There's More to the Story: Both Individual and Collective Policy Narratives Can Increase Support for Community-Level Action

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Narratives can convey the need or community-level action to address social problems. Yet narratives often tell stories about specific individuals rather than the broader collectives these problems affect. Some theorists argue that individualizing collective problems inhibits audiences from recognizing upstream causes and solutions. This study tested how narrative individualization (whether a story focuses on an individual case or a larger collective) might produce trade-offs when mobilizing support for community-level policies to address childhood obesity. We also investigated whether narratives using language congruent with political partisans' morals (equity or loyalty) might minimize polarized responses to such narratives. A large, Web-based experiment with a national sample of U.S. adults demonstrated that both individual and collective narratives increased policy support relative to a no-message control group. Individual narratives promoted policy support via narrative engagement, tender emotions, and external thoughts about the issue. Against expectations, morally congruent narratives did not outperform morally incongruent ones.

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Stories can engage, entertain, and persuade. They allow audiences to conceptualize and imagine potential solutions because they distill complex ideas and problems into concrete mental

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models. The scholarly history of narrative persuasion has long focused on promoting individual-level outcomes, but narratives can also be influential in the public policy arena, shaping policy makers' and lay attitudes toward collective solutions to address societal-level issues (Crow & Jones, 2018; Strange & Leung, 1999).

Recently, scholars have investigated the conditions under which narratives can effectively communicate causes and solutions of social problems, including the social determinants of health (SDH)— that is, the "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning and quality-of-life outcomes and risks" (U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, 2018, para. 5). Although the public tends to think that behavior and medical care are the primary determinants of health (Robert & Booske, 2011), evidence indicates that the myriad conditions outside individual control in our social, physical, economic, and political environments are major influences on health by creating our lived contexts and determining our health status across the life span (Frieden, 2010).

Health advocates, policy makers, and journalists often attempt to explain the SDH by illustrating with policy stories about individuals facing specific challenges (i.e., individual exemplars) with the expectation that audiences will connect those stories to "upstream" health influences the policy solutions are designed to address. However, telling stories about individual cases—even when emphasizing system- and policy-level solutions—may inadvertently reinforce beliefs about personal responsibility for health, thereby undermining public willingness to support community-level efforts to address factors in the social environment (Barry, Brescoll, & Gollust, 2013; Iyengar, 1991). SDH are inherently systemic and environmental in nature, requiring community- and policy-level intervention. The tension between a tendency to tell stories about individuals and the need for collective solutions matters in the larger policy sphere because news—and news narratives, in particular—are a primary means by which people learn about policies, their importance, and potential consequences if they are (not) enacted (Brodie, Hamel, Altman, Blendon, & Benson, 2003). Our study investigated key mechanisms that may explain how individualization (whether a story focuses on an individual exemplar or a larger collective) shapes support for policies to address the SDH.

Additionally, the effects of SDH stories can depend on the audience's political leaning (Gollust & Cappella, 2014). Given that policy narratives are more likely to be successful when their content aligns with the audience's beliefs and morals (Crow & Jones, 2018; Jones & McBeth, 2010), we examined whether narratives tailored to emphasize different morals (equity and loyalty) would enhance narrative impact for the political partisans who endorse these different morals (Democrats and Republicans, respectively). Using morally or ideologically congruent appeals has been effective for a host of divisive issues (e.g., Feinberg & Willer, 2015; Luong, Garrett, & Slater, 2019), and we sought to apply this approach to SDH narratives.

We address these matters by drawing from distinct but connected literatures on narrative persuasion, the narrative policy framework, message framing, and moral psychology. We then present results from a large, Web-based experiment in which we manipulated the individualization of SDH narratives (individual or collective) and their moral congruency (equity or loyalty).

Using Narratives to Garner Support for Social Policy

Researchers often contrast narratives with statistical or didactic forms of persuasive messaging (Zebregs, van den Putte, Neijens, & de Graaf, 2015), but there is considerable variability in how a story can be told. Policy narratives vary in terms of the issue they address (e.g., income inequality, immigration) and narrative form. As outlined in the narrative policy framework (Crow & Jones, 2018; Jones & McBeth, 2010), policy narratives have a setting (where the story unfolds), characters (victims, villains, heroes), plot (temporal structure that organizes character motives and causal events), and moral of the story (the policy solution).

Here, we are interested in character individualization. By individualization, we mean that stories about the SDH may be structured around the experiences of single individuals (a parent raising her child in an underserved neighborhood) or a broader collective or community (entire underserved neighborhoods; Zhou & Niederdeppe, 2017). Journalists and advocates typically employ the former, incorporating individualized stories as exemplars to illustrate larger societal issues or trends, such as the social factors that affect a person's health (Zillmann & Brosius, 2000). Stories told entirely at the collective (that is, community) level are less common. Yet, "stories told at the group rather than the individual level [may] function similarly. Social groups tell shared stories, and stories with particular resonance are those that speak to the state of our communal well-being, as public journalism narratives do" (Woodstock, 2002, p. 38).

