Strange Frame Fellows: The Evolution of Discursive Framing in the Opt-OutTesting Movement[*]

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Abstract:

Background/context: In recent years, opposition to accountability policies and associated testing has manifested in widespread boycotts of annual tests—mobilized as the "opt-out movement." A central challenge facing any movement is the need to recruit and mobilize participants. Key to this process is *framing*—a discursive tactic in which activists present social issues as problems that require collective action to solve. Such framing often relies on compatible political and ideological commitments among activists and potential recruits. Yet, the opt-out movement has successfully mobilized widespread boycotts in diverse communities. How have participants in the movement framed issues relating to testing and accountability?

Purpose/Objective/Research Question/Focus of Study: I explore the discursive tactics of participants in the opt-out movement by analyzing how they frame issues related to testing and accountability over time. I ask two research questions: (1) What frames did participants in opt-out aligned social media groups use to convince others that standardized accountability tests are a problem and build support for the movement? (2) To what extent and how did the deployment of frames change over time?

Research design: I conduct a mixed-methods study combing qualitative content analysis to identify frames and computational analysis to describe their co-deployment over time.

Data Collection and Analysis: I compiled a text corpus of posts to opt-out aligned social media pages from 2010-2014. I analyzed posts using open coding to identify frames used by participants in online communities. Frames were categorized by their orientation—the general way in which they framed the problem of testing and accountability. I then analyzed the co-deployment of frames using network analysis and hierarchical clustering.

Conclusions/Recommendations: The longitudinal analysis of frames reveal key differences in the frames used by participants. While more politically-oriented frames—those characterizing testing as a social issue affecting the public schools at large—were common in early stages of the movement, less overtly political frames—those characterizing testing as an individual issue affecting children and local schools or a technical issue—became more prominent over time. Over time, socially-oriented frames became decoupled from other frames, showing independent patterns of deployment. This suggests that the movement may have benefitted from de-emphasizing politically oriented frames, but that it lacked an overarching shared narrative, which has to potential to limit how it might affect accountability policies and testing.

Standardized testing is a longstanding and controversial component of public education in the United States. Its role greatly expanded with the nationwide adoption of standards-based accountability under the No Child Left Behind Act of 2001. The act mandated the use of standardized tests to assess the performance of students, teachers, and schools, and hold them accountable to performance benchmarks. Despite its status as a perennial source of controversy and debate (Koretz, 2009), it was not until almost a decade after the adoption of NCLB that widespread collective action opposing standardized testing emerged in earnest in the form of boycotts of annual accountability tests. This raises many questions about factors that contributed to this mobilization—in particular, how did activists in the movement convince other parents to mobilize and join boycotts.

Mobilization is a central challenge facing any social movement. Activists must convince others that their cause is worth dedicating time and resources to, and to risk repercussions from participating in disruptive action (Willer, 2009). One key mobilization tactic is the use of discursive frames. Discursive frames are cognitive schema that create a framework for interpreting social events (Snow et al., 1986). Activists craft frames to present social issues as problematic and requiring change, using these frames to recruit and mobilize participants.

To craft frames, activists often draw on the beliefs and values embedded in political ideologies so that they appeal to like-minded individuals (Benford, 1993a; Benford & Snow, 2000). Shared ideological commitments give movements unity (Zald, 2000). While generating unity, explicitly activating political ideology could limit participation from individuals who do not affiliate with those identities, since ideology strongly informs social and political opinions (Baldassarri & Gelman, 2008; DellaPosta, Shi, & Macy, 2015). This raises the question of how

movements that seek to mobilize a politically diverse base create and frame messages about their core issues.

In this study, I document the evolution of discursive tactics used by participants in digital communities aligned with the opt-out movement. Using text data consisting of posts to opt-out-aligned social media pages, I show how the frames used by participants transitioned from politically- and socially-focused, characterizing testing as a tool used by "big government" or corporations (or both) to undermine public schools, to individualistically-oriented frames, characterizing testing as harmful to children and local schools. These frames largely avoided political content and came to dominate the frames used by activists.

Framing standardized testing

Activists use framing to build support for their cause, convince others to join a movement, and motivate collective action (Bail, 2016; Snow et al., 1986; Snow, Soule, & Cress, 2005). In order for opt-out activists to build a movement for change, they must convince others that the use of standardized testing for accountability purposes is indeed problematic and requires collective action to change. Framing involves identifying a problem, its cause, and the parties responsible–a process referred to as diagnostic framing (Benford & Snow, 2000; Coburn, 2006). Activists intentionally craft frames to provide and interpret schema that will persuade others to support their cause and join in collective action. To take the example of standardized testing, one might view testing as an important tool, providing parents and educators with a snapshot of student progress which they can use to guide instruction. Standardized tests are perceived as neutral, technical instruments that support students learning. However, an activist in the opt-out movement may offer a contrasting

interpretation–that standardized testing provides no useful information for teachers or parents, and that their real purpose is to undermine public confidence in schools so that politicians can privatize them. Under this interpretation, standardized tests are not neutral, technical instruments, but are part of a political effort to destroy public schools. A problem is defined and blame is assigned.

Politics and ideology in the framing process

A shared political ideology provides a movement with cohesion, agreement, commitment, and motivation (Benford, 1993a; Zald, 2000). Ideologies encode values and beliefs that shape how individuals view the world, their sense of justice, and their political and social opinions (Baldassarri & Gelman, 2008; Benford & Snow, 2000; DellaPosta et al., 2015; Oliver & Johnston, 1999). Ideology is a powerful predictor of social and political attitudes and behaviors (Baldassarri & Gelman, 2008; DellaPosta et al., 2015; Feinberg & Willer, 2015). Ideologies serve as a semantic and cultural resource for activists, allowing them to infuse frames into broader meaning systems (Bail, 2016; McCammon, Muse, Newman, & Terrell, 2007). When crafting frames, activists often encode beliefs and values embedded in specific ideologies so that they resonate, or appeal, to target audiences, exploiting semantic connections between the beliefs and values encoded in the frame and in the ideology (Swidler, 1986; Weber, Heinze, & DeSoucey, 2008).

This creates challenges for activists who seek to mobilize populations with diverse political and ideological commitments. For frames to transform bystanders into participants, target audiences must judge them credible interpretations of reality. Shades of differences in ideological commitments can shape how activists frame the core issues of the movement

(Benford, 1993a; Whittier, 2014). Benford's (1993a) study of nuclear disarmament activists found that ideological differences between moderate, liberal, and radical wings of the movement lead to a fracturing of the movement, due to disagreements over how to frame the problem of nuclear proliferation and how to frame solutions to that problem. Such lack of unity creates challenges for recruitment and mobilization.

Recent research suggests that there are circumstances when individuals support positions that do not match their political ideology, even when the issue is highly politicized. First, when activists can credibly frame issues as having a beneficial local impact, people may support issues counter to their political identity (Dokshin, 2016). Second, partisan individuals will support positions associated with an opposing political ideology if it is framed in terms of their moral values. Feinberg and Willer (2013, 2015) have shown that support for contentious issues increases when framed to resonate with a target audience's moral values.

