c. *Charity behind migrant-rescue boats sees 15-fold rise in donations in 24 hours.* By Jessica Elgot. Accessed April 1, 2025. https://www.theguardian.com/world/2015/sep/03/charity-behind-migrant-rescue-boats-sees-15-fold-rise-in-donations-in-24-hours.

The Guardian. 2015d. "Images of drowned boy made only a fleeting change to refugee reporting." By Roy Greenslade. Accessed April 1, 2025, *The Guardian,* https://www.theguardian.com/media/greenslade/2015/nov/09/images-of-drowned-boy-made-only-a-fleeting-change-to-refugee-reporting.

———. 2015e. *Thousands join Solidarity with Refugees rally in London.* By Nadia Khomami and Chris Johnston. Accessed January 28, 2026. https://www.theguardian.com/uk-news/2015/sep/12/london-rally-solidarity-with-refugees.

Tilly, Charles. 1978. *From Mobilization to Revolution.* Reading, Mass.: Addison-Wesley.

Tomz, Michael. 2007. "Domestic audience costs in international relations: An experimental approach." *International Organization* 61 (4): 821–840.

Tversky, Amos, and Daniel Kahneman. 1981. "The framing of decisions and the psychology of choice." *Science* 211 (4481): 453–458.

UNHCR. 2015. *Crossings of Mediterranean Sea exceed 300,000, including 200,000 to Greece.* By Melissa Fleming. Accessed January 28, 2026. https://www.unhcr.org/news/stories/crossings-mediterranean-sea-exceed-300-000-including-200-000-greece.

Valkenburg, Patti M, Holli A Semetko, and Claes H De Vreese. 1999. "The effects of news frames on readers' thoughts and recall." *Communication research* 26 (5): 550–569.

Van der Brug, Wouter, and Eelco Harteveld. 2021. "The conditional effects of the refugee crisis on immigration attitudes and nationalism." *European Union Politics* (London) 22 (2): 227–247.

Velasquez, Alcides, and Robert LaRose. 2015. "Youth collective activism through social media: The role of collective efficacy." *New media & society* (London) 17 (6): 899–918.

Vis, Farida, and Olga Goriunova. 2015. "The iconic image on social media: A rapid research response to the death of Aylan Kurdi." *Visual Social Media Lab.*

Viterna, Jocelyn. 2013. *Women in war: The micro-processes of mobilization in El Salvador.* Oxford University Press.

Ward, Matthew. 2016. "Rethinking social movement micromobilization: Multi-stage theory and the role of social ties." *Current Sociology* (London) 64 (6): 853–874.

Weeks, Jessica L. 2008. "Autocratic audience costs: Regime type and signaling resolve." *International Organization* 62 (1): 35–64.

Wong, Wendy H. 2017. *Internal affairs: How the structure of NGOs transforms human rights.* Cornell University Press.

Yasseri, Taha, Helen Margetts, Peter John, and Scott Hale. 2016. *Political turbulence: How social media shape collective action.* Princeton University Press.

Appendix A

Full Survey Questionnaire: Public Perceptions of Human Rights Issues

1. What is your age in years?
   Open-ended

2. Which of the following best describes your gender?
   Male / Female / Non-binary or third gender / Prefer not to say / Other (please specify)

3. What is the highest level of education that you have completed?
   Some high school / High school graduate / Some technical school or college / Technical school or associate degree / College degree / Professional degree / Graduate degree

4. How often do you follow world news?
   Never / Sometimes / About half the time / Most of the time / Always

5. How much influence do you think people like you have in shaping public policy?
   None / Little / Some / A lot

6. How often do you use social media platforms (such as Facebook, Instagram, X/Twitter, TikTok, etc.)?
   Never / Rarely / Occasionally / Often / Very frequently

7. To ensure quality responses, please select the first option below.
   First option / Second option / Third option / Fourth option / Fifth option

8. How much did the message from the Alliance for Human Rights affect you emotionally?
   Not at all / A little / Moderately / Quite a bit / Very much

9. Describe in your own words how this message made you feel, and why.
   Open-ended

10. I feel knowledgeable about the political crisis in Myanmar and its impact on pro-democracy activists.
    Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

11. I feel knowledgeable about the societal and economic effects of granting asylum to political refugees.
    Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

12. I feel knowledgeable about the need to grant refugee status to individuals fleeing political persecution.
    Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