As a first step, we wished to examine whether narratives (regardless of individual or collective focus) are persuasive relative to no-message exposure. A meta-analysis that compared narratives to no message or an unrelated message (Braddock & Dillard, 2016) found that narratives do promote beliefs, attitudes, intentions, and behavior. These findings are heartening for public storytellers, yet most narrative persuasion studies (including those analyzed in the meta-analysis) focus on changing individual intentions and behavior (e.g., make healthy choices) rather than generating support for community- or policy-level intervention (e.g., create communities that offer healthy options and resources). Some research suggests that exemplifying specific individuals runs the risk of producing less support for community-level solutions relative to messages that focus on the broader issue (Barry et al., 2013; Iyengar, 1991). Nevertheless, considering Braddock and Dillard's (2016) findings, there is good reason to expect that well-crafted policy narratives will be persuasive relative to no message at all. We hypothesized that individuals exposed to any narrative about the SDH (individual or collective focused) would express greater support for community-level policies targeting the SDH than individuals not exposed to any message (H1).

Individualization Effects on Policy Support

Individualized narratives (those focusing on a single person or family) need not focus exclusively on individual-level solutions and causes. Individual narratives have the potential to promote support for collective policies because narratives can distill complex ideas about cause and effect, demonstrating how individual actions are shaped by environmental, systemic, or structural factors (Strange, 2002). For instance, telling a story about food deserts may help the public recognize that the reason a single mother regularly orders fast food for her children (a health behavior) is that she lives in a neighborhood where the only nearby food options are fast food and corner markets with limited and expensive healthy stock (a structural barrier). Such a story could go on to explain how community-level interventions are necessary to complement personal health efforts.

Niederdeppe et al. (2016) found that adding a statistical map of the prevalence of food deserts to an individualized narrative reduced counterarguing of external (e.g., environmental) factors for health and increased cognitive elaboration about those external factors—presumably because the map helped audiences connect the dots between individual and societal forces. This line of thought leads to the conclusion that an individualized policy narrative can mobilize support for policy-level solutions if it also contextualizes the individual character's experience within larger, systemic causes and solutions.

That said, even if an individual narrative conveys the importance of upstream causes and policy solutions, individualization could indirectly reduce support for collective solutions by inadvertently directing audience thinking (and thus judgments of causal and treatment responsibility) to individual actors. This possibility derives from findings in the message framing literature. With message framing, communicators can emphasize some attribute or angle of an issue to draw attention to that attribute. Iyengar (1991) showed that individually focused episodic frames (messages describing concrete events focused on specific individuals) prompt audiences to assign causal responsibility to individuals for societal problems; societally focused thematic frames, which describe higher level collective events, prompt audiences to assign causal responsibility to society. In turn, individual attributions of blame may elicit feelings of animosity, potentially reducing one's willingness to help those in need (Weiner, 1986).

Ample research supports these concerns with respect to SDH messaging (Gollust & Lynch, 2011; Lundell, Niederdeppe, & Clarke, 2013; Niederdeppe, Robert, & Kindig, 2011; Sun, Krakow, John, Liu, & Weaver, 2016). For example, two experiments found that participants exposed to individualized frames about childhood obesity were less supportive of obesity-mitigation policies than were participants reading a generic frame that did not individualize the issue. These effects were partially explained by increased judgments of blame on the obese child (Barry et al., 2013). This message framing evidence might lead to a prediction that collective policy narratives should be more effective than individualized versions because they operate at a community level of abstraction and therefore invite system-level thinking and judgments of responsibility. To be clear, message frames are not the same as narratives, but we see message framing research as germane to the current investigation. Story characters come in many forms (as outlined in theories of narrative persuasion and the narrative policy framework), and the distinction between episodic and thematic frames in the framing literature calls attention to the way that a policy message can center on a single exemplar or the broader issue at the level of an entire community.

An opposing argument would be that individualized narratives are preferable to collective narratives because they are more narratively engaging. According to theories of narrative persuasion, narratives are influential to the extent that they draw and hold audiences in the story (Green & Brock, 2000; Moyer-Gusé, 2008; Slater & Rouner, 2002). Some proponents of this perspective maintain that collective narratives are limited in this regard because audiences tend to be less sensitive to depictions of the plights faced by mass numbers of people than plights faced by one individual (Slovic, 2007). Related work on the so-called identifiable victim effect shows that people are more likely to assist an identified victim than an unidentified victim and, somewhat counterintuitively, that people feel greater distress for (and are more likely to offer help to) a single victim than a collection of victims (Kogut & Ritov, 2005). Though this lends support for a prediction that individual policy narratives would garner more policy support than community narratives, to our knowledge, none of the studies explicitly comparing individual to community stories have found a

relative advantage for individual stories (Niederdeppe, Kim, Lundell, Fazili, & Frazier, 2012; Zhou & Niederdeppe, 2017). We suspect that the lack of a main effect in these investigations on policy support may be attributable to competing psychological mechanisms working against each other, as we will discuss.

Considering these competing predictions, we sought to juxtapose collective policy stories with the community as primary character (an entire neighborhood dealing with structural impediments to good nutrition) against individual stories that focus on a single exemplar in her larger context (a mother caring for her daughter), in both cases explaining how SDH shape individual actions and emphasizing the need for policy-level, structural change. Because there remains ambiguity about whether a difference in policy support will emerge depending on individualization, we pose a research question about whether there will be a relative advantage for individual or collective narratives on policy support (RQ1). In the following sections, we elaborate on the competing mechanisms of narrative effects for individualized versus collective narratives.