While the evidence suggests that framing strategies that foreground local issues or tap into shared moral commitments can build bipartisan or cross-partisan support, it still leaves open an important question: How do activists motivate collective action in absence of any ideological or political consensus among targets of mobilization? Can activists craft frames and build a narrative for the movement that can overcome barriers to collective action? The case of the opt-out movement in New York provides an opportunity to explore framing processes in a movement that seeks to mobilize a diverse base to participate in boycotts of annual accountability tests.

In this study, I address two research questions:

1) What frames did participants in opt-out aligned social media groups use to convince others that standardized accountability tests are a problem and build support for the movement?
2) To what extent and how did the deployment of frames change over time?

Research Design

I conducted a qualitative case study of the discursive tactics used by opt-out aligned Facebook groups based in New York, covering the 2012-2013 and 2013-2014 school years. Using data from Facebook groups provides unique affordances to the study of framing. First, Facebook is the most widely used social media site, with 68% of the U.S. adult population on Facebook (Greenwood, Perrin, & Duggan, 2016). This suggests that relevant audiences had relatively easy access to opt-out groups. Second, while Facebook groups are moderated by administrators (deleting posts, accepting or rejecting members), once admitted, all group members are free to post whatever they wish. This allows me to avoid problems that plague other studies of framing, such as selection bias that leads to the observation of only successful frames or those crafted by movement elites (Benford, 1997). In addition, with longitudinal data, I observed both successful frames (those continually used by activists) and frames that failed. This feature of the dataset is particularly important for this study, since it allows for the observation of a wide range of frames that may align to different ideological perspectives.

However, accompanying these affordances are some notable limitations. The use of Facebook data does not fully overcome the issue of selection bias, since (1) not all adults use Facebook, (2) even if they do, they may not use it for activism, (3) group administrators may moderate posts. In principle, an administrator could delete any posts that they do not like,

refuse memberships, and remove members. Such active moderation could create a potentially biased sample, especially if it were correlated with the ideological bent of the posts. Members can also leave Facebook at any time and delete their posts or comments. In addition, I have access only to publicly available data. Many of the opt-out affiliated groups who have a Facebook presence have private group pages. It may be the case that highly partisan activists prefer private Facebook groups, and thus, I am missing an entire set of frames used by activists.

In light of these limitations, I characterize this study as an investigation of the public presentation of frames by movement participants. The study of public facing groups is relevant for the study of framing, since it is one forum activists may use to recruit and mobilize participants.

Data Collection

To identify groups, I searched Facebook groups and pages using the terms "New York" and "Opt-out." With the help of two research assistants, I reviewed each group page to ensure it met the criteria for inclusion in the study. To be included, groups had to (1) express an affiliation with New York, (2) advocate for boycotting annual testing, (3) be a public group or page, and (4) be active between 2010 and 2014. This resulted in 31 Facebook groups or pages. Table 1 displays information about these groups. Long Island Opt-out Info was by far the most active group during this period and to date is the largest.

Once I identified groups, I used Facebook's Application Programming Interface to form a text corpus consisting of all public posts between the 2010-2011 and 2013-2014 school years. I subset the text corpus to include only posts that mentioned the keywords "test,"

"testing," "exam," or "assessment." I then conducted, with the aid of two research assistants, a preliminary analysis of 300 randomly sampled posts where we coded each for whether the content of the posts contained framing related to standardized testing. We discovered that posts with fewer than 50 words were too concise to contain a codable instance of framing. I therefore removed any posts with fewer than 50 words. Mentions of opt-outing and testing were rare in the 2010-2011 and 2011-2012 school years. I excluded these from the final dataset. The final dataset consisted of 2,700 status posts that mentioned testing, of which 756 contained instances of framing (see Figure 1, Panel A).

Analysis of discursive frames

The analysis of frames occurred in two parts. First, I coded all posts using a two-cycle coding approach (Miles et al., 2013). In the first coding cycle, I developed coding categories inductively, because I did not know *a priori* how group members would frame issues related to accountability testing. I read each post and coded any mention of testing or related issues that characterized testing as problematic or assigned blame, staying close to the language of the post. In the second cycle, I analyzed the frames and grouped related codes into more general pattern codes based on the substance of the frame. For example, the frames *Standardized testing leads to narrowing of the curriculum* and *Standardized testing leads to one-size-fits-all instruction* I categorized into the pattern code *Standardized testing leads to bad instructional practices and policies*. These pattern codes form the core of the analysis in this paper. Table 2 displays the frame codes and pattern codes.

For the second part, I analyzed the frequency and clustering of frames over time. These dimensions capture the extent to which members across opt-out-aligned groups crafted frames

into meaningful and compelling narratives. The frequency of frames consists of the number of times group members used a frame and its proportion of the overall number of frames used. A frame that is used repeatedly helps to create an overall narrative for the movement and can become a "master frame" that creates a unified worldview for participants in the movement (Benford & Snow, 2000).

Clustering captures the extent to which frames are deployed in similar ways, which can support the creation of a cohesive narrative through discursive links between different types of frames. I created two networks of frame-co-deployment–one for the 2012-2013 school year and one for the 2013-2014 school year. Frames were linked if they were used in the same pose. This resulted in adjacency matrix where each {*i*, *j*} cell of the matrix was a count of the number of times frame *i* and frame *j* were deployed in the same post. Using the `sna` package in R (Butts, 2016), I then determined the Euclidean distance between each pair of frames. The Euclidean distance between frame *i* and frame *j* is defined as:

$$d_{ij} = \sqrt{\sum_{k=1}^{n} [\,(X_{ik} - X_{jk}) + (X_{ki} - X_{kj})]}$$

X_{ik} represents the number of times frame *i* appears with frame *k*, X_{jk} represents the number of times frame *j* appears with frame *k*, and so on. The term *n* is the total number of frames in the analysis. The distance d_{ij} is reduced when *i* and *j* have many *k's* in common. Frames that are close together share a similar pattern of deployment. I then used complete-linkage hierarchical clustering to determine clusters of frames based on their Euclidean distance. This algorithm forms clusters based on the largest distance between the members of two potential clusters

(Wilks, 2011). Clusters, in essence, are formed by the groups with the smallest largest distance between pairs of frames. I visually depict the clustering of frames using dendrograms.

Findings

The growth of the anti-testing movement in New York

Between 2010 and 2014, over 40 opt-out-aligned Facebook groups were founded (Figure 1, Panel B). Likewise, beginning in the 2013 school year, a declining number of students in K-8 public school participated in the annual reading and math assessments. This number declined each year, with over 20% of students opting out of the 2015-2016 tests statewide. The overall participation rate masks a significant amount of between-school variation in opt-out rates. Between the 2012-2013 and 2015-2016 school years, some schools saw up 80% of students opting out of the annual tests.

This rate of boycotting has significance for schools and districts. Federal law requires the participation of 95% of students overall and within specified subgroups of students, else there is the risk of sanctions. Moreover, individual students face risks, since schools often use test scores to identify students for placement into academic services, for admission into honors programs, or even as a criterion for grade promotion.

Much of the early activity was focused in Suffolk and Nassau counties, which together comprise the eastern portions of Long Island and later spread to other regions in the state. The Facebook group "Long Island Opt-out Info" was the largest, most active, and among the earliest of groups specifically advocating for boycotts of the annual administration of standardized tests. The group was large relative to other groups in this study and very active. Indeed, posts to this group make up the majority of posts analyzed in this study. The social and

political context of Long Island reflects the challenges of mobilizing a politically diverse base. For the 2010 statewide election, about 48% of voters in Nassau county and 49% in Suffolk county voted for conservative candidates.[1] The counties are also majority white and affluent relative to urban and rural areas, matching the demographic characteristics of participants in the opt-out movement (Pizmony-Levy & Green Saraisky, 2016).

