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# Is It Better Not to Talk? Group Polarization, Extended Contact, and Perspective Taking in Eastern Democratic Republic of Congo

## Elizabeth Levy Paluck[1]

## Abstract

Mass media are often used to generate discussion for the purpose of conflict reduction. A yearlong field experiment in eastern Democratic Republic of Congo (DRC) tested the impact of one such media program, a talk show designed to promote listener discussion about intergroup conflict and cooperation. A stratified random half of all nonoverlapping broadcast regions in eastern DRC aired the talk show, which encouraged listeners to consider tolerant opinions and outgroup perspectives, and promoted extended intergroup contact using a related soap opera. The other regions aired the soap opera only. Compared to individuals exposed to the soap opera only, talk show listeners discussed more but were more intolerant, more mindful of grievances, and less likely to aid disliked community members. These results point to some of the limits of discussion and suggest further research on ideas connecting theoretical recommendations for discussion and conflict reduction.

> We can talk about it now
> It's that same old riddle only starting from the middle
> I'd fix it but I don't know how
> Well, we could try to reason but you might think its treason
>
> "We Can Talk," The Band, 1968

In popular culture and in academic theory, discussion is regarded as a compelling but hazardous path to conflict reduction. Historically, hazards such as opinion polarization, failure to share information, and bias driven by social pressure or cognitive errors have dominated psychological research (for reviews, see Mendelberg, 2002; Sunstein & Hastie, 2008). More recently, research has examined discussion as a path to tolerance and understanding. Importantly, it has identified some conditions of beneficial discussion, such as the expression of differing opinions (Mutz, 2002), well-structured intergroup contact (Nagda, 2006), and perspective taking (Galinsky, Ku, & Wang, 2005).

Research examining discussion as a means to reduce conflict arrives just in time for a resurgence in its use as a policy tool. Terms such as *deliberation*, *dialogue*, *participatory*, and *community driven* suffuse the literature on interventions designed to promote peace (Bland, Powell, & Ross, 2006;

Kelman, 1999; Saunders, 1999), democracy (Carpini, Cook, & Jacobs, 2004; Luskin & Fishkin, 2004), and prosperity (Besley, Pande, & Rao, 2005; Evans, 2004). Many of these discussion-based programs use the mass media to publicize and broadcast elite dialogues, host call-in question and answer sessions, and encourage discussion among audience members (Bores, 2003; Howard & Rolt, 2006; Manyozo, 2008; Panos, 2004).

We know little about the success of discussion-based conflict-reduction programs, particularly those involving mass media, because of deficiencies in the ways they have been studied (Paluck & Green, 2009). We can, however, learn something about theories of discussion and conflict reduction simply by considering the difficulties encountered when building such programs. Real-world discussion presents multiple challenges, whereas academic theories are tailored to address one or two at a time. Moreover, theories addressing challenges such as polarized opinion, antagonistic discussants, and

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incompatible perspectives sometimes conflict when considered simultaneously. The lack of connective ideas joining recommendations for discussion and conflict reduction translates into practical dilemmas for practitioners and theoretical puzzles for psychologists.

Psychological theory has much to offer discussion-based conflict-reduction programs, but it must be tested in the environments where these programs are staged. The current study takes up some of psychology's biggest ideas about discussion and conflict reduction and uses them to design a real-world radio talk show meant to improve intergroup relations in war-torn eastern Democratic Republic of Congo (DRC). I drew on hypotheses about group polarization, intergroup contact, and perspective taking to test whether the talk show could increase listeners' tolerance and helping behavior. My goal was not simply to assess the success or failure of a theoretically designed program but also to test connective ideas linking separate psychological theories in a challenging real-world situation.

## Discussion and Conflict

When does discussion escalate conflict, when does it reduce conflict, and why? I use the term *discussion* broadly to indicate the exchange of views between individuals or among a group of people. The scholarly literatures on group polarization, intergroup contact, and perspective taking outline the constructive and destructive potential of discussion.

*Group polarization.* For nearly five decades, the group polarization literature has demonstrated that discussion can exaggerate the initial positions of individual discussants (Brauer & Judd, 1996; Isenberg, 1986). When discussants are on the same side of the issue before discussion, polarization can be driven by one of a few processes: social comparison, when discussants are motivated to be more extreme than the perceived group average (Myers, 1982); persuasive argumentation, when discussants offer proportionately more arguments for their initial position (Burnstein & Vinokur, 1977); and social categorization, when the perceived distance between the prototypical ingroup position and an outgroup position is inflated by a sense of the discussants' group identity (J. Turner, Wetherell, & Hogg, 1989).

The facilitating conditions for group polarization are ubiquitous in conflict settings. Conflict increases individuals' ordinary tendency to discuss with members of their "side" (Green, Visser, & Tetlock, 2000), which can initiate polarization processes driven by social comparison, persuasive argumentation, and social categorization. Moreover, in a conflict, discussants are more likely to dismiss dissenting arguments as biased outgroup perceptions (Kennedy & Pronin, 2008).

What conditions of discussion prevent polarization or drive polarized opinion toward the center? Exposure to a diversity of views or to novel contrary arguments can promote learning about opposing rationales and can detract from perceptions of dissenters as unreasonable (Mutz, 2002; Mutz & Martin, 2001; Ross, in press). Recent group polarization studies suggest that discussants' recognition and repetition of dissenting opinions increases the influence of those positions on group members' attitudes (Brauer & Judd, 1996). Most discussion groups do not spontaneously consider contrary views, so a group member or leader must raise the topic (Homan, van Kippenberg, Van Kleef, & De Dreu, 2007). Deemphasizing the salience of group identity can also prevent polarization (Mackie & Cooper, 1984), but deemphasis is challenging in an identity-based conflict.

*Intergroup contact.* Discussion between two sides of a conflict is a form of intergroup contact (Allport, 1954). Research demonstrates that contact brought about by discussion can improve intergroup tolerance and interaction (Aboud & Doyle, 1996; Maoz, 2001; Nagda, 2006), as well as understanding of outgroup identities and perceptions (Xuniga, Nagda, Chesler, & Cytron-Walker, 2007, pp. 61-62; see also Ross, in press). Echoing the contact hypothesis, deliberative theory predicts political tolerance will result from discussion among citizens of different groups (e.g., Gutmann & Thompson, 1996; cf. Schudson, 1997). Deliberators "tend to take greater account of the interests of more inclusive collectivities—of one's town rather than just oneself or one's family, of the nation rather than just one's town" (Luskin & Fishkin, 2004, p. 1).

However, intergroup contact can provoke anxiety (e.g., Shelton, 2003), and the necessary conditions for beneficial intergroup contact (equal status, authority sanction, overlapping goals, and cooperation) are extraordinarily difficult to engineer, particularly in conflict settings. To cope with these difficulties, theory recommends vicarious, or "extended" contact, in which people learn about an outgroup through ingroup members who have befriended outgroup members (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). Previous research reveals that tolerance and empathy for an outgroup increases when individuals learn that their friends have outgroup friends (R. Turner, Hewstone, Voci, & Vonofakou, 2008) and even when they learn (through stories or media) that *fictional* ingroup members have outgroup friends (Cameron, Rutland, Brown, & Douch, 2006; Leibkind & McAllister, 1999; see also Paluck, 2009a, p. 584).[1] In a conflict, extended contact through friends or through media personalities could introduce outgroup perspectives into a discussion without the attendant anxiety or backlash kindled by actual intergroup contact.