Mechanisms of Effects: Narrative Engagement and Emotion

Narrative influence often depends on the extent to which one is engaged with the story (Slater & Rouner, 2002). Specifically, narrative processes like character identification, empathy with the character(s), and transportation into the story are considered important ingredients for narrative success (Green & Brock, 2000; Moyer-Gusé, 2008; Slater & Rouner, 2002). The first two processes pertain to one's connection to the characters. That is, identification occurs when an audience member imagines that they are the character navigating the story world, internalizing the character's goals, emotions, and perspective (Cohen, 2001). Empathy refers to "sharing the subjective experience of another person . . . based on a deep connection with that person's situation" (Campbell & Babrow, 2004, p. 160). Empathy involves sharing the character's cognitive perspective and/or their emotional experience. Empathy is conceptually similar to identification, but we treat them as separate processes following previous work (Zhou & Niederdeppe, 2017) and evidence for discriminant validity. With identification, the audience member assumes the character's identity for the interval in which they are engaged in the story, but with empathy, the self and the character remain separate entities and do not fully merge. This conceptual distinction is supported by research showing that identification items do not consistently load onto measures of empathy (Campbell & Babrow, 2004). Importantly, greater identification with a story protagonist promotes attitudes aligned with those held by the protagonist (Busselle & Bilandzic, 2009; de Graaf, Hoeken, Sanders, & Beentjes, 2012), and empathic attitudes are positively associated with intentions to help the victims depicted in a narrative (Oliver, Dillard, Bae, & Tamul, 2012).

Transportation (related to the concept of "absorption"; Slater & Rouner, 2002) is the convergent process that occurs when the audience member becomes "lost" or immersed in the story, rendering parts of the real world inaccessible (Green & Brock, 2000). Though similar to identification, transportation is unique from identification because the audience member may enter the story world (transportation) without necessarily imagining that they are the character (identification). Because transportation into the narrative world distances the recipient from their own beliefs, greater transportation is associated with adoption of story-consistent beliefs (Green, 2006). Transportation also reduces counterarguing of story points (Moyer-Gusé, 2008), which we discuss in detail in the next section.

Similarly, emotions are central to the experience of narratives (Oatley, 2002) and likely play an important role in affecting attitudes toward public interventions to address the SDH. Though there is an emotional side to empathy (that is, taking on the character's emotions as one's own), it is possible to experience emotions in response to a narrative without necessarily understanding the character's emotional perspective (Campbell & Babrow, 2004). For example, one can feel sad for a mom struggling to provide nutritious options for her family without necessarily sharing the frustration she feels. Empathy and emotional reactions to the story should be correlated, but based on this line of thinking, we argue there is theoretical reason for us to distinguish empathy from emotional responses to the story—namely, tender emotions (feelings of warmth and concern for the protagonist; Oliver, 2008) and hostility emotions (like anger and contempt toward the protagonist). Tender emotions should predict greater support for public policies out of a motivation to assist the person in need (Lu & Schuldt, 2016), but hostility emotions should reduce policy support (Weiner, 1986).

How might narrative engagement and emotions differ between a story about an individual versus a story about a larger collective? The psychic numbing effect proposes that feelings of tenderness for a victim and one's willingness to assist the victim are a function of how many victims there are (Slovic, 2007). That is, positive affect and willingness to help decline as the number of victims increases (Västfjäll, Slovic, Mayorga, & Peters, 2014)—a phenomenon explained by limitations in mental capacity for processing the gravity of large-scale problems.

Such "compassion fade" (Västfjäll et al., 2014) suggests that audiences should be more narratively engaged and experience stronger tender emotions when reading a story describing how a single family struggles to keep their kids healthy in the face of structural and environmental obstacles (e.g., food deserts, pervasive junk food marketing) versus a story about a larger collective facing the same challenges (Gross, 2008; Kogut & Ritov, 2005). For example, an individualized story about individual characters may feel more concrete to audiences than a story about a broader collective, making it easier to connect with the character and feel transported into the narrative. In addition, greater tender emotions in response to an individualized narrative should be accompanied by lower feelings of hostility toward the protagonist. We thus hypothesized that relative to collective narratives, individual narratives would indirectly promote policy support via greater identification (H2a), empathy (H2b), and transportation (H3b). We further predicted a positive indirect effect of individual over collective narratives on policy support via stronger tender emotions (H3a) and weaker hostility emotions (H3b).