Discursive framing in the opt-out movement

In Figure 1, Panel A, I show the number of posts per month and the cumulative number of posts that mentioned testing from September 2012 through July 2014. Discursive activities on Facebook groups were very limited until the 2012-2013 school year, when the number of posts increased dramatically. The two vertical lines indicate the onset of accountability testing, which lasted for two weeks. There is a distinct spike in the number of posts lead up to and during the testing periods, showing that group members became much more active during test administrations.

The analysis of posts revealed 47 distinct frames used by groups members to problematize the use of standardized tests for accountability purposes. These frames ranged from concerns over the impact of testing on classroom practices, to frames that questioned the validity of the tests, to suspicions that government or corporate entities use testing to attack public schools. Some frames, like those capturing concerns about the impact on classroom practices, are reflected in the research literature on accountability (Au, 2007; Booher-Jennings, 2005; Dee et al., 2013; Jacob, 2005; Koretz, 2009), while others, like those expressing suspicions about corporate influence on schools, are reflected in the popular literature (Ravitch, 2013), and thus connected to existing discourse on the use of accountability tests in schools. Many of

these frame mirror findings from existing research on the opt-out movement (Pizmony-Levy & Green Saraisky, 2016; Supovitz et al., 2016).

The frames used by participants had five orientations (Table 2). *Locally-oriented* frames cast testing as a threat to children and local schools. *Socially-oriented* frames saw testing as a tool used by malicious actors to harm the public school system. *Altruistically-oriented* frames characterized testing as harmful to non-dominant populations of students. *Technically-oriented* frames attacked the construction, use, and validity of the tests as instruments of evaluation. Finally, *professionally-oriented* frames viewed testing as harmful to teachers.

The focus of frames shifted over time. Participants in these online communities shifted their emphasis away from concerns for the connection between testing and broader social issues to concerns that foregrounded locally-oriented concerns and questions about the technical legitimacy of the tests over time. While such local and technical concerns were salient in the 2012-2013 school year, by the 2013-2014 school year, they became more prominent and formed a separate narrative within the groups. Frames that expressed concerns for vulnerable populations or the state of public education more generally became deemphasized. Both locally-oriented and technical frames downplayed political issues, which were more salient in frames the highlighted social issues.

In this section, I first present three types of discursive tactics used by group members. I then draw on the cluster analysis of frames to show that the deployment of these frames changed over time, with local and technical frames taking on a prominent role. Over time, activists increasingly used frames that allow audiences to view testing as a technical and local problem, deemphasizing it as a social problem that harms the public school system at large or vulnerable populations.

1. Spurring local concerns: Direct harms to children and local schools

A frequent charge leveled by members of opt-out aligned groups was that accountability testing did harm to the well-being of children and their schools. The source of this harm was varied. The tests themselves caused harm because they were ambiguous, tricky, or developmentally inappropriate, causing students to become demoralized and to "feel dumb." The preparation for and administration of the tests caused anxiety and fear. The high-stakes nature of the tests turned classrooms into test-prep pressure cookers that created an atmosphere of stress and made children grow to dislike school and learning. The pressures of the test lead teachers to narrow curricula and adopt didactic teaching practices.

The *harm to children* frames took three forms: physical, emotional, or academic harm. Most commonly, group members framed testing as responsible for excessive stress that, at times, manifested in physical symptoms. The language used was often extreme, equating testing with child abuse and trauma:

> My 8 year old daughter has been complaining of stomach aches for the past few days. She is having so much anxiety over this test. We took her to her favorite restaurant for dinner yesterday in hopes that she would eat! She didn't!!! How come it's alright for the state to put this much pressure in our kids? Isn't this a f[o]rm of child abuse?[2]

When not explicitly characterizing testing as child abuse, group members frequently cited the stress caused by testing as a reason to oppose it. Typically, these frames were accompanied by stories of the experiences of the children of group members, who recounted agonizing nights of test-prep homework or weeks or anxiety leading up to the test dates. One group member shared a story about her child's growing stress after he began to struggle with reading leading up to the test:

> I just feel this is all too much for him. Now for the last week or so he has been complaining about "heartburn"..he has a burning in his throat and chest..making an appt. for the dr.....a 9 year old with heartburn? I am sure it's the stress at school..this is all so much

Another shared a story of her child's struggle with test-prep homework:

> It was never an issue for my now 10th grader. Doing the test packets at home with my 3rd grader was torture - he was stressed and crying - I can only imagine what it was like in class. He told me crying one time that if he got a 2 on the test, he would get in trouble. We are done[.]

In each case, the group members depicted the tests as the source of enormous stress and anxiety that overwhelmed their children and impacted their health and daily lives.

Group members also claimed that the tests caused academic harm, either by forcing teachers and schools to adopt bad instructional practices or by making children dislike school. They argued that pressures of testing, for example, created a negative atmosphere in the classroom, since it forced teachers to focus on increasing test scores. Many group members claimed that overemphasis on testing caused teachers to adopt "teaching to the test" or "test prep" practice, crowding out genuine learning experiences, as the following post expresses:

> Just to prove how our teachers are being forced to "teach to the test" My son's teacher (6th grader at a middle school) put a list of 50 words up that he told the class they "need to know" to be able to take "the test".....AND this same teacher is now holding 2 periods of Reading.....to do practice ELA's! So much for READING.

Similarly, group members blamed tests for leading schools to narrow their curriculum, deemphasize subjects not tested, and eliminate extracurriculars to make room for more test-related activities. Group members argued that this resulted in an impoverished educational experience for their children and robbed them of a rich and varied curriculum. One group member argued that the narrowing of the curriculum meant that students missed out on developing important social skills:

> So sad but true. If it isn't going to be tested, it often isn't taught. To[o] bad tests couldn't be created for ethics, morality and empathy towards others. These are the overlooked social skills that are developed, or should be, early in a child's education. They come through classes such as gym and art and music where

> children share and create and compete with others. But when these classes are cut and replaced with test prep, the children and we as a society lose out.

On the whole, this group of frames cast accountability testing as harmful to children and their educational experience.

2. Technical troubles: Attacking the legitimacy of the tests

In a second discursive strategy, group members used frames that highlighted technical issues with the tests to undermine their legitimate use. Group members claimed that the tests were poorly designed, with ambiguous or confusing answers, were not developmentally appropriate, did not capture students learning, were not tied to classroom content, were not research-based, or were not validated as instruments of evaluation. Occasionally, group members linked these technical issues to broader social problems, such as the role of corporations in public schools, but for the most part, they remained focused on the tests themselves.

Some of the most prominent frames that members used to attack the legitimacy of tests questioned their use as instruments of evaluation. These frames came in several varieties. Group members claimed that the tests were a narrow and reductive way to evaluate children, using the slogan "children are more than a number." One group member emphasized that such tests missed the "human aspect" of learning:

> Data can be used as a tool to make informed decisions within a school district. However, there comes a time when the data…the numbers…the statistics…is taken too far. When our children are being used as statistics…not to see how well THEY are doing, but to gage how well our TEACHERS are doing…that is when the data is taken to another level. If you only measure the statistics, you miss the human aspect.

