


# Attitude Certainty and Conflict Style: Divergent Effects of Correctness and Clarity

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## Abstract

Little research has examined the properties of people's attitudes that predict how they will respond to conflict with others whose opinions differ. We propose that one aspect of attitude certainty—attitude correctness, or the perception that one's attitude is the “right” attitude to have—will predict more competitive conflict styles. This hypothesis was tested across five data sets comprising four studies. In Studies 1a and 1b, perceptions of attitude correctness (but not another form of attitude certainty, attitude clarity) predicted participants' tendencies to send competitive messages to an ostensible partner who held the opposite opinion. In Studies 2 to 4, manipulations of attitude correctness, but not attitude clarity (Study 3), also increased competitiveness in conflict, and perceived correctness mediated the effect of the correctness manipulation on conflict style (Study 4). The present research has implications for both the predictors of conflict style and the consequences of different forms of attitude certainty.

## Keywords

attitude certainty, conflict management, clarity, correctness, social consensus

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In the current political climates of many societies, opinion conflicts are extremely prevalent. For instance, American politics are dominated by two parties with opposing views on important social and economic issues (e.g., health care, gun control, same-sex marriage). These conflicts emerge in formal contexts such as debates between political candidates, and in informal contexts such as social media posts or discussions between friends. Regardless of context, there are many ways that people may choose to handle disagreement with others. For example, they may respond cooperatively by trying to compromise and attain a mutually beneficial outcome, or competitively by trying to assert one's point of view and “win” the argument (Pruitt, 1998).

What predicts people's choice of conflict management style? Previous research has examined individual differences, such as particular personality traits (Antonioni, 1998) and general perceptions of one's self-concept (Bechtoldt, De Dreu, Nijstad, & Zapf, 2010; De Dreu & van Knippenberg, 2005) that lead people to be more versus less competitive during opinion conflicts. In this work, however, we focus on how strongly people hold their attitudes toward the issue at hand—specifically, their feelings of certainty about their attitudes (Petrocelli, Tormala, & Rucker, 2007). By doing so, not only do we introduce a new predictor of conflict management style, but also demonstrate for the first time that different aspects of attitude certainty can bear different consequences.

## Conflict Management Styles and Their Predictors

According to the dual-concern model (Rubin, Pruitt, & Kim, 1994), people's responses to an interpersonal conflict can vary along two orthogonal dimensions: concern for one's own outcomes and concern for the other party's outcomes. High concern for both the self and others tends to produce behaviors aimed at problem solving, compromising, and reaching integrative agreements (i.e., win-win situations; Thompson, 1990). In the present research, we refer to these behaviors as “cooperative.” Conversely, high concern for the self but low concern for others tends to produce contentious behaviors, such as dominating a discussion or forcing one's opinion onto others (Carnevale & Pruitt, 1992). In the present research, we refer to these behaviors as “competitive.”

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It is important to note that both cooperative and competitive behaviors are active conflict management strategies, which involve high levels of concern for oneself but different levels of concern for others. The two additional strategies documented in the dual-concern model—avoiding the conflict and yielding to the other party—are passive in that they involve low levels of concern for oneself but different levels of concern for others (low for avoiding, high for yielding; Rubin et al., 1994). Because we are primarily interested in the strategies through which people engage in (rather than shy away from) conflicts, we focus here on how people *actively* respond to interpersonal disagreements, that is, whether they respond in competitive or cooperative ways.

The extant work on the dual-concern model has uncovered several predictors of competitive versus cooperative conflict styles. In terms of personality traits, extraversion relates positively, whereas agreeableness and neuroticism relate negatively, to competitive style. Furthermore, with the exception of neuroticism, all dimensions of the Big 5 (extraversion, agreeableness, openness, and conscientiousness) relate positively to cooperative style (Antonioni, 1998).<sup>1</sup> Cultural differences also play a critical role, with independent self-construal (i.e., defining the self as a unique individual) positively predicting competition and interdependent self-construal (i.e., defining the self in terms of social relationships and group memberships) positively predicting cooperation (Oetzel & Ting-Toomey, 2003). Taken together, this work suggests that the personality variables typically associated with concern for others tend to breed cooperative conflict management strategies, but that those variables typically associated with concern for oneself tend to breed competitive strategies.

Recent research has extended beyond particular personality traits to general aspects of the self-concept as predictors of conflict styles. For example, individuals who have been induced to feel a sense of personal ownership over their attitudes toward an issue tend to approach disagreements on the issue with more competitive mindsets and behaviors, as the disagreements present a threat to the self (De Dreu & van Knippenberg, 2005). Supporting the idea that self-concept threats can promote competition, the effects of identification with one's attitudes on competition are weaker among individuals with high self-concept clarity (see Campbell et al., 1996), who feel more certain of "who they are" and hence are less susceptible to such threats (De Dreu & van Knippenberg, 2005). These effects are also weaker among individuals who have affirmed important personal values beforehand (Cohen et al., 2007), a paradigm shown to increase self-concept clarity (Sherman & Cohen, 2006). In fact, high self-concept clarity not only negatively predicts competition, but also positively predicts cooperation (Bechtoldt et al., 2010). Thus, having a strong sense of self appears to promote constructive conflict management strategies.

## Attitude Certainty: Correctness Versus Clarity

Although the aforementioned work has demonstrated effects of aspects of the self-concept in general (i.e., self-concept clarity) on conflict styles, research has yet to examine whether aspects of one's attitude toward the specific topic of disagreement can also influence the use of competitive versus cooperative strategies. In particular, can people's feelings of certainty about their attitudes predict how they will approach disagreement with others? This is an important question because two individuals may hold the same attitude toward an issue (e.g., supportive of gun control), but with different degrees of certainty (e.g., one individual may be certain and the other may be uncertain of how he or she feels about gun control). Given that attitude certainty predicts outcomes such as resistance to persuasion and attitude-behavior correspondence (Tormala & Petty, 2002), these two individuals may exhibit very different behaviors—perhaps including conflict styles—despite their attitudes appearing identical on the surface.

Attitude certainty is broadly defined as the extent to which an attitude is held with confidence and is perceived as valid (Gross, Holtz, & Miller, 1995). Recently, however, it has been broken down into two components: attitude clarity and attitude correctness. Whereas attitude clarity involves certainty about what one's true evaluation of an attitude object is, attitude correctness involves certainty about whether one's attitude is the "right" attitude to possess (Petrocelli et al., 2007). For example, a person who holds a supportive attitude toward gun control with high clarity would be certain that he or she really does support gun control. A person who holds a supportive attitude toward gun control with high correctness would be certain that supporting gun control is the "right" stance to have and that others should feel the same way.