*Perspective taking.* The literature on perspective taking argues that the thoughtful consideration of the world from other viewpoints (Davis, 1983) increases the perceived overlap between the perspective taker and the target of perspective taking, thereby increasing tolerance, empathic concern, and helping (Batson, 2009), and decreasing bias and ingroup favoritism (Galinsky & Moskowitz, 2000). However, using perspective taking in discussion can have downsides under

certain conditions. If the perspectives taken are superficial, lacking vivid or detailed views of the target, perspective taking can generate misunderstanding (Galinsky et al., 2005). Of particular interest to conflict, perspective takers on one side of a conflict can lose credibility with their ingroup if they attempt to understand the other side (Galinsky et al., 2005, p. 119), and the benefits of perspective taking are limited by reactive egoism, in which perspective takers react defensively as they imagine the target to be biased by self-interest (Epley, Caruso, & Bazerman, 2006).

The type of guidance in a perspective-taking exercise is critical to its success. Batson (2009) recommends instructing individuals to imagine being another person (the "imagine-other" perspective) rather than instructing individuals to imagine the self, and how they would feel or act, in that person's situation (the "imagine-self" perspective). In a conflict, however, the imagine-other perspective may require individuals to imagine themselves as the "enemy," which can backfire among individuals who strongly identify with their side (Zebel, Doosje, & Spears, 2009). As a first step in contexts where another person's situation seems unfamiliar or unacceptable, Batson suggests the imagine-self perspective as an alternative, even though imagining the self in another person's situation is more tenuously linked to empathy.

## Integrating Theoretical Ideas for Intervention

As the foregoing overview makes clear, engineering discussion for conflict reduction is far more complicated than compiling theoretical guidelines and putting them to use. The conditions of success for each discussion technique are legion, and these multiply and occasionally clash when more than one technique is employed. Realistically, more than one technique is necessary to address the complications produced by discussion in a context of conflict. For example, a perspective-taking exercise on the radio might inspire listeners to discuss their reactions in homogenous groups, which could then polarize their opinions. Moreover, perspective taking is difficult for groups who are segregated and have little knowledge of the other side's experiences. In that case, extended intergroup contact may be necessary.

I integrated ideas addressing group polarization, intergroup contact, and perspective taking out of this need to reconcile theory and context. The radio intervention based on this theoretical integration promoted a range of tolerant opinions, extended intergroup contact, and imagine-self perspective taking. I chose theoretically and empirically supported modifications of these techniques when the terms of their implementation clashed.

Specifically, because I anticipated that listeners in the high-conflict context of DRC would select similarly minded, ingroup discussion partners, I used two techniques to expose them to differing views. First, I broadcast a range of tolerant listener reactions on the talk show, following the prediction

that repeated exposure to different opinions can reduce polarization. Second, the talk show promoted extended intergroup contact that was portrayed in an accompanying radio soap opera. The soap opera featured fictional ethnic groups that correspond to eastern DRC's ethnic groups; this allowed all of the show's various listeners to identify with some characters as ingroup members. Over the course of the soap opera, many characters form cross-ethnic alliances and friendships. In line with previous studies that used fictional stories to simulate extended intergroup contact (e.g., Cameron et al., 2006), I expected listeners to experience the fictional ingroup characters' cross-ethnic friendships as a form of extended contact. The talk show promoted this extended contact by asking listeners to discuss instances of intergroup cooperation and dialogue among the characters.

Finally, I used "imagine-self" perspective-taking instructions in the talk show's discussion guidance. I expected this technique to enhance the effect of the extended contact by asking listeners to imagine themselves in the situations of the fictional outgroup characters. I also hoped that imagining the self in the characters' situations would make outgroup arguments appear more valid, which is one route to depolarization. Using this "cocktail" of treatments, it is impossible for me to determine whether one particular technique is responsible for listener reactions. However, I aim first to test the efficacy of this theoretical integration, which addresses the obstacles of the context and the shortcomings of any one theoretical prescription.

## The Present Research

A yearlong posttest-only field experiment in eastern DRC tested the impact of the weekly radio talk show. The show encouraged listeners to consider a range of tolerant opinions, outgroup individuals, and the perspectives of those outgroup individuals. I predicted that the discussion inspired by such a talk show would increase perspective taking, tolerance, and helping behaviors.

Media-inspired discussion has never been experimentally tested in the field;[2] however, there are compelling social and theoretical reasons to understand its influence. Compared to most programs mobilizing discussion, the size and diversity of audiences for mass media programs is unrivaled. Media-inspired discussions provide insight into everyday interpersonal influence; they are face-to-face, informal, self-directed interactions in familiar settings.

Theory proposes that interpersonal discussion is an important mechanism of media influence (Bandura, 2001; Katz & Lazarsfeld, 1955). In a recent experiment demonstrating the impact of a reconciliation radio soap opera, Paluck (2009a) suggested that lively interpersonal discussions inspired by the radio show were partly responsible for its positive impact. She proposed that discussion about media "creates another vector of social influence" on listeners, and contributes "to

socially shared cognition, which is a basis for a social norm" and shifted behavior (p. 584; see also Mead, 1934).

Altogether, the contributions of the study are threefold. First, I measure whether mass media can actually encourage interpersonal discussion about community conflict. Second, I test the effects of such discussion—whether theoretical predictions about the expression of multiple opinions, intergroup contact, and perspective taking hold in an everyday, unsupervised setting of social conflict. Third, I present an experimental blueprint for approaching questions about the use and value of discussion aimed at real-world conflict.

## Method

### Eastern DRC

In 2003, a peace settlement officially ended a war in eastern DRC that took so many lives and involved so many nations it has been called "Africa's World War" (United Nations, 2001). Since then, conflict has not ceased in eastern DRC, where militias battle the national army and one another, and rape, kill, and forcibly displace civilians. Eastern Congolese live off of ingenuity, international aid, and what they can squeeze from the land. The situation stokes hostility among the region's many ethnic and linguistic groups (Autesserre, 2010).

Eastern DRC is also home to many nongovernmental organizations working to reduce conflict and promote tolerance. Radio is an important tool in these efforts, as it is the primary source of news and entertainment. I worked with an organization in eastern DRC that produces a weekly radio soap opera about intergroup conflict in the fictional town of Bugo, DRC (see Vollhardt, Coutin, Staub, Weiss, & Deflander, 2007). In my work studying the impact of this program, I collaborated with the organization to produce a radio talk show designed to encourage discussion about the issues presented in its soap opera.[3]

### Experimental Design

I tested the effect of the radio talk show with a stratified experimental design that extended through the 1st year of the show's broadcast. Of six nonoverlapping broadcast regions spread across the North and South provinces of eastern DRC (see Figure 1), I matched the regions most similar in rural or urban status, historical and current violence, and road accessibility. I randomly chose one broadcast region in each pair to air the 15-min talk show directly following the soap opera, and the other to air the soap opera only. Thus, the manipulation strategy is an encouragement design in which the talk show encourages face-to-face listener discussion using questions, prizes, and an on-air broadcast of listener reactions. A new episode aired every week and was broadcast twice during the week. All programming was in Swahili, the lingua franca of eastern DRC.