13. Providing refugee status to those escaping political persecution in Myanmar strengthens our democratic principles.
    Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

14. Political refugees from Myanmar face severe persecution, including imprisonment, torture, and threats to their lives.
    Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

15. Granting refugee status to individuals fleeing political persecution in Myanmar is a necessary humanitarian action.
Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

16. I feel like the issue of political refugees in Myanmar is relevant to my own life and values.
Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

17. I felt emotionally affected by the situation of political refugees in Myanmar.
Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

18. Reading about political refugees in Myanmar made me try to imagine what their lives would be like.
Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

19. To show you are paying attention, please select Somewhat disagree.
Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

20. If you were to share this message on social media, who would you want to share it with? Please list up to five individuals or groups.
Open-ended

21. When sharing the message, what would you write in your post? Write as if posting to your actual social media audience.
Open-ended

22. Reading the messages written by other participants, I...

(a) Felt the urge to help.
Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

(b) Understood why people cared.
Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

(c) Wanted to share more.
Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

23. Thinking of the situation of political refugees from Myanmar affects me emotionally.
Strongly Agree / Agree / Neither Agree nor Disagree / Disagree / Strongly Disagree

24. How likely are you to add your name to a petition to be sent to the United Nations Special Rapporteur for Human Rights, calling for stronger international protections for political refugees from Myanmar?
Extremely unlikely / Very unlikely / Somewhat unlikely/ Very likely / Extremely likely

25. How likely are you to share the message about political refugees from Myanmar on your social media platform?
Extremely unlikely / Very unlikely / Somewhat unlikely/ Very likely / Extremely likely

26. How likely are you to donate to support trusted humanitarian efforts protecting political refugees from Myanmar from persecution? (Your donation would go directly to organizations working on the ground to protect and assist those in need.)
Extremely unlikely / Very unlikely / Somewhat unlikely/ Very likely / Extremely likely

27. Would you be willing to be contacted again regarding this issue in the future?
Yes / No

Appendix B

Seemingly Unrelated Regression (SUR) Analysis

To ensure the robustness of our findings, I conducted several supplementary analyses. First, I compared the estimates with those from a standard Ordinary Least Squares regression (Model 1). Next, I provide an alternative SUR estimation that jointly models initial empathy and reinforced empathy as related but distinct outcomes, allowing the model to account for shared unobserved variance through correlated errors. The results in Table B.6 show that Model 3 demonstrates substantially better fit across all metrics. Importantly, the estimated effect of social media sharing on reinforced empathy remains significant and relatively stable across models (0.104 vs. 0.111), suggesting that this effect is robust to model specification. The coefficient for initial empathy in Model 3 is 0.405 and highly significant ($p < 0.001$), and the R^2 increases dramatically to 0.409.

Full Mediation Model Specification

The mediation analysis reveals several key insights that substantiate the emotional loop framework. As presented in Table B.7, digital engagement amplifies emotional responses beyond initial reactions, and this amplifying effect is particularly pronounced among those who already exhibit higher levels of empathy. As depicted in Figure B.9, social media sharing contributed meaningfully to increased willingness to participate.

Robustness Checks

I conducted a series of subgroup analyses focused on four key moderators: gender, age groups, and social media usage levels. Results as shown in Tables B.8-B.10 indicate that the effects of our experimental manipulations on reinforced empathy were consistent across gender, age groups, and pre-existing social media usage patterns.

Table B.6: Comparison of Models Predicting Reinforced Empathy

	(1)	(2)	(3)
	OLS	SUR	SUR (With Initial Empathy)
	Dependent Variable: Initial Empathy		
Personal Frame	0.411^{***}	0.281^{***}	0.411^{***}
	(0.090)	(0.074)	(0.090)
Motivational Frame	-0.342^{***}	-0.287^{***}	-0.343^{***}
	(0.091)	(0.074)	(0.091)
Intercept	1.788^{***}	1.802^{***}	1.789^{***}
	(0.243)	(0.240)	(0.243)
N	839	839	839
R^2	0.154	0.149	0.154
Adjusted R^2	0.146	0.086	0.403
Residual Std. Error	1.061 (df=830)	0.772 (df=831)	0.624 (df=830)
	Dependent Variable: Reinforced Empathy		
Initial Empathy	0.412^{***}	–	0.405^{***}
	(0.020)		(0.020)
Social Media	0.112^{*}	0.104^{*}	0.111^{*}
	(0.044)	(0.044)	(0.044)
Intercept	-1.587^{***}	-0.862^{***}	-1.573^{***}
	(0.145)	(0.173)	(0.145)
N	839	839	839
R^2	0.409	0.094	0.409
Adjusted R^2	0.404	0.086	0.403
Residual Std. Error	0.624 (df=830)	0.772 (df=831)	0.624 (df=830)
System SSR	–	1435.33	1258.14
McElroy System R^2	–	0.094	0.293
AIC	1599.94	4687.21	4249.35
BIC	1647.26	4752.68	4319.93
Residual Correlation	–	0.586	0.027