Attitude clarity and correctness have distinct predictors. Expressing one's attitude repeatedly has been found to increase attitude clarity but not attitude correctness, presumably because repeated expression solidifies one's attitude in one's own mind. However, receiving information that others hold the same attitude as oneself has been found to increase attitude correctness but not attitude clarity, presumably because social consensus validates one's attitude relative to that of others (Petrocelli et al., 2007). In terms of their consequences, both clarity and correctness independently increase resistance to persuasion (Petrocelli et al., 2007). No research, though, has examined whether attitude clarity and attitude correctness can bear different consequences for behavior. Because people's preexisting attitudes play a central role in their handling of disagreements with others (De Dreu & van Knippenberg, 2005), conflict management is a potentially interesting domain in which to study such consequences.

As noted above, attitude correctness involves the belief that one's own attitude toward a specific topic (e.g., gun control) is superior to others' attitudes (Petrocelli et al., 2007). One possible downstream effect of this belief is that people high in correctness may be more willing to force their attitudes onto those who disagree with them. In other words, attitude correctness may engender a more competitive conflict style. Research on naïve realism (Ross & Ward, 1996) suggests potentially relevant processes by which people might explain such disagreements with others. In this research, negotiators tend to perceive opposing parties as more extreme than they actually are (Keltner & Robinson, 1993) and as more ideologically based than objective (Robinson, Keltner, Ward, & Ross, 1995), both of which may be linked to a greater sense of attitude correctness (see Ross & Ward, 1996). These perceptions of extremity and bias ultimately lead to less optimal (i.e., less integrative) negotiation outcomes (Keltner & Robinson, 1993), a possible byproduct of competitiveness in conflict (Thompson, 1990). However, the prediction that attitude correctness may influence conflict management style has yet to be directly tested.

Attitude clarity, by contrast, should not trigger competitiveness in interpersonal conflict. Unlike attitude correctness, attitude clarity does not involve (favorably) comparing one's own attitude with others' attitudes. Moreover, some of the items used to assess attitude clarity (e.g., "To what extent is your attitude toward this issue clear in your mind?"; Petrocelli et al., 2007) are similar to items on the Self-Concept Clarity Scale (e.g., "In general, I have a clear sense of who I am and what I am"; Campbell et al., 1996; also, see DeMarree & Morrison, 2012). If anything, self-concept clarity and related constructs such as self-affirmation reduce tendencies to engage in competitive conflict styles (Cohen et al., 2007; De Dreu & van Knippenberg, 2005). It is thus reasonable to predict that attitude clarity, like self-concept clarity, would not lead people to approach conflict competitively.

## Overview of Research

Across five data sets, we tested the prediction that attitude correctness, but not attitude clarity, would lead people to adopt a competitive conflict style when disagreeing with others on social issues. We did not have strong a priori predictions about the effects of attitude correctness or attitude clarity on cooperative conflict style. In Studies 1a and 1b, we employed a correlational design by measuring participants' perceptions of their attitude clarity and correctness. In Studies 2 through 4, we experimentally manipulated attitude correctness. Further, Study 3 demonstrated the specificity of our effects to attitude correctness (versus clarity), and Study 4 showed mediation by perceptions of correctness.

Consistent with previous research (e.g., Bechtoldt et al., 2010), in each study we aimed to have 20 to 25 participants in each cell.

## Study 1a

### Method

**Participants.** Two hundred fifty-eight Texas Tech University students (116 men, 142 women;  $M_{\text{age}} = 20.15$ ,  $SD = 3.31$ ) participated in an online study in exchange for partial course credit.

**Procedure and materials.** Participants first read a paragraph about a junk food tax law ostensibly being considered in their home state (adapted from Clark, Wegener, & Fabrigar, 2008). The message described that states were considering the tax to offset new costs associated with the Patient Protection and Affordable Care Act passed by Congress and President Obama, and that the tax would encourage healthier eating by making the costs of junk food and healthier food more equal.

After reading the paragraph, participants reported their own attitudes toward the junk food tax using three seven-point semantic differentials, anchored at *bad-good*, *negative-positive*, and *unfavorable-favorable* ( $\alpha = .96$ ;  $M = 4.02$ ,  $SD = 1.97$ ). Participant attitude did not influence any of the results in this study and thus will not be discussed further.

Next, participants reported their perceptions of attitude clarity and attitude correctness, using the scale developed by Petrocelli et al. (2007). The clarity and correctness subscales contained four and three items, respectively. An example clarity item was, "How certain are you that you know what your true attitude toward the junk food tax really is?" An example correctness item was, "How certain are you that your attitude toward the junk food tax is the correct attitude to have?" Participants responded on nine-point scales (1 = *not at all certain*, 9 = *extremely certain*), and their responses were averaged into separate composites for clarity ( $M = 6.95$ ,  $SD = 1.80$ ;  $\alpha = .93$ ) and correctness ( $M = 5.92$ ,  $SD = 1.66$ ;  $\alpha = .78$ ).

Participants then completed a behavioral measure of conflict style, adapted from De Dreu and van Knippenberg (2005). Participants were told that they would be connected to another student who was also currently participating in the study but had the opposite attitude toward the junk food tax as they did, and that they would have the opportunity to debate the tax with that student. To "set the stage" for the debate, participants were asked to send exactly four, of nine messages through a chat to their upcoming interaction partner. Three messages were designed to allow the participant to express a desire to compete ("I plan on winning this debate," "I am going to make you understand my point of view," and "Don't count on me to compromise on this issue"). Another three messages were designed to allow the participant to express a desire to cooperate ("Hi, let's work together on this topic and see where we agree," "This is definitely an issue that people need to come to an agreement on," and "I hope that you will also want to find some common ground on this issue"). The last three messages, included for exploratory

**Table 1.** Zero-Order Correlations, Study 1a ( $N = 258$ ).

	Clarity	Correctness	Competitive	Cooperative
Clarity				
Correctness	.64**			
Competitive	.08	.22**		
Cooperative	-.12*	-.07	-.47**	
Learning	-.01	-.18**	-.56**	-.38**

Note. Competitiveness values were subjected to a square root transformation to reduce positive skew.

\* $p < .05$ . \*\* $p < .01$ .

purposes, were designed to allow the participant to express a desire to learn more about their partner's opinion ("I'm curious to learn about your position in this debate," "We can probably both learn from each other on this," and "Maybe you can tell me more about your reasoning on this issue").

The nine messages were presented on the same page, and the order was randomized for each participant. Participants could not select the same message twice, so their choices were not independent.