*Baseline radio soap opera.* The radio soap opera *Kumbuka Kesho* (*Think of Tomorrow*) is set in a fictional town called Bugo that is plagued by political corruption, income inequality, and conflict among the many ethnic groups who live there. The soap opera opens as Bugo's market is taken over by a politician who practices ethnic favoritism. The politician withholds public funds that could stem the tide of a cholera outbreak, and violence breaks out as the situation deteriorates. As an answer to Bugo's problems, the soap opera emphasizes conflict reduction through community cooperation, epitomized in the love story of Sisilia and Akili, two youth of different ethnic backgrounds who build a peace coalition.

*Talk show.* The talk show encouraged listener discussions about characters and events on all sides of Bugo's allegorical conflict, and in doing so the show encouraged perspective taking and consideration of a range of tolerant views. Because of infrastructure challenges in DRC, the talk show host posed questions about topics from the soap opera episode and invited letters (rather than phone calls) describing the listeners' ensuing discussions.

The host attempted to guide the listeners' face-to-face discussions by inviting their opinions and then encouraging them to imagine what they would do in the situation of various characters from the soap opera (using the imagine-self perspective). Each of the host's prompts reminded listeners of a scene from the soap opera, asked for an evaluative judgment, and then directed participants to think about what they would do in the character's situation. For example:

> Akili is rejoicing that his father agreed to recruit a Maka [member of a different fictional ethnic group] to work at the butcher shop with Akili. Do you think his father was right, to accept a Maka merchant? Could this act change relations among people at the market? *What would you do in Akili's father's place*?

To encourage the consideration of multiple and contrary views, the host always stated, "We like lively discussions containing many views. We ask you to include everyone's contribution in your letters to us." The host also encouraged listeners to choose different discussion partners each week. Table 1 reviews the topics and perspectives encouraged over the course of the yearlong radio broadcast.

The host read a selection of listener letters responding to previous questions. Letters that generally took an anticonflict stance, ranging from skeptical to very positive, were selected. The following reactions to the previous question illustrate this range:

> If the father agrees today to hire a Maka, it's not out of goodwill, but out of contrition. This hire can't resolve the problem of the Maka merchants in the Bugo market. The problem is much deeper and will not be solved by one person's job.
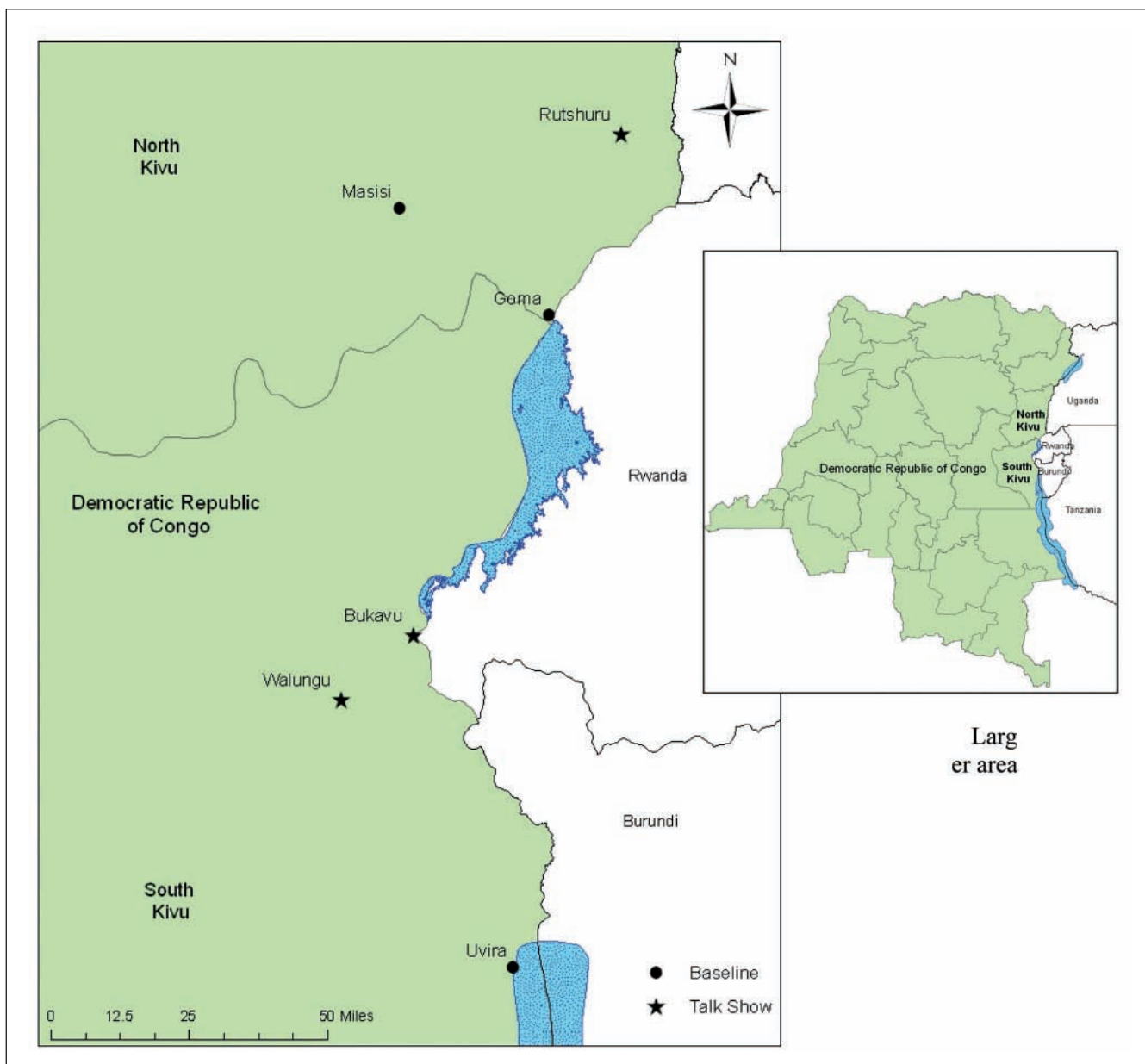
**Figure 1.** Random assignment of talk show and baseline radio programs
Circles and stars indicate the city-based origins of the broadcasts. Broadcasts did not overlap.

Agreeing to hire a Maka person in his butcher's shop is a great thing to do, it will humanize the members of the ethnicity Maka. One person also said that Akili should be joyful, because "we are what our parents were yesterday," as we like to say . . .