Note: $^{\cdot}p < 0.1$; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$.Control variables are included but not shown. Lower SSR, AIC, and BIC values indicate better fit. Higher McElroy R^2 indicates better fit.

Table B.7: Full SUR Mediation Model Results

Variable	Initial Empathy	Reinforced Empathy	Participation
Frame Personal	0.411***	–	–
	(0.090)		
Frame Motivational	−0.343***	–	–
	(0.091)		
Initial Empathy	–	0.405***	0.138**
		(0.020)	(0.047)
SNS Sharing	–	0.111*	–
		(0.044)	
Initial Empathy × SNS	–	0.092*	–
		(0.041)	
Reinforced Empathy	–	–	0.472***
			(0.050)
Intercept	1.789***	−1.573***	0.736**
	(0.243)	(0.145)	(0.245)
R^2	0.154	0.409	0.331
N	839	839	839

Note: Standard errors in parentheses. Control variables are included but not shown. Significance levels: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

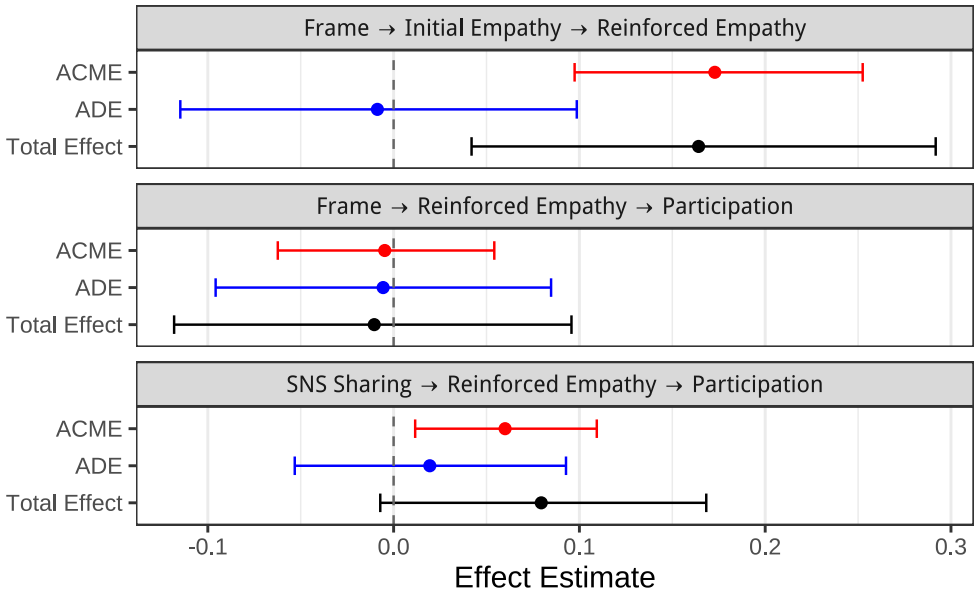


Figure B.9: Mediation Effects Across Emotional Pathways

Table B.8: Gender Moderation Analysis Results

Effect	Estimate	SE	t-value
Frame Personal	−0.442	0.414	−1.069
Frame Motivational	−0.379	0.417	−0.907
SNS Sharing	0.227	0.437	0.520
Gender	0.043	0.186	0.232
Frame Personal × SNS Sharing	0.674	0.612	1.101
Frame Motivational × SNS Sharing	−0.182	0.605	−0.301
Frame Personal × Gender	0.433*	0.250	1.731
Frame Motivational × Gender	0.035	0.259	0.136
SNS Sharing × Gender	−0.123	0.272	−0.452
Frame Personal × SNS Sharing × Gender	−0.432	0.380	−1.138
Frame Motivational × SNS Sharing × Gender	0.340	0.383	0.889

Note: $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$. Control variables included but not shown. Full model $R^2 = 0.104$, $F(16, 822) = 5.963$, $p < 0.001$.