Following De Dreu and van Knippenberg (2005), we measured competitive conflict style by summing the number of competitive messages that participants chose to send to their interaction partner (ranging from zero to three). The same calculation was used to compute scores for cooperative and learning conflict styles ( $M = 0.70$ ,  $SD = 0.85$  for competitive;  $M = 1.28$ ,  $SD = 0.75$  for cooperative;  $M = 2.00$ ,  $SD = 0.81$  for learning).

## Results

Because participants' competitiveness scores were positively skewed, we used the square root rather than raw scores in our analyses (skewness = .99, before transformation, .32, after transformation;  $SE_{\text{skewness}} = .15$ ). However, analyses with raw competitiveness scores produced identical or stronger results in this and all subsequent studies.<sup>2</sup>

**Zero-order correlations.** Consistent with predictions, attitude correctness significantly predicted increased competitiveness, whereas attitude clarity did not. In addition, attitude clarity (but not correctness) was negatively correlated with number of cooperative messages sent (see Table 1).

**Main analyses.** To examine the independent effects of each variable, we regressed each conflict style onto attitude clarity and attitude correctness. Supporting our predictions, we found a significant effect of correctness on competitiveness, such that as attitude correctness increased, so too did participants' use of more competitive opening statements ( $b = .11$ ,  $SE = .03$ ),  $t(256) = 3.59$ ,  $p < .001$ , total  $R^2 = .05$ . No such effect was found for clarity ( $b = -.04$ ,  $SE = .03$ ),  $t(256) = -1.33$ ,  $p = .18$ . The difference between these two regression

coefficients was significant ( $z = -5.83$ ,  $p < .001$ ; Lee & Preacher, 2013), indicating that attitude correctness had stronger effects on competitiveness than did clarity.

Similar analyses were conducted on the use of cooperative and learning statements. The analyses of the cooperative statements revealed no significant results ( $ps > .08$ ). For the learning statements, both correctness ( $b = -.15$ ,  $SE = .04$ ),  $t(256) = -3.81$ ,  $p < .001$ , and clarity ( $b = .08$ ,  $SE = .04$ ),  $t(256) = 2.32$ ,  $p = .02$ , were significant predictors, albeit in different directions (total  $R^2 = .05$ ).

## Discussion

The results of Study 1a supported our prediction that attitude correctness, but not attitude clarity, would be associated with a competitive conflict management style. Surprisingly, the number of learning messages sent was negatively related to attitude correctness and positively related to attitude clarity. The negative relationship with attitude correctness may have been due to the non-independence of the three conflict dependent measures. That is, based on the correlations in Table 1, participants who selected more competitive statements (e.g., those high in attitude correctness) were also likely to select fewer learning statements, and so the effect of correctness on learning statements could be a byproduct of its effect on competitive statements. The positive relationship between attitude clarity (controlling for correctness) and learning statements reflects the possibility that individuals who know what their true attitudes are may also be motivated to learn more about others' true attitudes. However, given that we did not make explicit predictions about the learning statements, this effect should be interpreted with caution.

In Study 1b, we aimed to replicate these findings using a different issue, as well as a slightly different paradigm for the online chat.

## Study 1b

### Method

**Participants.** One hundred three U.S. residents (53 men, 50 women;  $M_{\text{age}} = 32.23$ ,  $SD = 11.96$ ) were recruited from Amazon's Mechanical Turk (mTurk) website to participate in exchange for US\$.50. Four participants who suspected that the "online debate" would not take place and four participants who believed that vandalizing SUVs was justifiable (i.e., to whom the debate instructions described below did not apply) were omitted from analyses, leaving 95 individuals in the final sample.

**Procedure and materials.** The procedure was the same as in Study 1a, with four modifications. First, instead of the junk food tax, the topic of the "online debate" was whether it is justifiable to vandalize SUVs in the name of environmental

conservation. We anticipated that the vast majority of participants would believe it is not justifiable, and indeed, this was true for all but the four participants mentioned above. Thus, when setting up the debate, we informed participants that their partner believed it is justifiable (i.e., held the opposite opinion as theirs).

Second, before beginning the debate, participants simply reported their attitude toward the issue on a two-point scale (*yes* vs. *no*) rather than using a semantic differential, and they completed the attitude clarity ( $M = 8.07$ ,  $SD = 1.38$ ;  $\alpha = .93$ ) and attitude correctness ( $M = 7.45$ ,  $SD = 1.59$ ;  $\alpha = .88$ ) measures worded to pertain to SUV vandalism.

Third, we changed the setup of the debate slightly so that it was identical to Bechtoldt et al.'s (2010). Specifically, rather than choosing four messages in a single round, the messages were presented to participants in four separate rounds. Each round entailed choosing to send one of six messages (three competitive and three cooperative). Participants had the options not to send a message in any given round and to send the same message in more than one round. Thus, unlike in Study 1a, participants' message choices were independent of one another. The total number of messages (and the number of each type of message) could range from 0 to 4 ( $M = .60$ ,  $SD = 1.09$ , for competitive messages;  $M = 2.11$ ,  $SD = 1.40$ , for cooperative messages;  $M = 2.71$ ,  $SD = 1.21$ , for total messages). The learning messages, which we had included in Study 1a for exploratory reasons, were dropped from this study.

The three competitive messages and two of the three cooperative messages were the same as in Study 1a. The third cooperative message ("This is definitely an issue that people need to come to an agreement on") was replaced with "We can probably figure out a solution that benefits everyone," due to concerns that the former message would be seen as overly forceful.

Fourth, after sending the messages, participants responded to an open-ended prompt about what they thought would happen during the debate. Their responses were examined for suspicion, and as noted above, participants who indicated disbelief that the debate would occur were dropped from analyses. Participants were debriefed once they submitted their responses to the prompt.

## Results

As in Study 1a, to reduce skew, we took the square root of participants' competitiveness scores prior to analyses (skewness = 1.88, before transformation, 1.19, after transformation;  $SE_{\text{skewness}} = .25$ ).

**Zero-order correlations.** Consistent with hypotheses, attitude correctness significantly predicted increased competitiveness but not increased cooperativeness (or total number of messages), whereas attitude clarity did not predict any of these outcomes (see Table 2).

**Table 2.** Zero-Order Correlations, Study 1b ( $N = 95$ ).

	Clarity	Correctness	Competitive	Cooperative
Clarity				
Correctness	.69**			
Competitive	.15	.25*		
Cooperative	-.11	-.14	-.55**	
Total	.003	.06	.23*	.66**

Note. Competitiveness values were subjected to a square root transformation to reduce positive skew.

\* $p < .05$ . \*\* $p < .01$ .