After reading 4 or 5 listener letters, the host congratulated those listeners and directed them to collect a prize at their local radio station. Over the yearlong broadcast, an average of 75 letters per month across the three regions were received. The volume of letters is impressive for a region with no

postal service; listeners hand-delivered or passed their letters through chains of people and transport trucks. Nonetheless, the volume of letters is nowhere near the anticipated size of the radio program's audience; because of this and the nonrepresentative nature of the letter sample, I do not use the letters to draw inferences about listener reactions.[4]

### Participants

At the end of one year of radio broadcasting in 2007, a 10-person Congolese research team and the author

**Table 1.** Topics Offered and Perspectives Suggested by the Talk Show

| Topics | Percentage of talk shows | Examples |
|---|---|---|
| Conflict | 9 | Interfamily conflicts over community resources (garbage disposal) and over power positions among ethnic groups |
| Violence | 10 | Violent protest over marketplace discrimination; armed guards as self-defense |
| Discrimination | 10 | Students organizing a monoethnic organization; authorities organizing a monoethnic board |
| Causes of conflict | 24 | Situations that prevent and promote conflict: rumors (whether to refute them), mourning group members' deaths, power sharing, and poverty |
| Cooperation | 15 | Interethnic working relationships at the market, collaborating to build community resources |
| Talk | 20 | Freedom of expression in reactions to authorities, in talking on radio; dialogue for resolving conflict and comforting victims |
| Perspectives encouraged: | | |
| Of victims | 41 | How would you feel as one of the youth who are told they are the causes of these problems? |
| Of perpetrators | 32 | Can you understand why they feel it is necessary to arm themselves? |
| Of both sides | 29 | One side thinks the dialogue will help; another thinks it will waste time. Consider both perspectives—with which do you agree? |
| Of bystanders | 17 | They think that hiring someone from the other group would help the market atmosphere. Would you agree if you worked there? |

Percentages of perspective taking add to more than 100% because multiple perspectives were sometimes encouraged in one talk show question. The discussion topics represent the most frequent topics—12% of topics were smaller categories. Percentages were calculated out of 45 total talk shows.

interviewed and collected behavioral data from a random sample of 842 individuals living in the talk show (soap opera plus talk show) and baseline (soap opera only) broadcast regions. The research team's makeup reflected the variety of ethnic and linguistic groups in eastern DRC (Paluck, 2009b). Researchers selected participants using random number lists as they walked in randomly chosen directions through neighborhoods. Participants represented approximately 15 ethnic groups (primarily Shi, Bembe, Hunde, Nande, and Rega) and were interviewed in four languages (Swahili, Mushi, French, and Kinyarwanda). Half of the participants were male (51%); ages ranged from 16 to 94 (average of 33.5). Nearly half (46%) of participants had some exposure to secondary school, although 21% had no formal education.

Participants were poor and considerably affected by violence. Forty-eight percent of participants owned land for farming, but more than half did not farm because of insecurity. Only 14% reported that they do not listen to the radio. Seventy-two percent of participants owned a radio; another 72% of participants reported experiencing a human rights abuse (e.g., prevention of movement, forcible displacement, rape). This figure is probably an underestimate because rape, which has reached epidemic proportions in DRC, is underreported (Bartels & Kelley, 2008).

## Outcome Questionnaire

*Background characteristics and radio use.* Along with questions about participants' demographic and socioeconomic information, researchers asked participants about their radio listening and discussion habits and partners. Participants reported whether they listen to and discuss the radio soap opera, and whether they discuss politics (a discussion topic we expected to observe at similar frequencies between experimental and baseline groups).

*Perspective taking.* Two statements rated on the 4-point scale assessed participants' attempts to understand a disliked group. First, researchers asked participants to think of an *ethnic or political* group that they liked the least and to use that group when rating the statements: "I try to understand that group by imagining their feelings, suffering, or thoughts" (based on Davis, 1983) and "Even if I disagree with that group, I try to think of reasons why that group takes a different point of view" (based on Mutz & Mondak, 2006). These are "content-controlled" items (Sullivan, Piereson, & Marcus, 1982).

*Tolerance.* We measured tolerance for outgroup members in general, as well as tolerance of specific disliked outgroups. Two statements, rated on a 4-point ordinal scale (1 = *totally disagree*, 4 = *totally agree*), assessed participants' general social tolerance: "It is naïve to have confidence in people

belonging to other ethnic groups" and "I instruct my children (or will instruct future children) to marry only with people from the same religious or ethnic group." Three additional questions about tolerance used the content controlled procedure to refer to the participant's disliked group: "We should allow that group to hold demonstrations" (reverse coded), "I would not like that group to belong to my community association," and "There will never be peace if that group stays here" (items from Paluck, 2009a, and modified from AfroBarometer, 2005).

*Helping behavior.* We designed an unobtrusive behavioral measure to test whether listeners would act on the soap opera's central message to collaborate across group lines. We made the test as challenging as possible, asking participants if they would assist a member of a disliked group.

The researcher offered the participant a 2-kg bag of iodized salt, measured exactly, at the end of the interview. Iodized salt was given because it is a valued but not precious commodity. The researcher informed the participant that the bag of salt was a token of thanks for participating. The researcher then added, "The organization sponsoring this survey helps communities assist local groups in need. The organization has identified a group of people in your community in need of assistance." Making a show of looking back at the interview notes, the researcher said, "I can see from your responses that you are not a part of this group. Nonetheless, would you be interested in donating any of your salt to this group? I will deliver it for you."

Nearly all participants asked, "To which group will you give the salt?" Returning to the "disliked" question format, the researcher answered: "Is there a particular group to whom you would feel uncomfortable giving the salt?"[5] This question prompted the participants to identify their disliked group: "Yes, the . . . [Banyamulenge/Barega/RCD/etc.]." The researcher would nod apologetically and respond, "Actually that is the group my organization has identified. Would you still like to give any or all of your salt to this group?"

If the participant decided to donate, the researcher provided a generic plastic shopping bag to put the donation in. The researcher hand-recorded any of the participants' spontaneous comments about their decision. After the salt donation (or refusal), researchers gave participants 500 francs ($1), the actual thank-you gift for participation. Researchers weighed and recorded the salt donations at the end of each day. From this exercise we derived four measures: whether participants gave salt, how much they gave, the identity of the presumed recipient of the salt, and participants' rationale for giving or not giving.

### Data Analytic Procedures

The appropriate technique for the experimental comparison is an instrumental variables regression (Angrist & Krueger,

2001), which uses the randomly assigned treatment (the soap opera vs. the soap–talk show) to estimate an unbiased relation between the independent variable (participants' self-reported exposure to the radio program) and the dependent variable (perspective taking, tolerance, and helping). I used responses from the entire sample to estimate the experimental difference between listeners in the soap opera areas (baseline listeners) and in the soap–talk show areas (talk show listeners). An advantage of this methodological design is that it allows estimation of the causal impact of the program on individuals who actually tune in to this kind of radio programming, as opposed to a design in which an experimenter assigns the program to individuals who might not listen in real life. Estimating the impact of the treatment on those who opt to be treated informs us about the realistic impact of the intervention, whereas data on nonlisteners provide us with an understanding of the broader public the program was unable to reach.[6] For the purposes of learning about the impact of the talk show, I focus on the comparison between listeners in baseline and talk show regions. Approximately half of this total sample, or 423 participants, reported listening to the program.

STATA's (Version 9.2; StataCorp, College Station, TX) robust cluster option accounted for the fact that errors are dependent within each broadcasting region, allowing estimation of coefficients for individuals rather than regions and increase the effective *N* from 6 to 842. The experiment has very low power to detect small shifts in opinion or behavior, but as part of an ongoing research program it contributes an unbiased estimate of the impact of media discussion to an eventual high-powered aggregation of experimental studies.