This post also captured another type of frame that attacked the legitimacy of the tests–that the true purpose of the tests was something other than assessing student progress. This group

member claimed that the purpose was teacher evaluation. Others claimed that the actual purpose was to collect private information for government or corporate entities.

In another set of frames, participants claimed that the tests were poorly designed, ambiguously worded, or riddled with errors, invalidating their use as instruments of evaluation. For some, standardized tests in general were invalid tools of measuring student learning. For others, the particular Common Core-aligned tests were flawed, confusing, with arbitrary proficiency cutoffs, rendering them invalid. One group member expressed this latter point:

> The tests have been here for a while. The difference is teachers used the data from the tests to improve their instruction. These new cc tests are poorly written and we will never be able to use the data effectively because we can't ever see the tests again. And the amount if time kids need to sit Is ridiculous.

Group members also framed the tests as developmentally inappropriate, again casting doubt on their legitimate use. Frames of this type tended to expressly identify the Common Core-aligned tests as problematic, while previous standardized tests were considered fine. One group member linked the developmental inappropriateness of the Common Core-aligned test to the idea that the tests are abusive:

> I look to these new Common Core standards and every bell in my head is ringing. I ignored these bells in the past and I vowed NEVER to ignore them again. When you introduce mathematical concepts that are developmentally inappropriate, then test that child on these concepts and mark them as having failed, how is that not abusive? You are essentially giving them a task they cannot do and then telling them they are stupid. Now do that over and over and over again. Are these the rigorous results we are looking for? Or is this simply abusive?

This participant linked the three frames in this post. First, that the Common Core tests were the source of the problem. Second, that the problem with the Common Core tests were their lack of developmental appropriateness. And third, this lack of developmental appropriateness caused harm to children.

Finally, group members challenged the legitimacy of the tests by framing them as meaningless, unable to provide teachers or parents with useful information to drive instruction. In these posts, group members argued that, due to the administration, grading, and proprietary nature of the tests, teachers were unable to use them for diagnostic purposes to guide instruction and help students improve. One member captured this idea succinctly:

> The New York State ELA and Math Tests are given in April, taking up to 6 full days. The results are not given back till August. Worse yet, neither teachers nor parents are allowed to see the tests. This means these time consuming, stress ridden tests, which shape pedagogy for moths before in many schools HAVE NO EDUCATIONAL VALUE FOR THE STUDENTS WHO TAKE THEM!!! Because of timing and test secrecy, they cannot be used to help individual students identify their weaknesses and improve their skills.

Taken together, group members wrote posts that challenged the legitimacy of the tests by questioning their construction, validity, and purpose. By framing tests in such a way, they argued that the tests were not worth the time and effort, encouraging others to participate in boycotts.

3. Hands off my school (system): Threats to public education and local control

Participants framed testing as a threat to the public school system and to the local control over educational resources. These frames came in two distinct flavors. The first framed testing as a tool used by government or corporate entities to exploit or takeover the public school system. These frames expressed a broad concern for the state of public schools. They also encoded political positions, harboring suspicions for either the role of government in school affairs or the role of the corporations and free-market logics. The second framed testing as a threat to local control over educational resources. These frames expressed a local concern that testing could allow the state government to usurp local decision-making and resources.

Unlike the first flavor, these frames did not have a notable political component or express concern for the public school system at large.

Group members frequently framed the tests as a tool for corporations to exploit or privatize the public school system. In the initial stages of the movement, this frame was among the most salient. Group members claimed that corporate entities used testing to profit off schools and taxpayers. They viewed tests as a tool to undermine public confidence in schools, paving the way for efforts to expand charter schools and privatize the public school system.

Group members often framed children as "guinea pigs" of corporations, who used tests to extract profits from school districts:

> My child is not a guinea pig for some corporate CEO who is looking to "race to their top" as they siphon middle class tax dollar out of our local school districts and into their BIG WIDE OPEN WALLETS.

But corporations were not the only target of blame. Some saw the same threat emanating from the government, especially the federal government, rather than corporations. The government used tests to control and takeover local schools. These frames often linked to the Common Core or to federal initiatives like Race to the Top:

> And… that standards, curriculum and tests are being "nationalized", ie. the federal government is taking complete control over our children's education through the Common Core State Standards initiative. Never before happened in our country. This is a loss of freedom for education (local schools, school board and teachers) and parental rights. You can read more if desired on Parents and Educators Against Common Core Standards. They have a great many articles which will allow you to do your own research.

These frames often encoded more conservative suspicions about the role of government in the public school system. In the following post, a group member argues that the federal government has developed tests that students will fail, giving them more reasons to meddle in local affairs:

> The problem we have is the government has become too big. We need to remove the Federal Dept of Education and allow the local school districts figure out how to teach our children. The wealthy have

> nothing to do with this. By implementing difficult tests students will fail, this gives government and unions an excuse to hire more teachers and raise our taxes to keep them employed.

While these frames staked out more political territory to frame the problem of testing, many group members argued that the government and corporations worked together to undermine or exploit schools. These frames expressed populist concerns about the role of elites in exploiting the public school system, a sentiment expressed in this post:

> The assessments are not a measure of how well students achieve Common Core Standards. They are a weapon for financial interests to make tons of money while they train our children to work for them…. The assessments are a mechanism for the business interests aligned and empowered by the government to control the education system.

Members often framed politicians as enabling corporate entities to infiltrate and exploit the public school system, using testing to show that school were "failing" and required intervention or closure:

> The tests are designed to prove failure so that many self-interested politicians and corporate masters can say that schools and teachers are failing…instead of addressing poverty and social conditions, it is much easier to attack schools and teachers and then funnel public money to private interests, corporations, and charter schools.

The idea that the tests were "designed for failure" was a pervasive theme in these frames. Another group member expressed this, saying "Fail the children, fire the 'under-performing' teachers, close schools and create charter schools." By designing tests that children would inevitably fail, some group members argued, policymakers or corporations could intentionally undermine confidence in the public school system, justifying closures and the expansion of charter schools.

While group members used these frames to characterize testing as a tool for attacking the public school system at large, some framed this idea more locally, as an attack on their local school. These frames expressed concerns that testing was part of an effort to takeover local

schools, threatening local control over educational resources. In an extensive post, one group member saw testing as a way for the state government to control her local school:

> My school district is a very healthy and academically thriving school district…. The point is that healthy schools from district to district and state to state are being lumped into this reform because people like our Commissioner John King have focused primarily on the issue of failing schools who are failing students from lower socio-economic backgrounds and minorities. I think that is great..focus on those students and schools, but keep your hands off the districts whose taxes have been paid to produce quality and have succeeded thus far. Keep his hands off our tax dollars, our brick and mortar, our children….

This group member saw a place for government intervention: in schools that served primarily low-income students and students of color. However, she found such an intervention as inappropriate for her school district.

This set of frames characterized testing as a tool used by pernicious actors to undermine confidence in the school system and to wrestle control away from local schools. In contrast to the preceding frames, these frames often expressed a political perspective on testing, harboring suspicions about the role of the government or corporations, or both, in the public school system. Unlike other frames, these frames were not always cast in local terms, but expressed a broader social concern over the state of public education in America.