**Main analyses.** To examine the independent effects of each variable, we regressed the number of competitive messages, number of cooperative messages, and total number of messages onto attitude clarity and attitude correctness. Supporting our predictions, higher levels of attitude correctness were associated with more competitive messages sent ( $b = .11$ ,  $SE = .06$ ),  $t(92) = 1.93$ ,  $p = .056$ , but attitude clarity was unrelated to the number of competitive messages sent ( $b = -.02$ ,  $SE = .07$ ),  $t(92) = -.26$ ,  $p = .80$ , total  $R^2 = .06$ . Although the effect of correctness did not reach conventional levels of significance, as in Study 1a, the difference between the correctness and clarity regression coefficients was significant ( $z = -2.80$ ,  $p < .005$ ; Lee & Preacher, 2013).

Neither attitude clarity nor attitude correctness predicted number of cooperative messages ( $ps > .38$ ) or total number of messages ( $ps > .44$ ).

## Discussion

Using a different issue, Study 1b replicated the finding from Study 1a that attitude correctness (but not attitude clarity) predicts increased competitiveness in conflict. However, one limitation of these data is that they are entirely correlational. In Studies 2 through 4, we sought to establish causality by experimentally manipulating attitude correctness and (in Study 3) attitude clarity.

## Study 2

### Method

**Participants.** One hundred eighteen U.S. residents (67 men, 51 women;  $M_{\text{age}} = 32.74$  years,  $SD = 11.40$ ) were recruited through mTurk to participate in exchange for US\$.50. Participants were randomly assigned to either the "majority support policy" condition ( $n = 58$ ) or the "majority oppose policy" condition ( $n = 60$ ).

Three participants were omitted from the analyses because they expressed suspicion that either the online debate would not actually happen or the "background information" was not real. The remaining 115 individuals were retained in the final sample.

**Procedure and materials.** Participants first answered demographic questions. They then read that they would be participating in a debate with another mTurk worker, and the focal issue was whether a new policy should be enacted that would require clinically obese airline passengers to pay for two seats instead of one. Before proceeding, participants reported their own attitude toward the policy on a two-point scale (support vs. oppose). In total, 73 participants supported the policy and 42 opposed it.

Next, participants read some “background information” about the policy, which constituted the experimental manipulation of attitude correctness. This information stated that in a recent poll conducted by NBC News, 86% (majority support condition) or 14% (minority support condition) of Americans supported the policy (see Morrison & Wheeler, 2010, for a similar manipulation).

Previous research has demonstrated that perceptions of social consensus for one’s position can increase attitude correctness (Petrocelli et al., 2007). Thus, depending on both participants’ own attitudes and the ostensible attitude of the majority, participants were classified as having either high attitude correctness (i.e., they supported [opposed] the policy and read that most others did as well;  $n = 60$ ) or low attitude correctness (i.e., they supported [opposed] the policy but read that most others opposed [supported] it;  $n = 55$ ).

After the experimental manipulation, participants completed the behavioral conflict style measure from Study 1b. The number of messages of each type was summed to create a competitiveness score ( $M = .47$ ,  $SD = .97$ ) and a cooperativeness score ( $M = 2.20$ ,  $SD = 1.42$ ), both ranging from 0 to 4. The mean for the total number of messages sent was 2.67 ( $SD = 1.31$ ).

Finally, participants were probed for suspicion and debriefed as in Study 1b. Those who either suspected that the debate would not occur or doubted the veracity of the information about “other people’s” opinions were dropped from analyses.

## Results

We predicted that participants who held high attitude correctness (i.e., who were led to believe that most others shared their opinion) would adopt a more competitive conflict style than participants who held low attitude correctness (i.e., who were led to believe that most others did not share their opinion). Prior to analyses, we took the square root of participants’ competitiveness scores to reduce skew (2.19 before transformation, 1.51 after transformation;  $SE_{skewness} = .23$ ).

A one-way analysis of variance (ANOVA) confirmed that high-correctness participants sent significantly more competitive messages to their debate partner ( $M_{transformed} = 0.44$ ,  $SD = 0.69$ , 95% CI [0.29, 0.60]) than did low-correctness participants ( $M_{transformed} = 0.20$ ,  $SD = 0.47$ , 95% CI [0.04, 0.36]),  $F(1, 113) = 4.88$ ,  $p < .03$ ,  $\eta_p^2 = .04$ . In contrast, high-correctness participants sent marginally fewer cooperative messages

to their debate partner ( $M_{raw} = 1.97$ ,  $SD = 1.47$ , 95% CI [1.61, 2.33]) than did low-correctness participants ( $M_{raw} = 2.45$ ,  $SD = 1.32$ , 95% CI [2.08, 2.83]),  $F(1, 113) = 3.48$ ,  $p < .07$ ,  $\eta_p^2 = .03$ .<sup>3</sup> There was no difference in total number of messages sent,  $F(1, 113) = 0.10$ ,  $p = .76$ ,  $\eta_p^2 = .001$ .

## Discussion

Study 2 demonstrated that an experimental manipulation of attitude correctness—informing participants that most others either shared or did not share their opinion—increased competitiveness in much the same way as the attitude correctness measure did in Studies 1a and 1b. The goals of Study 3 were twofold: to use a different manipulation of attitude correctness to increase generalizability and to further examine the specificity of these effects to attitude correctness by also manipulating attitude clarity.

## Study 3

### Method

**Participants.** Ninety-eight U.S. residents (59 men, 37 women, 2 unspecified;  $M_{age} = 30.11$ ,  $SD = 9.39$ ) were recruited from mTurk to participate in exchange for US\$.50. Participants were randomly assigned to one of four experimental conditions: low clarity ( $n = 27$ ), high clarity ( $n = 25$ ), low correctness ( $n = 22$ ), or high correctness ( $n = 24$ ).

Eight participants who suspected that the “online debate” would not take place, two participants whose responses to the clarity and correctness items were more than 3  $SD$  below the sample mean (i.e., who responded to all of the items with a 1 out of 7), and three participants who did not complete the dependent measure were omitted from the main analyses, leaving 85 individuals in the final sample. The degrees of freedom in each of the following analyses vary to reflect the numbers of omitted participants.

**Procedure and materials.** As in Study 2, participants were told that they would partake in an online debate with another person about whether clinically obese airline passengers should be required to purchase two tickets.