Mechanisms of Effects: External Thinking and Counterarguing

Other processes that may explain the effects of narratives about the SDH include (a) thoughts about causes and solutions for health that are outside or "external" to individual control and (b) counterarguments that negate, limit, or caveat the importance of such external forces in determining health status. Although we expect individual stories to be more narratively and emotionally engaging, collective narratives should cue more community- and system-level thinking about causes and solutions than individual narratives (Niederdeppe et al., 2012; Sun et al., 2016). Whereas individualized policy stories require audiences to make the cognitive leap between individual and structural factors, collective policy stories remain at a structural level of abstraction, which could translate into greater policy support. Zhou

and Niederdeppe (2017) found that people who read an individualized narrative about a teenager with obesity were less likely to cognitively elaborate on external attributions for obesity than people who read a narrative about a collection of obese teenagers, holding constant the systems-level solutions mentioned to address the matter (see also Lundell et al., 2013). These results suggest that even when a story attributes responsibility to upstream factors, telling stories about individuals runs the risk of directing attribution away from external forces to individual ones by priming individual attribution thoughts, thereby undermining support for community-level initiatives (Lakoff, 2004). We therefore expect that individual narratives will produce fewer externally focused thoughts relative to collective narratives, leading to indirect negative effects on policy support (H4).

As for counterarguing, there are competing possibilities for whether counterarguing will be greater or weaker in response to individual narratives. On one hand, individual stories may produce more counterarguing than collective ones because they direct audiences to think about health at an individual level, thereby inviting audiences to question the influence of environmental and structural factors. On the other hand, individual narratives may generate fewer counterarguments than collective narratives because (as previously hypothesized) audiences should be more transported into individual stories and greater transportation is associated with less motivation to counterargue the story's points (Moyer-Gusé, 2008). Experiments comparing individual to collective stories have not demonstrated differences on counterarguments generated (Niederdeppe et al., 2012; Zhou & Niederdeppe, 2017), so we ask whether individualization will influence counterarguing (RQ2).

Morally Congruent Narratives

Not all audiences are equally receptive to messages communicating a need to address the SDH. Political ideology has emerged as a key moderator, with liberals tending to be more sympathetic to arguments about addressing "upstream" or sociostructural causes of health than conservatives (Gollust & Cappella, 2014; Gollust, Lantz, & Ubel, 2009; Niederdeppe, Shapiro, & Porticella, 2011). To galvanize support for community-level solutions across the ideological spectrum and minimize polarization, health advocates and policy makers will need to consider message-targeting strategies that resonate with different publics across the ideological spectrum.

Advocates aiming to bring attention to the SDH often adopt equity language about how certain groups are disadvantaged by structural, environmental, and financial barriers, resulting in uneven starting points that affect lifelong health. However, research suggests that such rhetoric may not resonate with conservative audiences who generally do not prioritize equity, a liberal-leaning moral (Skurka, Winett, Jarman-Miller, & Niederdeppe, 2020). Research in moral and political psychology demonstrates that one's political ideology is linked to one's moral concerns about what is right and wrong. Moral foundations theory (Haidt, 2012) has identified several moral domains on which individuals base their moral judgments. Political liberals prioritize the foundations of harm (concern for minimizing harm to others) and fairness (concern for reciprocity and justice; Haidt, 2012), and more recent work shows that liberals are also more concerned than conservatives with equity (that achieving equal outcomes requires different levels of support because some people have unequal starting points; Skurka et al., 2020). Conservatives, on the other hand, are more even-handed in their endorsement of moral foundations. Nonetheless, they are more likely than liberals to

prioritize loyalty to one's in-group, deference to authority, and preservation of spiritual and bodily purity (Haidt, 2012).

A key tenet of the narrative policy framework is that policy narratives should be more effective when their content matches the audience's preexisting beliefs and morals (Crow & Jones, 2018; Jones & McBeth, 2010). In this way, just as the framing of policy narratives can be episodic (about a single case) or thematic (about the larger context), so too can narratives be "morally framed" to speak to different moral intuitions. Research in moral psychology has shown that tailoring persuasive arguments to match partisans' morals is effective in various domains, including climate change (Wolsko, Ariceaga, & Seiden, 2016), science topics (Luong et al., 2019), and support for political candidates (Voelkel & Feinberg, 2018), among others. In the public health domain, framing universal health care as a purity issue (universal health care will result in fewer unclean and diseased people) produced greater support for the Affordable Care Act among conservatives than a similar frame using a fairness-based argument (health care is a human right; Feinberg & Willer, 2015, Study 3). A report (Robert Wood Johnson Foundation, Carger, & Westen, 2010) on best practices for communicating the SDH recommends messaging that taps into both traditionally conservative values (e.g., supporting small businesses) and traditionally liberal values (e.g., offering equal opportunities).

Building off this growing evidence on moral framing, it stands to reason that stories about upstream causes and solutions for health can be couched in the language of different moral foundations to make the ideas presented more consonant for political partisans. For instance, equity-based language in SDH narratives would emphasize lack of access to healthy foods in certain neighborhoods and the health difficulties some families face because of where they live—ideas likely to activate liberal morals. But if equity resonates for individuals on the political left, what moral analogue might resonate for people on the political right? Loyalty, a group-focused foundation, seems a promising candidate. Because loyalty can include family cohesion and a binding sense of commitment to the larger collective to which one belongs, loyalty could be an important lens for considering population-based policy solutions like those we explore here. Loyalty language would emphasize that parents recognize their familial obligation to protect their children in health-compromising environments— an idea likely to activate conservative morals. Accordingly, we expect SDH narratives to be most influential for political partisans when they are congruent with their moral frameworks (Crow & Jones, 2018; Jones & McBeth, 2010). Thus, among Democrats, equity-framed narratives should produce greater levels of policy support than loyalty-framed narratives, and we expect the opposite pattern among Republicans (H5).