My analyses address the following questions: Did the talk show increase interpersonal discussion about the radio soap opera? By encouraging listeners to discuss, take perspectives, and consider a range of opinions, did the talk show increase tolerance, understanding, and helping behaviors?

## Results

### Interpersonal Discussion

Talk show listeners reported discussing the soap opera at significantly higher rates compared to baseline (soap opera only) listeners: 33% compared to 26%, respectively (see Table 2). There were no differences in the frequency of discussing politics in general between talk show and baseline regions (68% vs. 66%), which suggests that the difference in discussing the soap opera was caused by the talk show and not by a greater propensity for discussion in the randomly assigned talk show regions. Urban residents were more likely to report discussing the show than rural residents.

Of those who discussed the soap opera, 58% of talk show listeners and 47% of baseline listeners said they discussed

**Table 2.** Experimental Effects of Talk Show Exposure on Listeners' Discussion Habits

|  | Talk show | Urban–rural dummy |
|---|---|---|
| I discuss the show | 2.67*** (0.20) | 0.24** (0.05) |
| Discussion of politics in this area | 1.07 (0.31) | 0.31 (0.26) |
| I discuss with a variety of people[a] | 0.27 (0.25) | −0.02 (0.26) |
| We have many disagreements[a] | 0.49*** (0.15) | 0.29* (0.14) |

Coefficients are probit estimates in which the independent variable, listening to the radio show, is instrumented by the randomized assignment to the joint soap opera–talk show or to the soap opera only (1 = *talk show,* 0 = *control*). Numbers in parentheses are the standard errors of the coefficients.
[a]Of those who reported discussing the show regularly, *n* = 241.
*p < .05. **p < .01. ***p < .001.

with a variety of partners as the talk show host had encouraged, but this difference was not statistically significant. It seems that most discussions occurred with members of the listeners' ingroup, specifically adult family members (46%) and children (24%). Less than 10% of listeners reported speaking with colleagues, schoolmates, and people at church or market. There were no experimental differences in the types of discussion partners named or in the reported frequency of discussion (approximately two thirds of individuals who discussed in talk show and baseline areas reported discussing the show each week).

What were the discussions about? Again, there were no differences between talk show and baseline listeners: An overwhelming majority (85% of talk show and 89% of baseline listeners) reported that the fictional program inspired discussions about actual situations in eastern DRC. However, the tone of these discussions differed. Talk show listeners were more likely to report that their discussions were contentious: Forty-eight percent said they disagreed with their partners "always or often," compared to 31% of baseline listeners.

### Attitudinal Outcomes

*Perspective taking.* The two items measuring efforts to understand others through perspective taking did not reveal any differences between talk show and baseline listeners (see Table 3).

*Tolerance.* In a principal components analysis, items regarding general and disliked group tolerance formed two components, but as expected, interitem correlations in each component were low and therefore items are analyzed separately (see Table 3).[7] The talk show did not affect tolerance of outgroups in general. However, exposure to the talk show was associated with *less* tolerance for disliked groups. Talk show listeners were significantly more likely to say they would *not* want members of their disliked

group to join their community associations (49% of talk show listeners vs. 37% of baseline listeners) and to claim that peace would not come to DRC if their disliked group continued to live there (71% of talk show listeners vs. 62% of baseline listeners). Sixty-two percent of talk show listeners believed their disliked group should not be allowed to hold demonstrations compared to 50% of baseline listeners, but this difference was not significant. These differences are significant for people who report listening to the radio program (see the "Listens" column in Table 3), and they are slightly stronger for the subset of people from this category who report listening *and* discussing the radio program (see the "Listens and discusses" column in Table 3).

### Behavior

*Giving salt.* Far exceeding expectation, 63% of all participants gave some portion of their salt. To put this statistic into perspective, consider that the bag of salt was worth $1.20, more than the average daily income in eastern DRC. However, consistent with the attitudinal findings from the survey, talk show listeners were significantly *less* likely to donate salt than baseline listeners, controlling for other factors that would affect giving, that is, urban residence, educational levels, age, and land ownership. Eighty percent of baseline listeners donated salt, whereas only 59% of talk show listeners donated salt. Consistent with the results for attitudes, the experimental difference in donations between talk show and baseline listeners who *discussed* the program are stronger than the difference for those who only reported listening to the program (see Table 4). The frequency with which listeners discussed the radio program (e.g., regularly after every weekly show vs. sporadically) did not further influence listeners' likelihood of giving salt.

Figure 2 depicts the proportions of those who donated salt in the baseline and talk show regions among nonlisteners, listeners who do not discuss, and listeners who discuss. Across the entire sample, higher levels of tolerance among listeners compared to nonlisteners are observed, which were expected given that more tolerant people are likely to select media programs addressing tolerance (Zillman & Bryant, 1985). Because participants self-selected into each category of listening versus not listening and discussing versus not discussing, the within-treatment differences among nonlisteners, listeners, and listeners who discuss cannot be attributed to the radio intervention.

*How much and to whom.* Talk show listeners were less likely to give, but when they gave, their donation was on average 357.7 g—exactly the same average as baseline listeners. Figure 2 shows that participants who discussed the program in the talk show areas give less salt in grams than those who discussed in baseline areas, but this difference is not significant.

**Table 3.** Talk Show Influence on Perspective Taking and Tolerance for Outgroups and Disliked Groups

| | Means | | Talk show influence | |
| --- | --- | --- | --- | --- |
| | Baseline | Talk show | Listens | Listens and discusses |
| Perspective taking | | | | |
| Try to understand them by imagining their inner life | 2.43 | 2.43 | 0.20 (1.77) | 0.11 (2.20) |
| Try to think of reasons for their points of view | 2.44 | 2.32 | 0.47 (1.93) | 0.35 (2.42) |
| Tolerance for outgroups and disliked groups | | | | |
| Naïve to have confidence in other groups | 1.84 | 1.78 | −0.47 (0.82) | −0.30 (1.27) |
| Marry only from your own group | 1.63 | 1.56 | 0.37 (1.14) | 0.74 (1.69) |
| Ban disliked group from holding demonstrations | 2.66 | 2.88 | 1.19 (1.42) | 1.46 (1.66) |
| Don't want disliked group in my association | 2.25 | 2.48 | 1.70** (0.69) | 1.89** (1.65) |
| There will never be peace if disliked group stays here | 2.84 | 3.08 | 1.55* (0.69) | 1.87** (1.65) |

Means are participant responses on a 1 (*disagree strongly*) to 4 (*agree strongly*) scale. Baseline listeners heard the soap opera only; talk show listeners heard the talk show plus soap opera. Coefficients are probit regression estimates in which listening to the radio show (1 = *listens*, 0 = *does not listen*) is instrumented by randomized assignment to the *talk show* (1) or *baseline* (0) condition. I control for *urban* (1) and *rural* (0) status in each regression. Numbers in parentheses are the standard errors of the coefficients.
*$p < .05$. **$p < .01$.