After indicating their attitude toward the requirement (support:  $n = 57$ , oppose:  $n = 41$ ), participants completed the experimental manipulation, which was based on a paradigm created by Salancik and Conway (1975). Those in the attitude clarity conditions indicated their agreement with four clarity statements based on the items used in Studies 1a and 1b, whereas those in the attitude correctness conditions indicated their agreement with three correctness statements, on seven-point scales (1 = *strongly disagree*, 7 = *strongly agree*). However, the wording of the statements varied according to whether participants were in the high or low conditions. In the “high” conditions, the statements contained the word “sometimes” (e.g., “I am sometimes certain that I know what

my attitude toward this issue really is,” “I am sometimes certain that my attitude toward this issue is the correct attitude to have”). In the “low” conditions, the statements were identical except that they contained the word “always.”

The rationale behind this paradigm is that the “sometimes” statements should elicit greater agreement than the “always” statements, as participants should find it easier to perceive themselves as sometimes (versus always) feeling a particular way (Salancik & Conway, 1975). Thus, in the context of the present study, the “sometimes” statements should induce participants to feel higher in attitude clarity or correctness. This paradigm has been used in prior research to elicit perceptions of religiosity (Salancik & Conway, 1975), as well as perceptions of oneself as non-prejudiced (Monin & Miller, 2001).

Next, participants sent four messages to their “partner” in the online debate as in Study 2 (competitive:  $M = 0.33$ ,  $SD = 0.78$ ; cooperative:  $M = 2.13$ ,  $SD = 1.27$ ; total:  $M = 2.46$ ,  $SD = 1.19$ ), prior to being probed for suspicion and debriefed.

## Results

Participant attitude (support vs. oppose) did not produce any main effects or interactions and will not be discussed further. The results of each measure were submitted to a 2 (item level: high/sometimes vs. low/always)  $\times$  2 (item type: clarity vs. correctness) ANOVA. As in the previous studies, because participants’ competitiveness scores were skewed, we took the square root of these scores prior to analyses (skewness = 2.77 before transformation, 1.85 after transformation;  $SE = .26$ ). Again, analyses with raw instead of transformed competitiveness scores were identical or stronger.

**Manipulation check.** Participants were marginally more likely to agree with “sometimes” statements ( $M = 5.51$ ,  $SD = 1.05$ , 95% CI [5.16, 5.83]) than “always” statements ( $M = 5.12$ ,  $SD = 1.25$ , 95% CI [4.78, 5.42]),  $F(1, 92) = 2.87$ ,  $p = .09$ ,  $\eta_p^2 = .03$ . Thus our manipulation produced the expected patterns of agreement with the clarity and correctness items.<sup>4</sup> There was also a marginal main effect of item type, such that the attitude clarity statements ( $M = 5.52$ ,  $SD = 1.17$ , 95% CI [5.20, 5.84]) elicited greater agreement than the attitude correctness statements ( $M = 5.06$ ,  $SD = 1.13$ , 95% CI [4.74, 5.42]),  $F(1, 92) = 3.59$ ,  $p = .06$ ,  $\eta_p^2 = .04$ .

**Main analyses.** It was predicted that participants induced to feel high attitude correctness would send more competitive messages to their debate partner than those induced to feel either low attitude correctness or high attitude clarity. There was a significant main effect of item type on competitive messages: Participants in the correctness conditions ( $M_{\text{transformed}} = 0.38$ ,  $SD = 0.13$ , 95% CI [0.24, 0.63]) sent more competitive messages overall than participants in the clarity conditions

( $M_{\text{transformed}} = 0.13$ ,  $SD = 0.40$ , 95% CI [-0.02, 0.28]),  $F(1, 81) = 6.12$ ,  $p < .02$ ,  $\eta_p^2 = .07$ . There was no main effect of item level (sometimes vs. always),  $F(1, 81) = 0.23$ ,  $p = .64$ ,  $\eta_p^2 = .003$ .

More important, the two-way interaction between item level and item type was significant,  $F(1, 81) = 4.06$ ,  $p < .05$ ,  $\eta_p^2 = .05$ . Simple effects tests indicated that high-correctness participants ( $M_{\text{transformed}} = 0.54$ ,  $SD = 0.71$ , 95% CI [0.30, 0.78]) sent marginally more competitive messages than low-correctness participants ( $M_{\text{transformed}} = 0.26$ ,  $SD = 0.51$ , 95% CI [0.05, 0.48]),  $F(1, 81) = 2.84$ ,  $p = .096$ ,  $\eta_p^2 = .03$ . High-clarity ( $M_{\text{transformed}} = 0.05$ ,  $SD = 0.21$ , 95% CI [-0.17, 0.26]) and low-clarity ( $M_{\text{transformed}} = 0.21$ ,  $SD = 0.51$ , 95% CI [0.01, 0.42]) participants did not differ in the number of competitive messages sent,  $F(1, 81) = 1.30$ ,  $p = .26$ ,  $\eta_p^2 = .02$ . Although the predicted effect on competitive messages was only marginal, additional simple effects tests revealed that high-correctness participants sent significantly more competitive messages than high-clarity participants,  $F(1, 81) = 9.24$ ,  $p < .005$ ,  $\eta_p^2 = .10$ , whereas low-correctness and low-clarity participants sent equal numbers of competitive messages,  $F(1, 81) = 0.12$ ,  $p = .73$ ,  $\eta_p^2 = .001$ . A one-way ANOVA with a planned contrast comparing high correctness (3) with the three other conditions (-1) was also significant, omnibus  $F(3, 81) = 3.13$ ,  $p = .03$ ; planned contrast (3 -1 -1 -1):  $t(81) = 2.67$ ,  $p < .01$ .

There were no main effects or interactions on number of cooperative messages or total number of messages sent ( $ps > .36$ ).

## Discussion

The results of Study 3 experimentally demonstrated that whereas attitude correctness increases competitiveness during conflict, attitude clarity does not. In Study 4, we tested whether measured attitude correctness mediates the relationship between consensus information and competitive conflict style. Because we switched back to the consensus manipulation of attitude correctness used in Study 2, testing this mediation also allowed us to ensure that consensus information actually increases perceived attitude correctness.

An additional objective of Study 4 was to use a dependent measure that assessed all five of Pruitt’s (1983) conflict styles (i.e., competitive, compromising, problem solving, yielding, and avoiding), and that did so independently. That is, unlike in Studies 1a through 3, participants could be high or low on any or all five styles, rather than higher scores on one style necessarily indicating lower scores on another style.

## Study 4

### Method

**Participants.** One hundred twenty-nine U.S. citizens (47 men, 81 women, 1 unspecified;  $M_{\text{age}} = 34.93$ ,  $SD = 10.61$ ) were recruited from an online database to participate in this study.

The database was maintained by social science researchers at the University of Chicago and consisted of adults from all areas of the United States, who had signed up (through classified ad websites such as Craigslist) to receive notifications of paid online experiments. As compensation, participants received a US\$5 gift card of a major online retailer.