Methods

Recruitment and Sample

We worked with the Cornell University Survey Research Institute, which fielded the study using Nielsen's Harris Panel, an opt-in market research panel. To recruit participants from the panel, Nielsen uses a stratified random sampling procedure, weighting recruitment based on previous completion rates for panel members. This project also involved an earlier wave of data collection, but we do not report those data (aside from demographics and covariates) because we used them to address a different set of research questions, presented elsewhere (Skurka et al., 2020).

Participants (*N* = 1,975) were 58 years old on average (*SD* = 15.04) and 52.9% were male. The majority (92.5%) identified themselves as White. Most had a bachelor's degree or higher (62.0%). We oversampled Republicans to ensure adequate power for interactions with partisanship and thus expected distributions by political party and political orientation to be roughly balanced. In terms of political orientation, the average participant was near the scale midpoint (*M* = 4.12, *SD* = 1.75, with 1 = *extremely liberal* to 7 = *extremely conservative*). The sample included similar proportions of political partisans (Republican = 36.3%, Democrat = 38.2%, Independent = 21.2%, another party = 1.1%, no party preference = 3.2%). We asked participants who identified as Independent, with another party, or had no preference to indicate which of the two major parties they more closely align. This allowed us to create a dichotomous variable of party affiliation for moderation analyses (Republican-leaners = 48.8%, Democrat-leaners = 51.2%).

Procedure

We randomly assigned participants to one of five between-subjects conditions in a 2 (narrative type: individual vs. collective) × 2 (moral frame: equity vs. loyalty) + 1 (no-message control) design. Participants in the treatment groups read their assigned narrative (described below) and then completed a thought-listing task. Next, they self-reported their emotions and completed several measures related to narrative processing. They concluded the survey by indicating their support for various obesity-related policies. Because participants in the control group did not read any message, they did not complete the process-related measures (thought listing, emotions, or narrative processing).

Narratives

Depending on the narrative condition, the narratives either told the story of Cynthia and her daughter (individual versions) or families in Philadelphia neighborhoods (collective versions) struggling to find healthy food amid an array of unhealthy options. The narratives outlined a range of structural barriers to health in these areas, including the preponderance of fast food and minimarkets, the lack of local grocery stores, and the seemingly endless barrage of advertising for unhealthy foods. The narratives then described how the situations in these neighborhoods or for Cynthia and her daughter improved when local organizations (the Food Trust and Philadelphia Health Department) helped to support and incentivize supermarkets and farmers' markets moving into the community. The narratives also explained that these organizations instituted grants that allowed corner stores to offer healthful food options, boosting the economy by increasing jobs. The narratives emphasized the positive impact that these changes had on the health of [Cynthia's family/neighborhoods in Philadelphia]. The narratives concluded that [Cynthia/Philadelphians] now recognize the importance of individual-level changes alongside community-level action.

To manipulate the moral framing of the stories, we altered the language to reflect themes of differential access and environmental factors (equity frame) or themes related to duty to others and mutual effort (loyalty frame). For example, the individual equity version read, "Cynthia wants her family to enjoy access to the same healthy foods as are available in some parts of the city," whereas the individual loyalty version read, "Hardworking and focused on her family, Cynthia had always believed it is her duty to protect the health of her family members." The four narratives were of comparable length (362–375 words; see appendix Table A2 at https://osf.io/nf4te/).

Measures

Participants in the treatment groups used a scale of 1 (strongly disagree) to 7 (strongly agree) for the narrative engagement variables (identification, empathy, transportation). Depending on the narrative condition, the items referred to "Cynthia" (individual narratives) or "families in Philadelphia" (collective narratives). These variables evidenced moderate but not extreme positive correlations (see Table A3 at https://osf.io/nf4te/), and preliminary models not reported here revealed no evidence for multicollinearity.

We adapted Tal-Or and Cohen's (2010) 5-item identification scale, which included statements like "I think I understood [Cynthia/families in Philadelphia] well" (Cronbach's α = .90, M = 4.58, SD = 1.32). We measured empathy with 10 items that we adapted from previous work (Campbell & Babrow, 2004) with statements such as "I do not understand how people get themselves into difficult situations like the one described in the story" (reverse-coded; α = .90, M = 5.13, SD = 1.17). We used 10 items from Green and Brock's (2000) transportation scale (e.g., "I could picture myself in the scene of the events described in the story"; α = .78, M = 4.64, SD = .94).

Participants in the treatment groups used Likert-type scales of 1 (not at all) to 7 (very much) to report their emotions toward "families like the one[s] described in the story." We created a scale of tender emotions (respect, compassion, sadness, hope, happiness; α = .79, M = 4.71, SD = 1.38) and a scale of hostility emotions (anger, disgust, contempt; α = .80, M = 2.27, SD = 1.41).

We invited treatment group participants to list up to six thoughts that came to mind while reading the story. The instructions requested that participants type one thought per box and that participants continue to the next page of the survey if they found themselves taking more than 15 seconds to think of an additional thought. This resulted in *n* = 5,384 thoughts with 73.6% of participants in the treatment groups listing at least one thought.