**Table 4.** Exposure to the Talk Show Decreases Salt Donations Among Radio Listeners and Radio Listeners Who Discuss

| | Salt donations | | | |
| --- | --- | --- | --- | --- |
| | Listening | | Listening and discussing | |
| Talk show | −1.72** (0.55) | −1.99*** (0.33) | −1.99** (0.54) | −2.17*** (0.25) |
| Urban | | −0.15 (0.28) | | 0.06 (0.19) |
| Education | | 0.20*** (0.06) | | 0.13* (0.07) |
| Age | | −0.01*** (0.00) | | −0.00 (0.01) |
| Land owner | | 0.14 (0.11) | | 0.20 (0.11) |

Coefficients are probit estimates in which the independent variable, listening to the radio show (1 = *listens*, 0 = *does not listen*), is instrumented by the randomized assignment to broadcasting condition (1 = *talk show*, 0 = *baseline*). Education is an ordered variable from 1 (*no education*) to primary, secondary, and university education. Age is a linear variable; land ownership is dichotomous (1 = *owns*, 0 = *does not own land*). Numbers in parentheses are the standard errors of the coefficients.
*$p < .05$. **$p < .01$. ***$p < .001$.
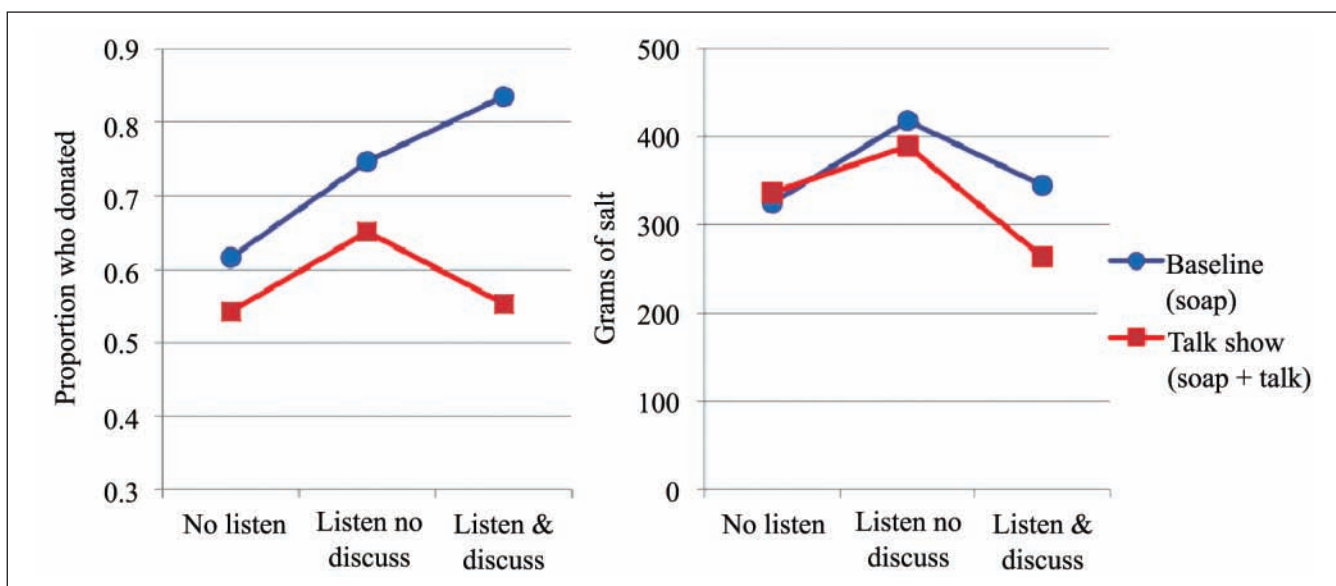


**Figure 2.** Proportion of salt donators, and average amount of donations in treatment and baseline areas

However, the target of judgment differed between the two experimental groups. Twenty-nine percent of talk show listeners believed they were donating their salt to the military wing of an outgroup (because they had named them as their disliked group), compared to 13% of baseline listeners ($\beta$ = 1.60, *SE* = .75, *p* < .05). One participant said: "I'll give, despite the fact they have stolen all from us. Perhaps this gift will change them." Other negative comments allayed fears that participants felt compelled to donate: "I would rather throw this bag of salt in the toilet than let Nkunda's men [a militia] have it." Talk show listeners who believed they were donating salt to a disliked military group were significantly less likely to donate than baseline listeners who believed they were giving to the military ($\beta$ = –1.56, *SE* = .44, *p* < .001). Talk show listeners who did *not* believe they were giving salt to a military wing were significantly less likely than baseline listeners to donate to a disliked group, but only when they reported discussing the program ($\beta_{\text{NoDiscussion}}$ = –1.47, *SE* = 1.22, *p* = .22; $\beta_{\text{Discussion}}$ = –2.04, *SE* = 1.1, *p* < .07). Consistent with the attitudinal results, discussion strengthens the association between exposure to the talk show and less helping.

*Salience of grievances.* All of the participants' spontaneous comments about their salt decision were coded using categories derived from the transcripts and a priori categories suggested in the literature. The range of rationales can be broadly classified as negative, strategic, or positive. Negative rationales include personal and group-based grievances against the least liked group (e.g., "They killed my mother/They make us poor"), blame of a foreign group (e.g., "They are not from here; they should go home"), and anger (e.g., "I'd rather die than help them"). Strategic rationales include reasons for *withholding* salt (e.g., "If I give this to them, they will use it to get stronger and attack us") and for *donating* salt (e.g., "If I give them this, maybe they will stop attacking us"). Positive rationales include citations of common humanity (e.g., "We all have the same needs"), of religious teachings (e.g., "The bible tells us to love our enemy"), and of positive social norms (e.g., "We are Congolese, this is the way we must treat others"), and altruistic statements (e.g., "I want to help others").

Overall, talk show listeners offered more reasons for giving or not giving than did baseline listeners (an average of 1.6 coded motivations per talk show listener and 1.1 per baseline listener). Controlling for number of reasons, talk show listeners provided more *negative* rationales for their salt decision. Specifically, talk show listeners cited personal and group-based grievances and the foreign status of disliked groups significantly more often (Table 5). Moreover, if talk show listeners donated, they were more likely than baseline listeners to describe their donations as strategic (e.g., to persuade the group to cease violence).

**Table 5.** Rationales for Donating (or Not Donating) Salt to a Disliked Group

| | Talk show | Baseline |
|---|---|---|
| Negative | 43% | 33% |
| Personal/group grievances | 1.67*** (0.52) | |
| Blame foreigner group | 1.64*** (0.44) | |
| Anger expressed | 1.46 (0.83) | |
| Strategic | 9% | 6% |
| Strategic withholding | 1.54 (1.02) | |
| Strategic giving | 1.39* (0.79) | |
| Positive | 37% | 37% |
| Common humanity | –0.46 (0.81) | |
| Religious teachings | –1.44 (0.86) | |
| Positive societal norms | –0.07 (1.73) | |
| Altruism | 1.03 (2.51) | |

Coefficients are probit estimates in which the reason is dichotomous (1 = *reason mentioned*, 0 = *not mentioned*), predicted by listening to talk show (1 = *listens*, 0 = *does not listen*), instrumented by random assignment to broadcasting condition (1 = *talk show*, 0 = *baseline*). Percentages are percentages of negative, strategic, or positive reasons given among participants living in talk show versus control areas. Numbers in parentheses are the standard errors of the coefficients.
*p < .05. ***p < .001.