Participants were randomly assigned to read that most Americans either supported ( $n = 64$ ) or opposed ( $n = 65$ ) a junk food tax. Four participants who suspected that the “background information” about the junk food tax was not real were excluded from analyses, as were 15 participants who reported a neutral attitude toward the junk food tax (i.e., who could not be classified as holding either a majority or minority opinion). The remaining 110 individuals were retained in the final sample.

**Procedure and materials.** Participants read that the purpose of the study was to assess their attitudes toward a social policy, which (as in Study 1a) was a junk food tax under consideration in the United States. After reading a passage about the policy,<sup>5</sup> participants read a paragraph of “background information” indicating that in a recent survey, either a majority (86%) or a minority (14%) of Americans had supported the tax.

Next, participants reported their own attitude toward the junk food tax (1 = *strongly oppose*, 7 = *strongly support*;  $M = 4.04$ ,  $SD = 2.11$ ). Participants’ attitudes were not influenced by whether they had read that a majority or minority of others supported the tax,  $F(1, 108) = 0.005$ ,  $p = .94$ . Participants were classified as either high or low in attitude correctness depending on both their own attitude and the supposed attitude of the majority. Specifically, those who supported the tax (i.e., whose attitude was 5, 6, or 7) and learned that the majority of others also supported it were classified as high in correctness, as were those who opposed the tax (i.e., whose attitude was 1, 2, or 3) and learned that the majority of others also opposed it (total  $n = 53$ ). Those who supported the tax but learned that a majority of others opposed it, and vice versa, were classified as low in correctness (total  $n = 57$ ). As noted above, the 15 participants who held a neutral attitude toward the junk food tax (i.e., whose attitude was 4) could not be classified.

Participants then completed the measures of attitude clarity ( $M = 5.81$ ,  $SD = 1.07$ ;  $\alpha = .91$ ) and attitude correctness ( $M = 5.08$ ,  $SD = 1.10$ ;  $\alpha = .67$ ) described in Study 1a.

After the clarity and correctness measures, participants completed a self-reported measure of conflict style. This measure was developed and validated by De Dreu and colleagues (De Dreu, Evers, Beersma, Kluwer, & Nauta, 2001) and assessed the extent to which participants would engage in each of Pruitt’s (1998) five conflict styles with someone who disagreed with them on the junk food tax: competing (“forcing” in the terms of De Dreu et al. (2001); e.g., “I would push my own point of view”), compromising (e.g., “I would insist that we both give in a little”), problem solving

(e.g., “I would examine ideas from both sides to find a mutually optimal solution”), avoiding (e.g., “I would avoid a confrontation about our differences”), and yielding (e.g., “I would adapt to the other party’s goals and interests”). In the context of the present research, both the compromising and problem-solving styles are considered “cooperative.” Each style was measured with four items on a scale from 1 (*not at all*) to 7 (*very much*), and participants’ responses were averaged to form five separate composites, all of which demonstrated acceptable reliability ( $M = 4.67$ ,  $SD = 1.19$ ,  $\alpha = .80$ , for competing;  $M = 4.50$ ,  $SD = 1.35$ ,  $\alpha = .84$ , for compromising;  $M = 4.96$ ,  $SD = 1.17$ ,  $\alpha = .81$ , for problem solving;  $M = 3.43$ ,  $SD = 1.49$ ,  $\alpha = .83$ , for avoiding;  $M = 4.26$ ,  $SD = 1.37$ ,  $\alpha = .88$ , for yielding).

At the end of the study, participants completed a demographic questionnaire and suspicion probe. They were then fully debriefed.

## Results

Participants’ competitiveness scores were not skewed (skewness =  $-.26$ ,  $SE_{skewness} = .22$ ), perhaps because the self-reported nature of the dependent measure reduced social desirability concerns (i.e., about sending competitive messages to an ostensibly real debate partner) or because the measure was based on responses to a continuous (Likert-type) scale rather than a count of the number of messages sent. Thus we used raw rather than transformed scores in all analyses.

**Zero-order correlations.** The correlations between all measured variables are depicted in Table 3. As in Studies 1a and 1b, attitude correctness was positively associated with competing (and unrelated to the other conflict styles). In addition, attitude clarity was negatively associated with yielding (and unrelated to the other conflict styles). The difference between the effects of correctness and clarity on competing was significant ( $z = -3.57$ ,  $p < .001$ ).

**Conflict style.** We hypothesized that participants who were induced to have high attitude correctness would report a more competitive conflict style (i.e., forcing) than those who were induced to have low attitude correctness. The results of a one-way ANOVA supported this hypothesis (high correctness:  $M = 4.90$ ,  $SD = 1.21$ , 95% CI [4.59, 5.23]; low correctness:  $M = 4.44$ ,  $SD = 1.15$ , 95% CI [4.13, 4.75]),  $F(1, 108) = 4.28$ ,  $p = .04$ ,  $\eta_p^2 = .04$ .<sup>6</sup>

We conducted the same analysis for each of the other four conflict styles. There was a marginal effect of correctness condition on avoiding, such that participants induced to have high correctness ( $M = 4.01$ ,  $SD = 1.44$ , 95% CI [3.64, 4.38]) tended to be less avoidant than participants induced to have low correctness ( $M = 4.49$ ,  $SD = 1.28$ , 95% CI [4.14, 4.85]),  $F(1, 108) = 3.41$ ,  $p < .07$ ,  $\eta_p^2 = .03$ . None of the other conflict styles produced significant or marginal results ( $ps > .25$ ).



**Table 3.** Zero-Order Correlations, Study 4 ( $N = 110$ ).

	A	B	C	D	E	F
A Clarity						
B Correctness	.67**					
C Competing	.06	.33**				
D Compromising	-.11	-.06	.14			
E Problem solving	.05	.01	.20*	.76**		
F Avoiding	-.14	-.01	.01	.43**	.31**	
G Yielding	-.32**	-.01	.32**	.47**	.32**	.48**

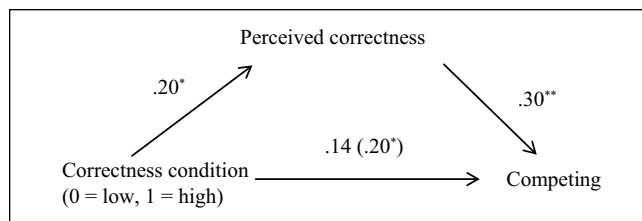
\* $p < .05$ . \*\* $p < .01$ .