Table B.9: Age Group Moderation Analysis Results (Selected Coefficients)

Effect	Estimate	SE	t-value
Frame: Personal × SNS Sharing × Age Group: 31–50	−0.097	0.522	−0.186
Frame: Motivational × SNS Sharing × Age Group: 31–50	0.186	0.545	0.341
Frame: Personal × SNS Sharing × Age Group: 51+	0.169	0.500	0.339
Frame: Motivational × SNS Sharing × Age Group: 51+	0.723	0.507	1.425

Note: Full model includes main effects and two-way interactions (not shown). Full model R^2 = 0.106, F(22, 816) = 4.417, p < 0.001

Table B.10: Social Media Usage Moderation Analysis Results (Selected Coefficients)

Effect	Estimate	SE	t-value
Frame Personal × SNS Sharing × Low SNS Use	−0.143	0.391	−0.365
Frame Motivational × SNS Sharing × Low SNS Use	−0.088	0.400	−0.220

Note: Full model includes main effects and two-way interactions (not shown). Full model $R^2 = 0.097$, $F(16, 822) = 5.541$, $p < 0.001$.

Appendix C

Sentiment Analysis and Topic Modeling

Prior to conducting sentiment analysis, I applied a series of standard text preprocessing procedures to ensure the quality and consistency of the textual data. I removed all missing or empty responses and converted all text to lowercase to reduce redundancy due to case sensitivity. I then removed special characters, punctuation, and non-ASCII characters, as well as any embedded URLs. I provide the detailed descriptive statistics for VADER sentiment scores across framing conditions in Table C.11. Table C.12 presents Kruskal-Wallis test results of differences in sentiment scores across framing conditions.

Table C.11: VADER Sentiment Scores by Framing Condition

	Informational			**Personal**			**Motivational**		
Metric	Positive	Negative	Neutral	Positive	Negative	Neutral	Positive	Negative	Neutral
Mean	0.063	0.142	0.795	0.060	0.152	0.788	0.089	0.098	0.813
Median	0.000	0.091	0.833	0.000	0.103	0.833	0.000	0.000	0.875
SD	0.112	0.166	0.189	0.109	0.173	0.193	0.139	0.153	0.197
Min	0.000	0.000	0.250	0.000	0.000	0.200	0.000	0.000	0.250
Max	0.600	0.750	1.000	0.579	0.800	1.000	0.667	0.750	1.000
N	362	362	362	365	365	365	358	358	358

Table C.12: Kruskal-Wallis Test Results for Sentiment Scores

Sentiment Metric	**H Statistic**	**df**	**p-value**	**Significant Pairwise Comparisons**
Compound	81.633	2	< 0.001	$\text{I} < \text{M}^{***}$, $\text{P} < \text{M}^{***}$, $\text{I} \approx \text{P}$
Positive	15.472	2	< 0.001	$\text{I} < \text{M}^{**}$, $\text{P} < \text{M}^{**}$
Negative	27.814	2	< 0.001	$\text{I} > \text{M}^{***}$, $\text{P} > \text{M}^{***}$
Neutral	5.691	2	0.058	N/A

Note: I = Informational, P = Personal, M = Motivational.
Significance levels: $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$.

I employed Latent Dirichlet Allocation (LDA), an unsupervised machine learning algorithm that identifies underlying topics by analyzing patterns of word co-occurrence across documents. Before applying the LDA algorithm, I tokenized the responses and lemmatized the text to reduce

words to their base forms and removed rare terms that appeared in fewer than five documents, as well as overly frequent terms that appeared in more than 80% of the documents.

To determine the optimal number of topics, I evaluated models ranging from 1 to 10 topics using three complementary metrics: coherence score, perplexity, and topic exclusivity. Figure C.10 presents the results of this evaluation. I ultimately selected a three-topic model (coherence = 0.3234) based on four considerations: (1) the marginal difference in coherence between the two- and three-topic solutions (a 2.47% increase), (2) alignment with the experimental design, which included three framing conditions, (3) the superior interpretability and theoretical relevance of the three-topic solution, and (4) the model's stability across multiple runs.