## Individual Differences in Background and Discussion

Listeners' ethnic identity is not associated with differential responding to the talk show. However, listeners' personal experience of violence does play a role in their behavioral reactions to the program. The talk show's negative effect on salt donations is not significant among the minority of listeners who did not report experiencing a human rights abuse (25% of listeners; $\beta$ = –1.18, *SE* = 1.06, *p* = .27), whereas the effect among those who report a human rights abuse is strong and significant ($\beta$ = –1.83, *SE* = .49, *p* < .001). Listeners' attitudinal reactions to the talk show were not moderated by their experience of violence. Finally, variation in the quality of participants' discussions does not moderate the experimental effects. There is no substantive or significant effect of participants' self-reported discussion frequency, disagreement frequency, or variety in discussion partners on the experimental differences in attitudes or behavior. Although this result is surprising in light of predictions made by the group polarization literature, it may be explained by the fact that these aspects of discussion were self-reported or by the relative invariance in discussion partners, who were mostly ingroup members.

## Potential Mechanism of Talk Show Influence

Exposure to the talk show, and particularly discussion prompted by the talk show, causes listeners to be less tolerant toward disliked outgroups, in attitude and behavior. Why? One

plausible mechanism is that the talk show called attention to intergroup grievances. Talk show and baseline listeners suffered comparable rates of human rights violations ($M = 1.3$ abuses in both groups), but talk show listeners expressed more personal and group-based grievances when talking about their disliked groups, and they were more likely to think about the militarized wing of that group. Talk show exposure and expression of personal or group grievance are both significant and negative predictors of behavioral intolerance (salt donation). A probit regression of salt donation on talk show exposure *and* grievance expression shows that the talk show no longer significantly predicts salt donation ($\beta = -1.07$, $SE = 0.97$, $p = .28$), whereas grievance is a strong negative predictor of giving salt ($\beta = -1.47$, $SE = 0.51$, $p = .004$, Sobel's $Z = -2.08$, $SE = 1.24$, $p = .03$). Because I did not experimentally test the salience of grievances as a mechanism of the talk show's impact, I offer it as a plausible story fitting with the general pattern of results—one that merits future testing (Bullock, Green, & Ha, 2010).

## Discussion

A radio talk show in eastern DRC that encouraged discussion marked by a range of tolerant views, extended intergroup contact, and perspective taking had significant and unintended effects. The show did increase interpersonal discussion among listeners. However, relative to baseline listeners who were exposed to the same subjects but not encouraged to discuss, talk show listeners demonstrated more negative attitudes and fewer helping behaviors toward disliked groups.

The experiences of talk show listeners and baseline listeners were equivalent in many respects. Key to the interpretation of the findings, both reported the same level of human rights violations and reported discussing actual situations in eastern DRC following the soap opera or soap opera plus talk show. However, talk show listeners described their discussions as more contentious, and their intolerance of disliked groups was stronger across a variety of indicators, including interview responses about group intolerance, offers of food aid to disliked groups, and spontaneous comments about personal and group-based grievances.

Given the small sample of broadcasting regions, it is possible that random chance allocated the talk show to regions where citizens were most aggrieved. The ex ante matching of broadcast regions diminishes this possibility, in addition to the regions' equivalence on discussion and anger measures that are independent of the talk show (i.e., habitual political discussion and human rights abuses). Finally, the results are consistent across different measures of attitudes and behavior. The present findings require replication, but at this point they represent an empirical and theoretical puzzle. Why did the increased discussion lead to less tolerant attitudes and behaviors? What mediating process was responsible? My

design limits my ability to pinpoint the exact cause of this negative effect, but I can use the theories that generated the intervention to speculate about causes and to plan future tests.

Before addressing this puzzle, I summarize the immediate lessons generated by the study. First, I show that media *can* increase interpersonal discussion in a real-world context. This is a notable finding, given the reach of the mass media and the possibilities it indicates for the study of interpersonal and media influence. Second, the significant and negative impact of these discussions highlights the importance of pursuing theoretical integration and sensitivity to context in psychological theory, particularly with respect to topics of immediate social relevance such as conflict reduction. Connective theoretical ideas linking theories to contexts and to other theories should be perennial subjects of scholarly pursuit, given both the theoretical challenge and the social consequence. Third, the study provides a methodological blueprint, one that I hope will diminish presuppositions about the infeasibility or atheoretical nature of field experiments.

The negative impact of the talk show may indicate that my theoretical predictions were too far out of sample—much of the theory guiding the talk show was developed with college students in rich, industrialized nations (Henrich, Heine, & Norenzayan, 2009). Alternatively, I may have integrated theories and contextual concerns incorrectly or neglected to consider other vital recommendations. In the first case, my surprising results call for more research in a variety of social and political conditions to improve the external validity of my theories. In the second case, my results call for different connective ideas about how theories of discussion and conflict reduction operate in tandem.

In the remainder of this article, I discuss movement toward the latter end by examining the talk show's influence in more detail and proposing additional ideas for joining theoretical perspectives on discussion and conflict reduction. I also suggest improvements to my methodology to sharpen statistical and theoretical inference in future research.

### *Connective Ideas for Theories of Discussion and Conflict Reduction*

The data suggest that the talk show increased intolerant attitudes and behaviors by heightening listeners' awareness of intergroup grievances, but they do not explain why grievances were primed. One straightforward explanation is that listeners did not follow the talk show's instructions to consider other positions, groups, and perspectives. Although the data cannot definitively refute this interpretation, the fact that talk show listeners' discussions were more contentious suggests the presence of differing opinions or of the negative affect that can arise when people imagine themselves in others' shoes (Batson, 2009).

If talk show listeners did follow the show's discussion guidance, we are faced with a few different explanations as to why the show was unable to prevent the paradoxical "dark side" (Galinsky et al., 2005) of perspective taking, group polarization, or intergroup contact. Perhaps the show used too many conflict-reduction techniques; alternatively, it may have inspired discussion with too little guidance. Although the show stands in dramatic contrast to the freewheeling style of most talk shows (from central Africa to the United States), its guidance was minimal compared to professionally and theoretically guided conflict-reduction dialogues (e.g., Bland et al., 2006; Kelman, 1999). In the following, I consider factors such as discussion guidance, partners, goals, and timing for the interpretation of the current findings and for future research.

*Types of guidance.* There are a few possibilities why the talk show guidance negatively affected listeners. First, although the show aired a range of tolerant listener views, listeners did not necessarily entertain these views during their discussion. The group polarization literature is very clear that repetition of one position will polarize the group (Brauer & Judd, 1996). Future talk show guidance could strive to ensure that listeners are exposed to alternative views via their discussion partners, not just via the radio program, by directing listeners to respond to views broadcast on the show. Second, the talk show itself was polarized in the respect that it never aired angry or frustrated listener feedback. The concentration of relatively tolerant on-air reactions may have polarized discussants by portraying a perspective so inconsistent with their own that it was categorized as an outgroup perspective. Social categorization theory predicts that the salience of ingroup–outgroup differences increases the likelihood of polarization. There is a fine line between representing angry audience feedback and media incitement, but future broadcasts might try airing audience reactions that more accurately reflect listeners' frustration.