**Attitude correctness and clarity.** We hypothesized that participants who were induced to have high (relative to low) attitude correctness would report greater perceived attitude correctness. As hypothesized, a one-way ANOVA revealed a significant effect of correctness condition on perceived correctness ( $M = 5.31, SD = 1.00, 95\% CI [5.02, 5.60]$ , for high-correctness condition;  $M = 4.87, SD = 1.15, 95\% CI [4.59, 5.15]$ , for low-correctness condition),  $F(1, 108) = 4.51, p < .04, \eta_p^2 = .04$ .

Consistent with some prior research (Petrocelli et al., 2007), there was also a significant effect of correctness condition on perceptions of attitude clarity, such that participants induced to have high correctness reported higher attitude clarity than did those induced to have low correctness,  $F(1, 108) = 4.84, p = .03, \eta_p^2 = .04$ .

**Mediation analysis.** Next, we tested whether perceived attitude correctness mediated the effect of the correctness manipulation on competitive conflict style (Baron & Kenny, 1986). Even though the correctness manipulation influenced perceptions of both correctness and clarity, perceived correctness and competing were significantly correlated ( $r = .33, p < .001$ ), but perceived clarity and competing were not ( $r = .06, p = .53$ ). Thus, only perceived correctness was a candidate for mediation and was included in the analysis.

As noted above, the correctness manipulation (the independent variable; 0 = low, 1 = high) significantly predicted both perceptions of correctness (the potential mediator;  $b = .44, SE = .21, t(108) = 2.12, p < .04, total R^2 = .04$ , and competing (the dependent variable;  $b = .46, SE = .22, t(108) = 2.07, p = .04, total R^2 = .04$ ). The first two criteria for mediation were therefore met. When competing was regressed onto correctness condition controlling for perceived correctness, the relationship between perceived correctness and competing was significant ( $b = .33, SE = .10, t(107) = 3.24, p < .005$ , whereas the relationship between correctness condition and competing dropped to non-significance ( $b = .32, SE = .22, t(107) = 1.47, p = .15, total R^2 = .12$ ). A bootstrapping analysis with 1,000 estimates confirmed a significant indirect effect of the correctness (consensus) manipulation, though perceived attitude correctness, on competitive conflict style (*estimate of indirect effect* = .14, *boot-SE* = .08,



**Figure 1.** Mediation analysis, Study 4 (standardized betas). \* $p < .05$ . \*\* $p < .01$ .

95% CI [0.02, 0.35]), consistent with full mediation (Preacher & Hayes, 2004). Figure 1 depicts this mediation.

**Discussion**

Study 4 showed that perceptions of attitude correctness mediate the relationship between social consensus information (i.e., high manipulated correctness) and competitive conflict style. The correctness induction increased both attitude correctness and attitude clarity, most likely because of the high correlation between these two dimensions of attitude certainty ( $r = .67, p < .001$  in this sample). However, only perceived correctness predicted competitive conflict style.

Study 4 also demonstrated that the effects of induced attitude correctness on conflict style are specific to competitiveness. High (vs. low) social consensus for one’s attitude increased participants’ tendencies to be competitive during conflict, but not to engage in any of the other four conflict styles.

Notably, there was a negative zero-order correlation between attitude clarity and yielding. This was the only study in which we examined conflict styles other than competitiveness and cooperativeness, so this finding—though potentially interesting—awaits replication.

**General Discussion**

The present studies showed that certainty in one’s attitude toward an issue predicts tendencies to handle disagreement with others on the issue in a competitive manner. However, the two different components of attitude certainty unveiled in previous research—clarity and correctness (Petrocelli et al., 2007)—are not equivalent in their prediction of conflict style. Whereas attitude clarity (i.e., knowing what one’s true attitude is) does not influence competitiveness, attitude correctness (i.e., believing that one’s attitude is the right attitude to have) exacerbates it.

We first demonstrated this effect correlationally by measuring attitude clarity and correctness in Studies 1a and 1b. Then, in Studies 2 through 4, we experimentally manipulated clarity and correctness by providing social consensus information to induce high correctness (see Petrocelli et al., 2007), or by leading participants to endorse scale items assessing

either clarity or correctness (see Salancik & Conway, 1975). Furthermore, in Study 4, we found that measured attitude correctness mediated the relationship between social consensus information and competitiveness. Across our five studies, we administered both behavioral and self-reported measures of conflict style. We also used a variety of social issues: junk food tax, SUV vandalism, and airline seating regulations. Thus our findings generalize to several issues and social contexts.

### Post-test: Studies 1a Through 3

Although the online debate paradigms used in Studies 1a through 3 were based on prior research (Bechtoldt et al., 2010; De Dreu & van Knippenberg, 2005), the messages themselves were created for the purpose of the present studies. To confirm that the competitive and cooperative messages were perceived as intended, we conducted a post-test, in which 48 mTurk workers rated each of the messages on competitiveness versus cooperativeness (1 = *very competitive*, 7 = *very cooperative*).

All three competitive messages were rated as significantly below the scale midpoint of 4,  $t(47) < -8.97$ ,  $ps < .001$ . Two of the three cooperative messages from Study 1a were rated as significantly above the midpoint,  $t(47) > 6.25$ ,  $ps < .001$ , and the third (“This is definitely an issue that people need to come to an agreement on”) was non-significantly so,  $t(47) = 1.41$ ,  $p < .17$ . Notably, the third message was the one we had replaced in subsequent studies due to concerns about its face validity, and the replacement message used in Studies 1b through 3 (“We can probably figure out a solution that benefits everyone”) was rated as significantly above the midpoint,  $t(47) = 9.61$ ,  $p < .001$ . Paired-samples  $t$  tests also revealed that each of the competitive messages was rated as significantly more competitive than each of the cooperative messages,  $t(47) > 6.75$ ,  $ps < .001$ . Thus, our competitive messages were indeed viewed as competitive and our cooperative messages as cooperative.

Interestingly, all three learning messages from Study 1a were rated as significantly above the midpoint,  $t(47) > 8.73$ ,  $ps < .001$ , suggesting that such attempts to better understand another person’s position may be considered cooperative.

### Theoretical Implications

The present research is both the first to show that conflict style can be influenced by attitude strength on a particular issue—more precisely, the certainty with which people hold their attitudes—and the first to show that different aspects of attitude certainty can have different behavioral consequences. In so doing, it extends previous work on other antecedents of conflict style, which has largely examined features of one’s personality or self-concept in general. For example, some studies have found that individuals with weaker self-concepts (i.e., an unclear or unaffirmed sense of “who they

are”) tend to approach an interpersonal conflict more competitively than do individuals with stronger self-concepts (Bechtoldt et al., 2010; Cohen et al., 2007; De Dreu & van Knippenberg, 2005). However, no research prior to ours had tested the role of *attitude* strength on the specific topic of disagreement. Because people with seemingly identical attitudes toward an issue may vary in how certain they are of their attitudes, our studies shed light on an important—yet subtle—trigger of competitiveness versus cooperativeness in conflict.