From social to local: Shifting the locus of the problem of testing

The preceding analysis described how participants in opt-out-aligned social media groups deployed frames to problematize standardized testing. How activists deploy frames helps to create unifying themes that may provide narrative cohesion for the movement (Olsen, 2014; Polletta, 1998a, 1998b). Participants did not use frames in isolation, but deployed multiple frames in the same post, often in the same sentence. The co-deployment of frames can help to create links between different ideas about testing, tapping into various reasons that may motivate audiences and creating discursive cohesion (Benford, 1993b; Polletta, 1998a, 1998b).

It may also reveal multiple narratives staking out competing ideological spaces, suggesting a discursive fracturing of the movement (Benford, 1993a). Such fracturing can make motivating social action challenging. Over time, participants in online communities deemphasized frames that cast testing as a social problem impacting the public school system and vulnerable populations, like low-income students. Frames that captured local concerns–about the impact of testing on the well-being of children and local schools–and those that attack testing on more technical grounds grew in prominence and took on distinctive, independent discursive roles. These frames encoded an ideology of individualism and concern over one's local communities, rather than broader concerns for how testing may affect others.

Frames that cast testing as a local and technical problem shared a feature that sets them apart from socially- or altruistically-oriented frames: they were less overtly political. Socially-oriented frames, such as those that frame testing as a tool used by corporations to privatize the school system, had a more political flavor than those that framed testing as harmful to children. While in the initial stages of the movement, socially-oriented frames were the most frequently used, by the 2013-2014 school year, they became less common (Figure 2).

Analyzing the clustering of frames shows that the discursive role of local and technical frames shifted and became more independent of the socially-oriented frames. Figure 3, Panel A shows the clustering of frames categories for the 2012-2013 school year. There were three distinct clusters of frames. The first cluster contained four frames, two expressing localized concerns (that tests harm children and that tests lead to poor instructional practices), one expressing a social concern that corporations use testing to takeover public schools, and one expressing technical concerns about the use of standardized tests for evaluative purposes. The next cluster contained three frames capturing local concerns (that testing wastes educational

resources, threatens local control, and violates privacy), one captured social concerns about government overreach in public schools, one expressing concerns that testing harms teachers professionally, one expressing altruistic concerns about the connection to social issues related to non-dominant groups, and one addressing the technical issue that testing does not provide useful information. The final cluster contains two frames, one expressing concern that testing harms students from non-dominant groups and one that expressing the concern that tests are designed to undermine confidence in public schools. Notably, the first cluster occupies a distinct discursive space, while the other two clusters are more closely related.

By the 2013-2014 school year, a distinct change occurred where socially-oriented frames became decoupled from other types of frames (Figure 3, Panel B). They formed their own cluster, along with frames that attacked the usefulness of the tests. The harm to children, bad instruction, and illegitimate evaluation frames formed a separate cluster, suggesting that these frames were deployed in similar ways, creating a cohesive narrative about the use of tests in schools. The remaining frames formed a third cluster, composed of frames capturing of variety of local, technical, social, and altruistic issues. The locally-oriented and technically oriented frames that comprise the top cluster in the dendrograms were also the most frequently used frames during that time period, suggesting that they took on a prominent role in the framing of issues around testing in the groups.

Over time, group members deemphasized frames that characterized testing as a means that the government or corporations use to exploit or takeover the public school system relative to frames that depicted testing as a local and technical problem. These frames formed unique and separate discursive spaces. At the same time, group members increased their

reliance on frames that cast testing as harmful to children and local schools and began to use these frames in patterns independent of others.

Discussion

Participants in social movements use framing to build support and motivate action. Scholars typically conceptualize movements as resting on a shared, if contested, ideological foundation that provides meaning, coherence, and a source of identity (Zald, 2000). Indeed, a lack of shared ideological commitments can fracture movements (Benford, 1993a) or prevent coalitions from forming (Whittier, 2014), making coordinated collective action challenging. Participants in the opt-out movement faced the challenge of mobilizing an audience with diverse potential ideological and political commitments. The evidence presented here suggests these participants used frames that often avoided specific political commitments. I found that while socially-oriented frames that encoded political ideas about the role of government and corporations in public education played a prominent role in the initial stages of the movement, they waned in favor of politically-neutral frames focusing on harms to children and local schools and on technical problems with the tests. Group members continued to deploy socially-oriented frames, but their use became independent of other types of frames, suggesting that they represent niche concerns of a set of participants in the social media groups. The use of politically-neutral frames suggests that participants in the movement sidestepped the need to build political ideological consensus among participants.

This discursive approach mirrors that of participants in the homeschooling and anti-vaccination movements, which use frames that foreground the need to protect children and the uncertainty of technology (Reich, 2014; Stevens, 2001). Unlike those movements, however,

members in the opt-out movement sought to mobilize others to participate in collective action, to get them to join in boycotts of annual tests, and thus not only convince others that testing is a problem, but that it is a problem requiring collective action to remedy. While the research on homeschooling and anti-vaccination movements suggests that such personalized frames can motivate individuals to affiliate with movements and embrace new lifestyle choices, it does not provide an understanding of such frames may motivate participation in specific forms of collective action. The opt-out movement provides an important example of a movement that used this same discursive approach to motivate collection action, in this case, test boycotts.

The frames uncovered in this study extends survey research on the expressed motivations of participants in the movement, such as Pizmony-Levy and Green Saraisky (2016) and Supovitz and colleagues (2016). These studies found that participants in the opt-out movement joined out of concerns over privatization, narrowing of curriculum, teaching to the test, and the use of tests to evaluate teachers. The findings here show that participants in social media communities used these concerns to frame and problematize testing in a semi-public forum. These concerns not only motivated participation but were also used to shape the public discourse about standardized testing in schools. In addition, the study demonstrate that the relative salience of frames evolves over time.

This study has several implications for research and policy. First, while past research has suggested that a base of compatible ideologies forms the core of social movements (Snow et al., 1986; Zald, 2008), providing meaning and identity that motivates and mobilizes participants, there is increasing attention to factors that overcome political differences to build support for policies (Dokshin, 2016; Feinberg & Willer, 2013, 2015). By exploring a movement that sought to mobilize a diverse base of parents and concerned citizen, I have shown how

frames and discursive strategies need not rely on ideological or political commitments to serve as a resource for meaning-making and resonance when activists craft frames. This extend recent research by Dokshin (2016), who found that support for fracking projects depended on whether they could credibly be framed in terms of local benefits. In this case, members of opt-out-aligned groups relied heavily on personalized frames that saw testing as a direct harm to local educational resources and to children. The use of locally-oriented concerns occurred in the case of mobilization across New York State for collective action, manifesting in boycotts of annual tests. While this study does not directly assess the impact of framing of participation in test boycotts, it provides suggestive evidence that locally-oriented frames played a critical role.

These findings also provide important insights into the role of accountability policies in public schooling. Theoretically, advocates of standards-based accountability intend to give parents and policymakers clear metrics for gauging the quality of schools and teachers, aiming to build systemic reform to improve schools (Smith & O'Day, 1991). However ,reality is contested and negotiated. The analysis of framing in the opt-out movement reveals the ways in which everyday people–parents, educators, concerned citizens–have interpreted the use of standardized tests for accountability purposes. Unsurprisingly, many of the frames crafted by group members reflected ideas already present in the scholarly and popular discourse (Koretz, 2009; Ravitch, 2013). Participants did not work to build a consensus regarding the cause of the problems with testing, but focused on the damages wrought by their use.