To create a measure of externally focused thinking, we first created a dictionary of words, phrases, and stems that connote external causes or solutions for the SDH. We developed this dictionary deductively (by selecting, a priori, several terms that we knew to connote external factors within the story) and inductively (by examining a random set of thoughts and identifying additional externally focused terms within context) with the help of two undergraduate research assistants who underwent no fewer than 10 hours of training via discussions with the research team. The dictionary included terms related to community (e.g., *communit**, *working together*), place of residence (e.g., *environment**, *rural*), and organizations mentioned in the narratives (e.g., *food trust*, *health depa**). The full dictionary is available in Table A1 at https://osf.io/nf4te/. We then used the "liwcalike" function in the quanteda package for R (Benoit et al., 2018) to code thoughts for the presence of external terms identified in our dictionary. Half of the thoughts (*n* = 2,622, 48.7%) contained an external term.

Because many of the thoughts coded as external appeared to be counterarguments (e.g., "But you can still make good choices no matter what the environment is like"), we used human coding to analyze the external thoughts for the presence of counterarguing to ensure that our measure of external thoughts did not include thoughts that negated or caveated the premise of the stories. The first and second authors independently coded 750 external thoughts (28.6% of the external thoughts) to assess intercoder reliability

(Krippendorff's α = .64).[2] We resolved coding disagreements through discussion, and the first author proceeded to code the remaining external thoughts for counterarguing. Coders were unaware of each participant's condition during coding. We created a measure of the number of counterarguments per participant (M = .34, SD = .69, range: 0–6). To create a measure of "pure" external thoughts that did not involve counterarguing, we summed the external thoughts for each participant that were not coded as counterarguments (M = 1.35, SD = 1.34, range: 0–6).

We asked participants to indicate their support (1 = *strongly oppose*, 7 = *strongly support*) for several policies proposed to address the SDH and childhood obesity in the U.S. (Barry, Brescoll, Brownell, & Schlesinger, 2009; Wolfson, Gollust, Niederdeppe, & Barry, 2015; Zhou & Niederdeppe, 2017). We focus on responses to six policies proposing community or system-level solutions (e.g., "Provide incentives for full-service grocery stores to open locations in areas with limited access to healthy foods"; "Impose bans on junk food advertising aimed directly at children"; α = .88, M = 5.12, SD = 1.29).

Results

H1:   Narratives Will Increase Policy Support Relative to Control

We collapsed the two individual narrative conditions and the two collective narrative conditions to compare them to the control condition in a one-way analysis of variance (ANOVA). The omnibus test was significant, $F(2, 1965)$ = 7.85, p < .001, η^2 = .008. Supporting H1, Bonferroni follow-up tests indicated that the individual narratives (M = 5.22, SD = 1.31, 95% CI [5.13, 5.32]) increased policy support relative to control (M = 4.92, SD = 1.27, 95% CI [4.81, 5.04]), p < .001, Cohen's d = 0.23, as did the collective narratives (M = 5.13, SD = 1.28, 95% CI [5.04, 5.22]), p = .018, d = 0.16. Means and standard deviations for all variables are available in Tables A4 and A5 at https://osf.io/nf4te/.

RQ1:   Will There Be an Advantage for Individual or Collective Narratives on Policy Support?

An independent-samples *t* test indicated no difference between the individual and collective narratives on policy support, $t(1505)$ = −1.40, p = .16, d = 0.07.

H2–H4, RQ2: Indirect Effects of Individual Versus Collective Narratives on Policy Support

We tested our mediation predictions (H2–H4, RQ2) simultaneously with Hayes's (2013) PROCESS macro for SPSS. We set the individualization manipulation as the independent variable (1 = individual, 0 = collective), the seven process variables as parallel mediators, and policy support as the dependent variable (excluding the control group). We also included the moral framing manipulation as a covariate. We ran 10,000 bootstrapped samples, and we interpreted indirect effects as statistically significant if the 95% confidence intervals did not cross zero (Figure 1).

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[2] This reliability score, somewhat lower than traditional thresholds, was the highest we were able to achieve after several iterations of independent coding. We acknowledge that this reliability score works against our ability to detect a signal as it introduces more noise in the data than would be desired.
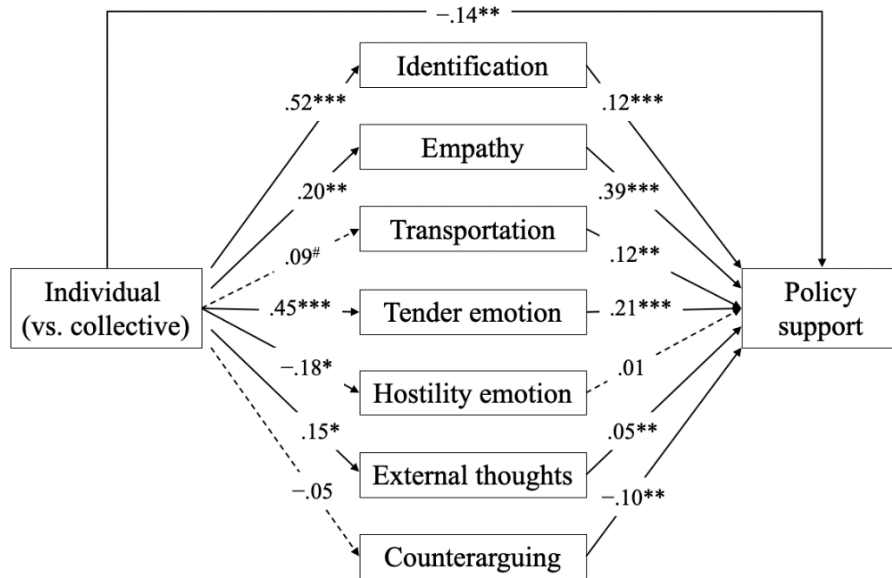
Figure 1. Path model showing indirect effects of individualization on policy support. #p ≤ .10.
*p ≤ .05. **p ≤ .01. ***p ≤ .001. Dashed paths did not reach statistical significance.