Our studies also have implications for research on the consequences of attitude strength. Although a great deal of prior work has examined effects of attitude strength more generally (e.g., resistance to persuasion, behavioral intentions; Petty & Krosnick, 1995) and of attitude certainty specifically (e.g., Tormala & Petty, 2002), attitude clarity and correctness are relatively new constructs. As a result, there is some research on their antecedents, such as repeated expression for clarity and social consensus for correctness, but little research on their consequences. The one exception is that clarity and correctness both increase resistance to persuasion, albeit independently (Petrocelli et al., 2007). The present studies contribute to this literature by showing that clarity and correctness can have divergent effects, at least in the domain of conflict management.

### Practical Implications and Future Directions

In demonstrating the differential consequences of attitude clarity and attitude correctness, the present studies suggest that some forms of attitude certainty—namely, correctness—may be worse for interpersonal interactions than others. Thus in preparing for a potentially contentious discussion—for example, negotiating a raise with one’s boss, or debating an issue with a person who holds opposing views—people may do well to focus less on correctness (e.g., thinking about the reasons they are “right”) and more on clarity (e.g., rehearsing what they will say ahead of time). Future studies should test whether attitude correctness, due to its effect on competitiveness, actually produces less optimal negotiation outcomes than attitude clarity. Some research does show that competitive conflict styles lead to fewer “win-win” outcomes (Thompson, 1990), but the relationships between attitude certainty and these outcomes have yet to be investigated.

Although the focus of the current studies was on attitude correctness, it would also be worthwhile to examine the relationship between attitude clarity and conflict styles. For example, might attitude clarity, like self-concept clarity, sometimes trigger certain types of cooperativeness? Supporting this possibility, Study 1a demonstrated a positive relationship between attitude clarity and learning (which our post-test suggested is a relatively cooperative strategy). As noted earlier, because attitude clarity entails knowing one’s true attitude, perhaps it increases motives to know more about others’ attitudes as well (i.e., learning strategies).

Another potential effect of attitude clarity, given its negative correlation with yielding conflict style in Study 4, is that it reduces tendencies to be submissive regardless of its effects on cooperativeness or competitiveness, perhaps due to increases in general self-confidence (e.g., Clarkson, Tormala, DeSensi, & Wheeler, 2009).

Finally, conflict style may be influenced not only by attitude certainty, but also by other indicators of attitude strength, such as importance. Given that attitude importance predicts voting behavior on political issues and attitude certainty does not (Visser, Krosnick, & Simmons, 2003), it is possible that high attitude importance produces a more active conflict style (whether competitive or cooperative), whereas low attitude importance produces a more passive conflict style (e.g., avoiding, yielding). These findings, if obtained, would further elucidate the roles of different aspects of attitude strength in predicting a range of conflict management strategies. In today's political climate, in which people often hold and are unafraid to express strong attitudes toward a variety of issues, a better understanding of such processes may be crucial to attenuating the adverse effects of conflict.

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### Notes

1. Antonioni's (1998) measures of competitiveness and cooperativeness were orthogonal, which rendered it possible for extraversion to positively predict each one. Most likely, these effects of extraversion were due to the fact that both styles reflect an "active" rather than "passive" approach to conflict (see Rubin, Pruitt, & Kim, 1994).
2. A negative binomial regression, which is sometimes recommended in cases of extreme skew (Long, 1997), also produced significant results across the present studies.
3. To increase statistical power and simplicity, the analyses reported in the text (i.e., high correctness vs. low correctness) are in lieu of a 2 (participant attitude: support vs. oppose)  $\times$  2 (majority opinion: support vs. oppose) analysis of variance (ANOVA) on each dependent measure. The two-way interaction was marginal on competitive messages (transformed scores),  $F(1, 111) = 3.20, p < .08, \eta_p^2 = .03$ , and significant on cooperative messages,  $F(1, 111) = 6.12, p < .02, \eta_p^2 = .05$ . The interaction was not significant on total number of messages,  $F(1, 111) = 1.48, p = .23, \eta_p^2 = .01$ . The patterns of the interactions suggested that participants who supported [opposed] the policy sent more competitive messages, but fewer cooperative messages, when they believed that others also supported [opposed] it than when they believed others opposed [supported] it.
4. A pretest, in which a separate sample of 154 mTurk workers indicated their agreement with the same items, demonstrated a

stronger effect of the item-level manipulation, with the "sometimes" items ( $M = 5.66, SD = 1.02$ ) eliciting significantly greater agreement than the "always" items ( $M = 4.76, SD = 1.30$ ),  $F(1, 150) = 18.63, p < .001, \eta_p^2 = .11$ .

5. To test a hypothesis unrelated to the present research, this study included a manipulation in which the passage introducing the junk food tax contained either strong or weak supporting arguments (see Clark, Wegener, & Fabrigar, 2008). However, this manipulation did not produce any main effects or interactions with the attitude correctness manipulation on measured attitude correctness, measured attitude clarity, or competitive conflict style ( $ps > .16$ ), so it will not be discussed further.
6. The analysis in the text (high vs. low correctness) is in lieu of a 2 (participant attitude: support [5-7] vs. oppose [1-3])  $\times$  2 (majority attitude: support vs. oppose) ANOVA, which was also significant,  $F(1, 106) = 3.87, p = .05, \eta_p^2 = .04$ . The pattern of the interaction suggested that participants who supported [opposed] the junk food tax reported being more competitive when they believed that others also supported [opposed] it than when they believed others opposed [supported] it. There were no main effects ( $ps > .10$ ).
7. These analyses (high vs. low correctness) are in lieu of 2 (participant attitude: support [5-7] vs. oppose [1-3])  $\times$  2 (majority attitude: support vs. oppose) ANOVAs, which were significant for both perceived correctness,  $F(1, 106) = 4.15, p = .04, \eta_p^2 = .04$ , and perceived clarity,  $F(1, 106) = 4.22, p = .04, \eta_p^2 = .04$ . The patterns of the interactions suggested that participants who supported [opposed] the junk food tax reported greater correctness and clarity when they believed that others also supported [opposed] it than when they believed others opposed [supported] it. In addition, participants who supported the junk food tax (the actual majority position in this sample, held by 70 out of 110 participants) reported greater correctness than did participants who opposed it,  $F(1, 106) = 4.67, p = .03, \eta_p^2 = .04$ . There were no other main effects ( $ps > .34$ ).

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