Moreover, the findings demonstrate that redesigns for already existing policies can activate opposition, despite the longstanding nature of the policy. New York has long had robust accountability policies, which, while subject to debate, did not face the oppositional collective action until after the adoption and implementation of the Common Core State

Standards. Group members frequently particularized the problem of testing by linking it to the Common Core, making a distinction between the current iteration of tests (problematic) and past iterations (at worst, tolerable). The Common Core served as a key rhetorical device that participants used when framing issues of testing. This suggests that policymakers should consider the culture and cognitive implications of policies and their deployment. What policies mean in practice is open to interpretation (Coburn, 2006; Hill, 2001; Spillane, 2000), and stakeholders like parents participate in the process of creating a shared understanding. Online communities, such as Facebook, also provide people with new platforms to disseminate ideas and to promote frames of interpretation (Bennett & Segerberg, 2013).

There notable limitations to these findings. As a single qualitative case study, it is challenging to generalize to other social movements. Given similarities to the homeschooling and anti-vaccination movements, it is possible that movements related to the well-being of children are uniquely able to mobilize a base that lacks ideological unity, in which case the framing tactics described here may have limited use for other social movements. In addition, the opt-out movement is a nationwide movement, present in most states. Conditions in other states may differ from New York and thus the framing processes may also differ. Future research on the movement in other states, both those with successful mobilization and those without, is needed to determine if the processes described here apply more generally to the movement.

Second, the data are limited to public expressions of movement activists. Much of the work of social movements occurs in face-to-face interactions and the settings like “free spaces” (Polletta, 1999). There were many private Facebook groups aligned with the opt-out movement in New York. The discursive processes in these private spaces may look different

and play a different role in mobilization. However, building public support and attracting new members is part of the critical work of framing, and therefore the public nature of these groups is important to the design of the study.

Finally, I do not make claims about the effectiveness of these framing activities. My data are limited to documenting the processes that activists engaged in on these online forums. I cannot determine, for example, if the frames used successfully motivated people to join these groups and the movement, or if people who joined shifted the conversation to more locally- and technically-oriented concerns. In other words, the direction of causality is unclear.

Conclusion

While standardized testing is a perennial part of public education in the United States, its exact role is contested. The emergence of the opt-out movement has revealed the depths of opposition to the current iteration of accountability. Boycotts have spread widely throughout New York State and beyond, creating challenges accountability schemes. While individuals express a variety of reasons for joining the movement, I show increasing coherence in the overall narrative–one that moved away from socially-oriented concerns to locally- and technically-oriented concerns.

Attention to how education policies create the conditions for movements to emerge and mobilize can serve to enlarge our understanding of both the policy process in education–which extends beyond policy creation and implementation–and the origin of social movements more generally.

Notes

I conducted all analyses in the R programming language (R Core Team, 2018), using the following packages: `RQDA` (Huang, 2018), `dplyr` (Wickham, François, Henry, & Müller, 2018), `reshape2` (Wickham, 2007), `ggplot2` (Wickham, 2016), `patchwork` (Pedersen, 2017), `ggdendro` (Vries & Ripley, 2016), `igraph` (Csardi & Nepusz, 2006), `sna` (Butts, 2016), and `huxtable` (Hugh-Jones, 2018). I thank the authors of these packages for their efforts.

[1] Author's calculations based on election data from the Harvard Dataverse (Ansolabehere & Rodden, 2011).

[2] I present the text of the posts verbatim, only making corrections when necessary for clarity. By presenting them verbatim, I hope to capture the urgency of the posts and well as the creative use of punctuation and capitalization, which can also convey meaning.

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Tables

Table 1 - Opt-out-aligned groups included in the study

Group Name	Region	Group membership as of 2017	Number of Posts, Aug. 2010-July 2014
Alliance for Quality Education - Hudson Valley	Hudson Valley	461	1
Alliance for Quality Education Of New York	Statewide	11994	2
Avengers of The Core	Statewide	50	10
BH-BL And Capital District Parents Against Common Core	Capital District	667	93
Delaware County for Public Education	Southern Tier	252	27
Get the Vote Out 2016 To Repeal Common Core	Statewide	280	4
Hampton Bays Parents for Common Sense Education	Long Island	158	51
Heads Down, Thumbs Up, Hudson Valley, NY	Hudson Valley	473	14
Kings Park Advocates for Education	Long Island	552	8
Long Island Opt-Out Info	Long Island	23797	1301
Long Island Parents and Teachers Against Standardized Testing & AAPR	Long Island	1056	1
More UFT	New York City	4949	13
North Shore Parent Action Committee	Long Island	257	25
New York State Allies for Public Education	Statewide	6489	15
Ossining Citizens for Schools	Hudson Valley	257	1
Opt-out CNY	Central Region	4099	249
Putnam County NY Stop the Common Core-Parents and Teachers	Hudson Valley	58	2
Pencils Down Rockland County	Hudson Valley	1319	26
Parents for Change - Warwick	Hudson Valley	568	2
POB Parents for Common Sense Education	Long Island	809	88
Parentvoicesny	New York City	512	2
Rethinking Testing: Mid-Hudson Region	Hudson Valley	1197	12
Sachem Community Alliance for Public Education	Long Island	640	32
Stop Common Core - Ballston Spa Central School District	Capital District	102	2
Stop Common Core In New York State	Statewide	14514	11
SECS Parent Advocate Group	Southern Tier	397	27
Staten Island - Know "Common Core"	New York City	576	15
Spackenkill Community Alliance for Public Education	Hudson Valley	307	29
The Other Stop Common Core In New York State	Statewide	283	34
United Islands Against Common Core - Staten & Long	Long Island	204	6
Worcester Community for Education	Mohawk Valley	236	31

Table 2 - Frames used by members of opt-out-aligned Facebook Groups

Altruistically-oriented frames	
Standardized testing is harmful to non-dominant students	HST_harm_nondom
Standardized testing is harmful to English language learners	HST_Harms_ELLs
Standardized testing is harmful to low-income children	HST_Harms_LowSES
Standardized testing is harmful to students with special needs	
Locally-oriented frames	
Standardized testing allows for others to access private data	HST_access_privat
Standardized tests are a threat to privacy	HST_Threat_Priv
Standardized testing is a waste of time or resources	HST_waste_resour
Standardized testing is a waste of school resources	HST_Waste_Resou
Standardized testing has a negative financial impact on schools	HST_Waste_Resou
Standardized testing is emotionally, physically, or academically harmful to children	HST_harm_children
Standardized testing is driving away good teachers	HST_DriveOut_GoodT
Standardized testing turns children into robots, eliminates critical thinking	HST_Elim_Critical
Standardized testing demoralizes students	HST_Harms_Kids_Acad
Standardized testing is harmful to student learning because it undermines teachers	HST_Harms_Kids_Acad
Standardized testing harms the relationship between students and teachers	HST_Harms_Kids_Acad
Standardized tests - Poor performance harms students academically	HST_Harms_Kids_Acad
Standardized testing is emotionally harmful to children	HST_Harms_Kids_Emo
Standardized testing causes excessive stress and anxiety that manifest as physical symptoms	HST_Harms_Kids_Phys
Standardized testing is child abuse	HST_Harms_Kids_Phys
Standardized testing makes students feel dumb	HST_Kids_Feel_Dumb
Standardized testing creates negative atmosphere in classroom	HST_Neg_Atmo
Standardized testing robs children of their childhood	HST_Robs_Childhd
Standardized testing ruins students' view of education	HST_Ruins_K_View
Standardized testing leads to bad instructional practices and policies	HST_bad_instruc
Standardized testing leads to teaching to the test/excessive test prep time	HST_Excessive_Test_Prep
Standardized testing leads to narrowing of the curriculum	HST_Narrow_Curr
Standardized testing leads to one-size-fits-all instruction	HST_One-size_Instruc
Standardized testing leads to rote learning	HST_Rote_Learning
Standardized testing takes the fun and creativity out of teaching	HST_TakesAway_Creative_T
Standardized testing takes joy, creativity, love out of school	HST_TakesAway_Joy_Schl