The mediation tests largely supported our predictions about the narrative engagement mechanisms (H2). Relative to the collective narratives, the individual narratives exerted positive indirect effects on policy support by way of identification (indirect effect [IE] = .06, *SE* = .02, 95% CI [.03, .10]), empathy (IE = .08, *SE* = .02, 95% CI [.03, .13]), and to a lesser degree transportation (IE = .01, *SE* = .01, 95% CI [.0004, .03]). Regarding emotional reactions (H3), there was an indirect effect of individualization on policy support through tender emotions (IE = .09, *SE* = .02, 95% CI [.06, .14]) but not hostility emotions (IE = −.002, *SE* = .004, 95% CI [−.01, .004]). These results supported H3a but not H3b.

Turning to external thinking and counterarguing as mediators (H4, RQ2), counterarguing did not mediate the effect of individualization on policy support (IE = .005, *SE* = .005, 95% CI [−.001, .02]) because there was no difference between the conditions on counterarguing. Though we predicted that individual narratives would have negative indirect effects on policy support through external thoughts, the indirect effect through external thoughts was positive (IE = .01, *SE* = .005, 95% CI [.001, .02]). These results contradicted H4.

We also noted that the total indirect effect of the individual versus collective narratives on policy support through all seven mediators was positive and significant (IE = .25, *SE* = .05, 95% CI [.16, .35]). However, the remaining direct effect of the manipulation on policy support when accounting for all mediators was negative (direct effect = −.14, *SE* = .05, 95% CI [−.24, −.04]). This suggests that additional, unmeasured factors may mediate the path from collective narratives to policy support and explain why we did not detect an overall difference in policy support between respondents exposed to the individual versus collective narratives.

H5:   Morally Congruent Narratives Will Outperform Morally Incongruent Narratives

We tested this hypothesis with a two-way ANOVA, setting moral frame condition, party affiliation, and their interaction as independent variables (excluding the control group). This analysis did not support H5 as the interaction between moral frame and party affiliation was not significant, $F(1, 1471) = .01$, $p = .94$, $\eta^2 < .001$. We obtained the same result when using political ideology rather than party affiliation as the moderating variable. We also obtained this result when excluding political "leaners" from this analysis and when looking at the conditional effect of each moral frame versus control.

Post Hoc Analyses

Because we predicted an interactive effect for the moral frame manipulation, we thought it wise to run post hoc analyses to probe for other potential interactions. The two experimental manipulations did not interact to affect policy support, nor did the two manipulations interact with political party affiliation to affect policy support (ps > .05). Although the interaction terms between any narrative exposure (vs. control) and political leaning were not significant, subgroup analyses indicated differential effects for Democrats and Republicans. Among Democrats, individual (M = 5.70, SD = .95) and collective narratives (M = 5.70, SD = .89) both increased policy support compared with control (M = 5.38, SD = .88), ps < .001, ds = 0.35, 0.36. Among Republicans, the individual narratives (M = 4.71, SD = 1.46) promoted policy support relative to control (M = 4.38, SD = 1.44), p = .020, d = 0.23, but the collective narratives (M = 4.62, SD = 1.36) did not, p = .13, d = 0.17.

Discussion

In line with a recent meta-analysis of narrative persuasion (Braddock & Dillard, 2016), we found that policy narratives (irrespective of individualization) encouraged audiences to endorse policy initiatives relative to no-message exposure. Diverging from previous studies showing no differences between individual and collective narratives on narrative engagement (Niederdeppe et al., 2012; Zhou & Niederdeppe, 2017), individualized stories were more narratively engaging than collective versions. That is, holding constant the upstream causes and policy solutions described in the narrative, people were more likely to identify with, empathize with, and feel tender emotions toward the characters when the story was told at the individual level. These reactions, though conceptually related to one another, were in turn independently associated with greater policy support. Transportation is thought to be one of the primary mechanisms by which narratives influence audiences (Green & Brock, 2000), and although transportation did positively predict policy support, participants were almost equally transported into the individualized and collective narratives. This suggests to us that when it comes to narrative engagement processes, any benefits conferred to individualized stories over collective ones likely come from their ability to connect audiences to the characters (via identification, empathy, and emotion) and not by transporting audiences into the story world. Such a conclusion comports well with literature on psychic numbing and compassion fade when more than one victim needs assistance (Slovic, 2007; Västfjäll et al., 2014).