The show's perspective-taking guidance should be examined in particular, as the imagine-self technique was chosen over a few viable alternatives. Although the imagine-self perspective seemed more palatable for audiences experiencing a conflict, Batson (2009) notes that it is not the most effective technique for inspiring empathic concern. Moreover, listeners were sometimes asked to take the perspective of sad or angry characters featured in the fictional conflict. Taking the perspective of those who feel negatively may not generate sympathy or changed attitudes (Vescio, Sechrist, & Paolucci, 2003), in part because individuals naturally resist the overlap of the self with negative others (Galinsky et al., 2005). Future research might direct perspective taking only toward targets who remain hopeful or who are striving to improve. Perspective taking instructions could also be more explicit, to direct the positive effects of perspective taking toward an entire outgroup rather than the specific targets of the exercise (Dovidio, Allen, & Schroeder, 1990). One way to be more explicit

would be to add real-world examples to the discussion guidance. This runs counter to Paluck's (2009a) suggestion that the power of fictional media derives partly from its function as an open-ended story for discussion and interpretation, a hypothesis that awaits rigorous testing.

*Discussion partners.* The talk show did not inspire intergroup contact—the overwhelming majority of participants discussed with people they knew well, typically friends and family members. However, the goal of the program was to improve intergroup attitudes and behaviors. To reconcile these two aspects of the intervention, this study relied on the soap opera characters—specifically characters who befriended characters from outside their ethnic group—to provide listeners with extended contact. The talk show amplified exposure to this extended contact by asking listeners to discuss the characters' relationships. However, extended contact may not be enough to diminish the salience of listeners' group identity or the dominance of ingroup perspectives and opinions presented in the face-to-face discussion. Both factors—the salience of ingroup identity and the repetition of ingroup positions—are reliably related to opinion polarization (Brauer & Judd, 1996; Mackie & Cooper, 1984).

To diminish the salience of ingroup identity and the dominance of ingroup positions, future instructions might invite listeners to discuss from their point of view of a mother, father, or other kind of individual nongroup perspective. Alternatively, future interventions could test the effects of facilitating actual intergroup interactions using the media. One possible method is a live call-in show matching callers from different sides to discuss on air with a moderator. Such a show would expose listeners to a guided intergroup discussion and could encourage them to emulate the discussion in their own lives.

*Discussion goals.* One aspect of the intervention I did not consider was the provision of a goal for the discussions. The talk show did not provide listeners with "next steps" or a behavioral channel for acting on their conclusions. The lack of goals sets these discussions apart from other discussion-based interventions aimed at identifying a community need or policy (Lee, 2007). Talk for talk's sake can make discussants feel impotent, and this sense of "cheap talk" (Bland, 2006) can fuel frustration and anger. Epley et al. (2006) suggest that superordinate goals and other factors highlighting shared interests can prevent perspective-taking backlash. This can be tricky to achieve in a conflict situation, but future research should explore the impact of suggesting goals such as forming community boards or collectives for providing aid to neighbors in need.

*Discussion timing.* Lacking a pretest, I interpret the results as evidence that encouraging people to talk exacerbated intolerance of disliked groups. This interpretation leads to the question: How can discussion be designed to be more beneficial? However, I could also use the interpretation that people who were *not* encouraged to discuss displayed more

positive attitudes and behaviors than those who were encouraged. This alternative interpretation begs the question: Is it better not to talk? Or, more realistically, *when* is it appropriate to talk? The talk show encouraged discussion in the middle of a conflict. Whether there is a critical period when discussion of a certain type should be suspended is worthy of sustained research. That talk therapy plays a negligible role in the resilience of the bereaved is a potentially related insight for this line of work (Stroebe, Schut, & Stroebe, 2005). Other programs of research show small but reliable mental health benefits of self-disclosure through writing or talking (Pennebaker & Chung, 2007); however, a lack of agreement among discussion partners undermines these effects (Lepore, Ragan, & Jones, 2000).

The timing of outcome measurement also may have been premature—1 year of discussion may be too brief for inspiring positive change. Alternatively, the shape of positive change might feature a decline in positive attitudes before an upturn. Little is known about the functional form of responses to discussion interventions. These questions require more long-term studies.

## Future Work

Future studies should capture more detailed data on how actual discussions are conducted (with whom, for how long, featuring which emotions and speech patterns) to tackle the ever-important question of mechanism: How does discussion yield particular outcomes across various contexts? Participants could be asked to recall their discussions more fully in the posttest, or researchers could identify participants before the program launch with a pretest and then follow them over the course of the broadcast using ethnographic methods, regular check-ins, or daily diaries. Future studies will have to trade some of the unobtrusiveness of the present research design for the ability to listen in on media-inspired discussions.

Future studies should incorporate a pretest, when possible, to improve the accuracy of experimental estimates and to ascertain the exact direction of change. Units of randomization could be increased in a number of ways to improve the robustness and accuracy of findings without giving up the unobtrusiveness of the "treatment by radio tower" approach. For media programs, studies could be conducted with community radio stations with narrower broadcasting range, or researchers could take advantage of naturally occurring variation in radio reception due to geography (a "natural experimental" strategy; Dunning, 2008). On an individual or small-group level, researchers could randomly distribute radio (or television or web-based) media programs to individuals on cassette, CD, DVD, or via an Internet campaign. This kind of study points to many possibilities for studying media and interpersonal influence in social networks, particularly in contained environments such as schools or refugee camps.

Laboratory experiments and observational field studies reveal instances in which discussion does and does not ameliorate conflict, and all of this work has offered possible theoretical solutions. Field experiments can test theory in a rigorous manner, merging the advantages of contextualized observational data with claims on causality. It seems that our future research is cut out for us.

## Notes

1.  The psychological effects of fictional ingroup members' friendships may be observed in part because, as shown by media effects and persuasion research, relationships with fictional characters can carry the psychological significance of real friendships (Rubin, 2002), and fictional narratives often have an influence on opinions that is comparable to factual narratives (Gerrig, 1993; Green & Brock, 2000).
2.  See Rojas et al. (2005) for a quasiexperimental design. Correlational evidence suggests positive effects of media-inspired discussion, particularly the ability and desire to work cooperatively (e.g., Ball-Rokeach, Kim, & Matei, 2001; Rogers, Braun, & Vermilion, 1977).
3.  The study was a small part of a broader effort to evaluate the impact of the radio soap opera, the results of which are not reported here.
4.  The majority (70%) of letter writers were male; 40% were students, 22% "peasants," 12% professionals, 10% youth not in school, and 5% housewives. Their average age was 31.
5.  For the fewer than 5% of participants who did not inquire about the identity of the group, researchers asked, "Are you curious to know the identity of the group?"
6.  Nonlisteners in baseline and talk show areas represent a different population of participants—that is, people without interest in radio programs about DRC's conflict, people without radio

access, or people who differ from listeners along any number of other unmeasured attributes.

7. I did not expect items to correlate highly with one another because they were chosen from various pretested survey questionnaires to measure distinct issues of tolerance varying in magnitude of social and political consequence.

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