Standardized testing takes time away from genuine instruction and learning	HST_Waste_Instruc_Time
Standardized testing threatens local control of schools	HST_threat_local_cont
Professionally-oriented	
Standardized testing is emotionally, physically, or professionally harmful to teachers	HST_harm_Ts
Standardized testing demoralizes teachers	HST_Demoral_T
Standardized testing causes excessive stress and physical problems for teachers	HST_Harms_T
Standardized testing intimidates teachers	HST_Harms_T
Standardized testing reforms are teacher abuse	
Socially-oriented	
Corporations use testing to takeover or exploit schools	Corp_HST_takeover_exploit
Children are guinea pigs for corporations	Corp_HST_Exploit
Corporate entities use standardized testing to takeover the school system	Corp_HST_Exploit
Corporate entities use standardized tests to profit off of children and schools	Corp_HST_Exploit
Standardized tests are designed to harm schools	HST_design_harm
Standardized tests are designed for children and schools to fail	HST_Designed_Failure
Standardized tests are destructive to schools	HST_Harm_Schls
The federal/state government uses testing to undermine or takeover schools	Gov_HST_takeover_exploit
Government entities use standardized tests to undermine or take over schools	Gov_HST_takeover
Technically-oriented	
Standardized testing is not a legitimate means of evaluation	HST_illegit_eval
Standardized tests are confusing or ambiguous	HST_Confusing
Standardized testing is not developmentally appropriate	HST_Dev_Inappr
Standardized tests do not capture authentic learning	HST_Dont_Capt_Authen_Learn
Standardized tests do not measure teacher effectiveness	HST_Dont_Capt_Ts_Effect
Standardized testing is over-used and excessive	HST_Excessive
Standardized tests are not validated or flawed	HST_Flaw_Design
Standardized testing is a narrow way to evaluate children	HST_Narrow_Eval
Standardized tests not fair because they advantage schools that use Pearson products	HST_Not_Fair_Pearson
Standardized tests are Not validated or are experimental	HST_Not_Valid
Real purpose of Standardized testing is the evaluation of teachers	HST_Purp_Eval_Ts
The grading of standardized tests is subjective	HST_Subjective_Grade
Standardized tests do not provide meaningful information	HST_not_useful

Standardized tests meaningless and do not provide useful information	HST_Meaningless
The grading of standardized tests is secretive	HST_Secretive

Figure 1 - Count of founding of opt-out-aligned Facebook groups and posts mention testing between February 2011 and July 2014