Contrary to predictions, individual narratives were more effective than collective ones at inviting external thoughts about the causes and solutions for health. Though this finding seems to run against a

considerable body of message framing research suggesting that episodic frames invite individual blame judgments more than thematic frames (e.g., Barry et al., 2013; Iyengar, 1991), one retrospective interpretation of this result could be seen as consistent with this research. As noted in our literature review, individualized stories need not remain exclusively at an individual level (Strange, 2002; Strange & Leung, 1999). We developed and tested highly contextual individual narratives that situated the characters within an array of larger environmental and structural causes and solutions; in hindsight, we suspect that this feature of the individual narratives (that they scaled up from a story about individuals to describe their larger context) may explain why the individual narratives produced more externally focused thinking than the collective versions.

Despite the fact that the individual narratives were more engaging and prompted more external thinking than the collective narratives, these advantages did not translate to an overall advantage for individual narratives on policy support. This may be because after accounting for all mediating mechanisms, the residual direct effect of individual versus collective narratives on policy support was negative. This suggests that individualized narratives are only superior to collective narratives to the extent that they engage readers in the story, evoke tender emotions, and prompt external thinking about the causes and solutions for social problems—presumably by making the connection clear between context and systems-level action. Analogous competing processes have emerged in previous work (Gross, 2008), but the negative, direct path from individualization to policy support leaves open the door to explanatory mechanisms that this investigation did not measure. For example, reactions to the collective (vs. individual) versions could have been more intuitive and outside conscious processing. Perhaps the collective narratives did not prime participants to think about individuals, so participants reading the collective versions did not have to think analytically about how the individual was affected by external forces. In this way, the collective narratives could have produced less external thinking, but a more automatic connection to community-level interventions.

Mechanisms aside, a compelling reason to tell individual stories is that they may be more effective than collective stories across the ideological spectrum. Whereas narratives persuaded Democrats to support policies regardless of whether the protagonist was an individual character or a larger community, post hoc analyses showed that only the individualized narratives influenced Republicans. This promising finding for individual narratives is noteworthy because it demonstrates that narratives can increase policy support among individuals on the political right, who tend to be less supportive than those on the left of community-level efforts to address the SDH (Niederdeppe, Shapiro, Kim, Bartolo, & Porticella, 2014). It also speaks to the importance of harnessing individualized narratives' strengths—that is, promoting identification, empathy, tender emotion, and external thinking—when communicating the issue to less-than-favorable audiences. Conversely, fostering connections to the character and prompting external thinking may be less critical for narrative success among more favorable audiences.

Finally, tailoring narratives to emphasize certain moral concerns did not uniquely persuade political partisans. This finding contrasts not only with the narrative policy framework (Crow & Jones, 2018) but also a growing literature demonstrating how morally congruent message frames are more influential than those that are morally incongruent (e.g., Feinberg & Willer, 2015; Luong et al., 2019). A more hopeful interpretation of our findings is that equity language can work for conservatives in narrative form (and that loyalty language can work for liberals)—although our design cannot disentangle narrative from moral language effects. Another speculative explanation is that our experimental manipulation was too subtle. The morality language was

peppered throughout a longer narrative and may not have been as prominent as needed to be salient to readers—an issue that could be investigated in future work with a manipulation check. Indeed, previous studies finding an effect for morally tailored appeals have used much shorter messages than ours in which the moral manipulations were much more prominent (e.g., Voelkel & Feinberg, 2018; Wolsko et al., 2016). Alternatively, it may be that narratives can override aversion to morally incongruent ideas by showing not telling, as is the case for didactic arguments (e.g., Wolsko et al., 2016). Future research that explicitly compares narrative versus nonnarrative moral arguments could add empirical clarity to these alternative explanations.

Limitations

This investigation is not without limitations. Our sample, which skewed White, older, and college-educated, was not particularly diverse. Additionally, as is the case in much message effects research relying on single exposure, the narrative effects we observed on policy support and narrative processing were not large by traditional (Cohen's *d*) standards. That said, we had a large enough sample to test for subgroup differences, and the fact that we detected effects on policy support is notable in light of some past work's inability to do so. This may be because our sample size afforded sufficient power to detect the small effects typically observed for narrative messages (Braddock & Dillard, 2016) or because treatment effects for a single stimulus can vary substantially across studies (Kenny & Judd, 2019). We also recognize the limitations of having a no-exposure control group rather than using a didactic message as a control stimulus.

Conclusions

As policy makers, advocates, and journalists publicly communicate the causes and solutions for societal problems, they often tell tales about people affected by those problems. A clearer grasp of when and how these stories mobilize support for societal-level initiatives will inform these communicators how to best convey social issues to the public and engage broad audiences in shared decision making. To this end, the current investigation indicates that narratives that (a) describe the struggles of an individual or a community then (b) show them receiving the benefits of specific policies can persuade people to support community-level interventions to address the SDH. Individual and collective narratives appear to operate through different psychological mechanisms, so future theorizing will need to explore these distinct pathways to enhance our understanding of how collective narratives persuade. Finally, our findings illuminate possible directions to identify the conditions under which morally congruent appeals can persuade audiences in narrative messages.

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