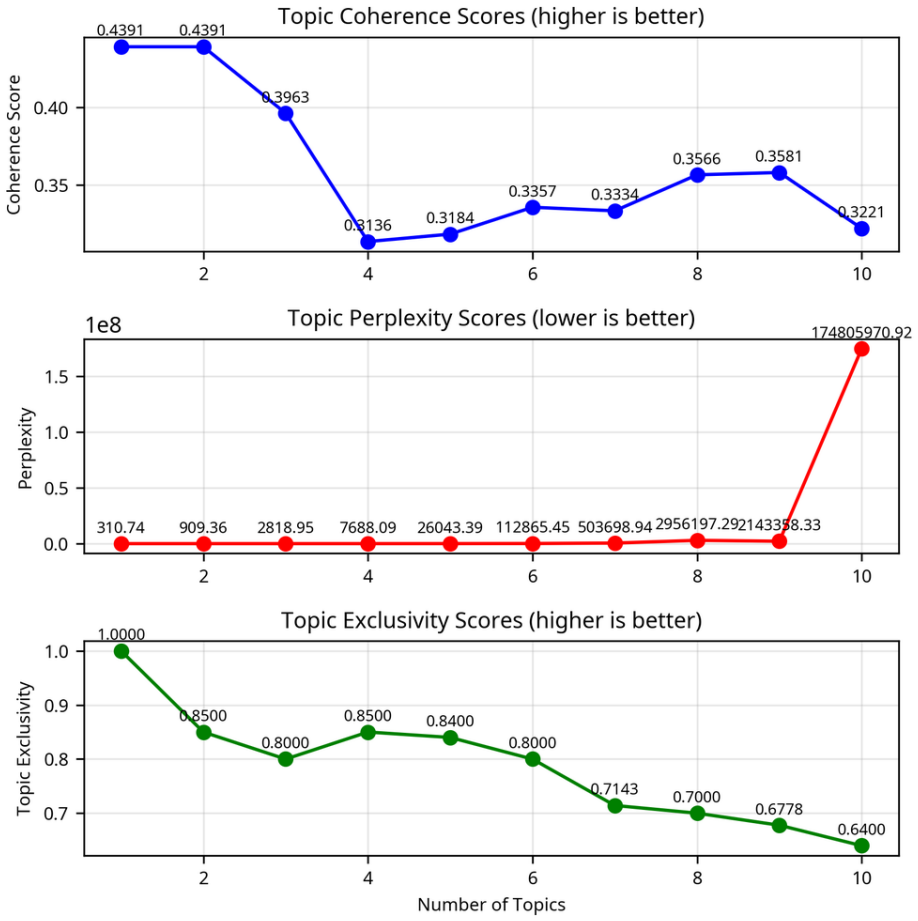


Figure C.10: Topic Modeling Metrics by Number of Topics

Table C.13 displays mean scores on outcome variables across the three dominant topics iden-

tified through topic modeling. A series of Kruskal-Wallis tests revealed significant differences across topics for all outcome variables, including initial empathy ($H = 15.278$), reinforced empathy ($H = 14.853$), initial mobilization ($H = 9.629$, $p = 0.008$), post-treatment mobilization ($H = 11.422$, $p = 0.003$), and consensus ($H = 8.428$, $p = 0.015$).

Table C.13: Mean Outcome Scores by Topic

Outcome Variable	**T1**	**T2**	**T3**	**H Statistic**	**p-value**
Initial Empathy	2.93	2.88	3.20	15.278	<0.001
Reinforced Empathy	3.47	3.37	3.70	14.853	0.001
Mobilization	3.20	3.23	3.54	19.777	<0.001
Consensus	3.77	3.69	3.93	8.428	0.015

Note: T1 = Situational, T2 = Human Rights, T3 = Emotional. H and p-values are from Kruskal-Wallis tests.

This analysis is not free of limitations. First, topic modeling using Latent Dirichlet Allocation (LDA) is sensitive to random initialization, which can affect topic stability. To address this, I set fixed random seeds and conducted multiple model runs to ensure consistency of the resulting topics. Second, the brevity of many open-ended responses (averaging 23.4 words) may have constrained the depth and nuance detectable in both the sentiment and topic modeling analyses. Finally, while VADER is widely used for sentiment analysis in social science research, it may not fully capture complex emotional subtleties or rhetorical features such as sarcasm, particularly in contextually ambiguous language.