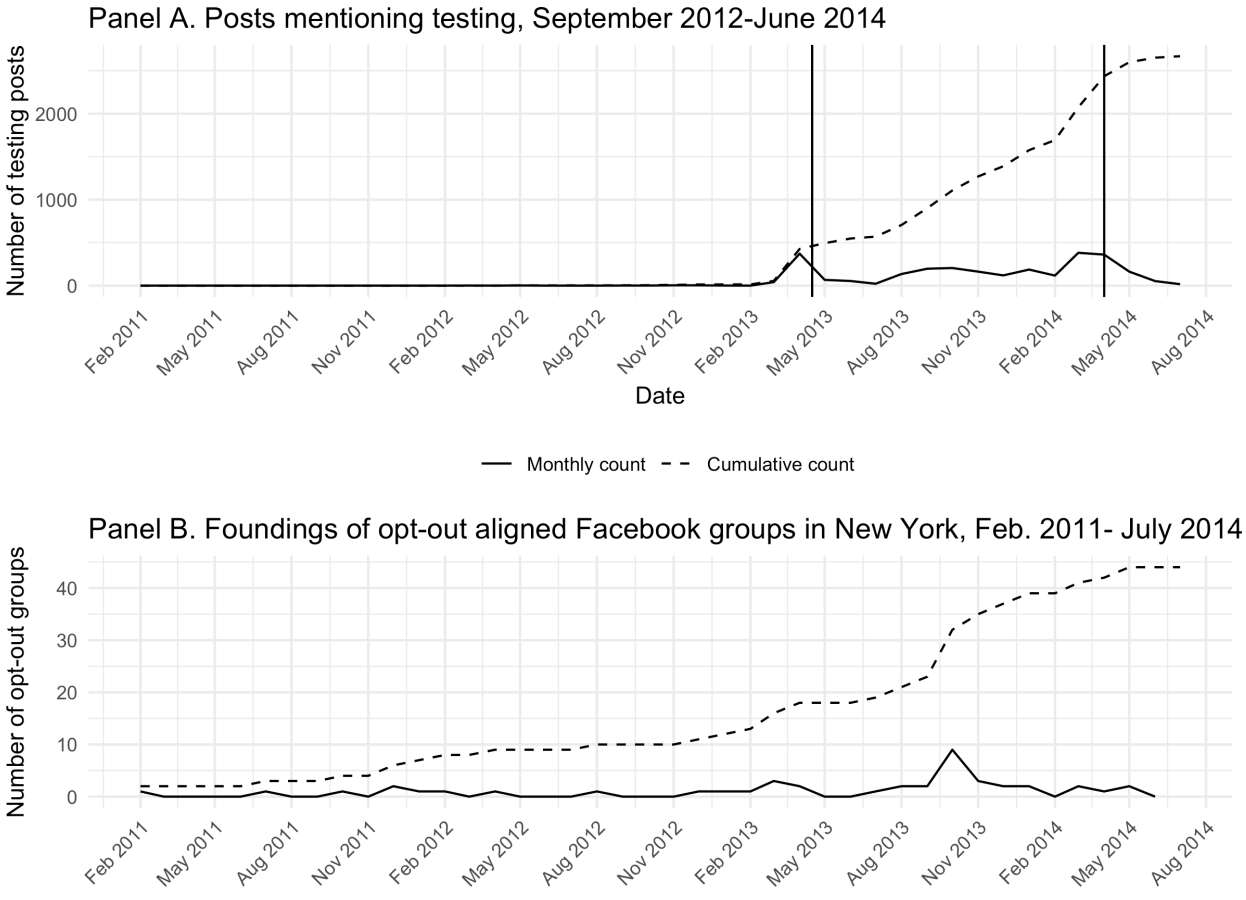


Figure 2 - Count and cumulative count of frames over time by orientation

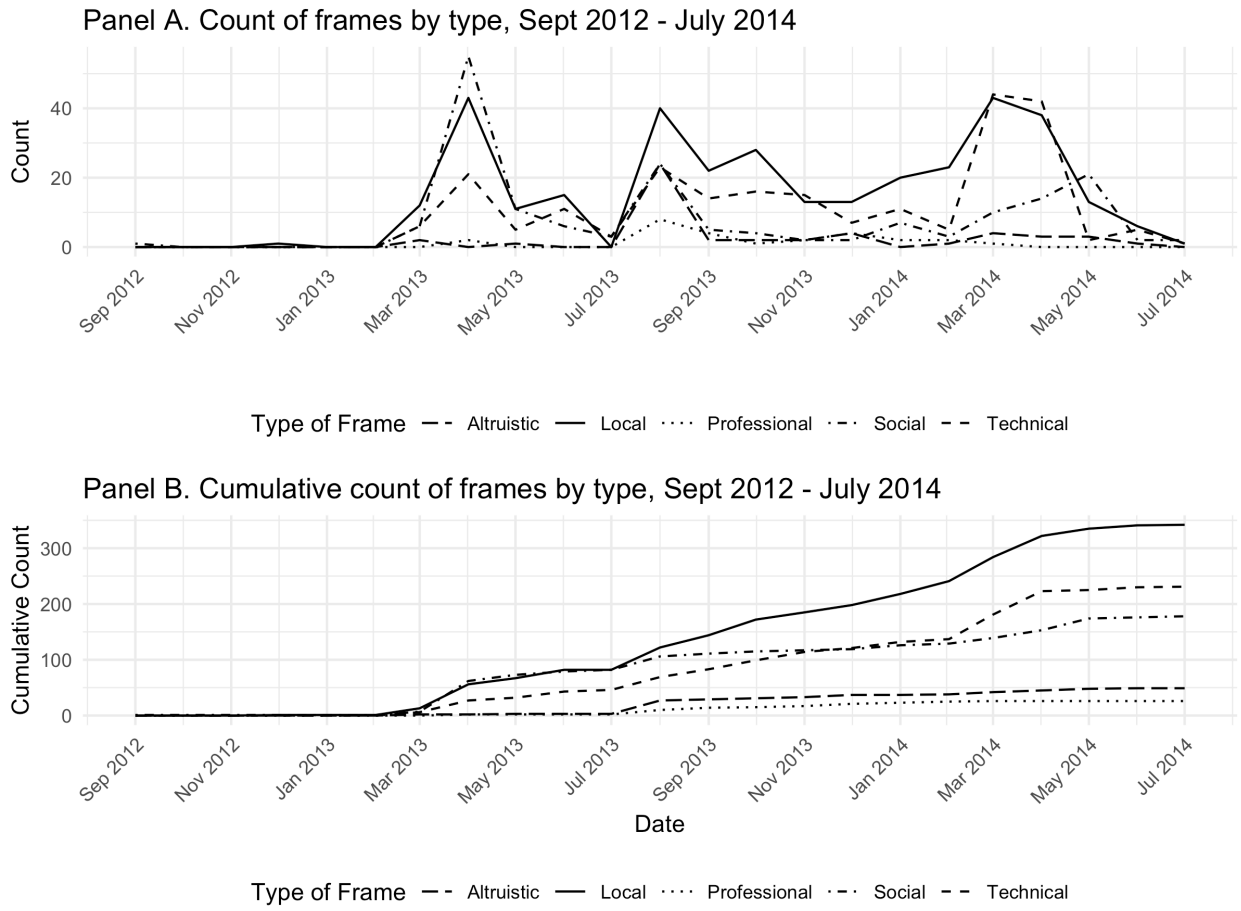
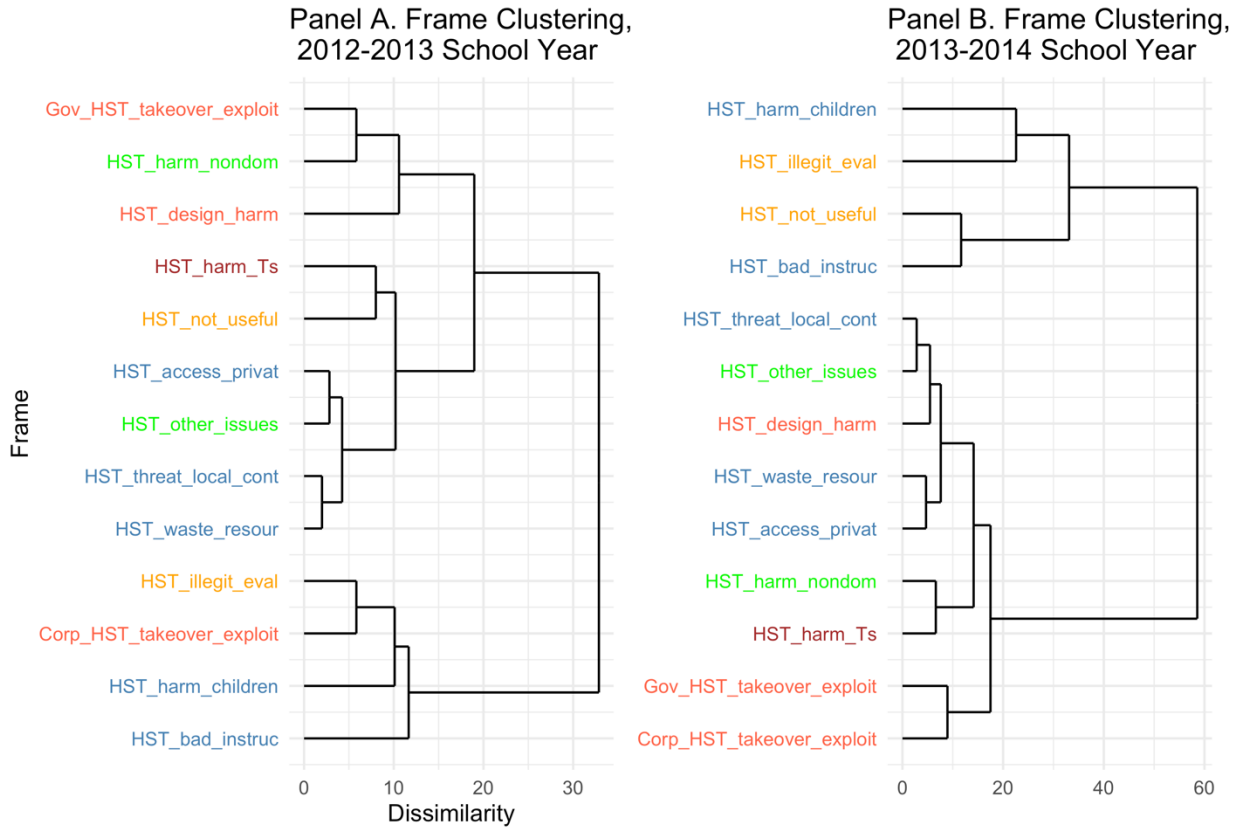


Figure 3 - Hierarchical clustering of frames, 2012-2013 and 2013-2014 school years



Note. Definitions of frames in Table 2. Colors indicate the orientation of the frame: red = social; blue = local; orange = technical; green = altruistic; brown = professional.