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Ufkes, Elze G.; Otten, Sabine; van der Zee, Karen I.; Giebels, Ellen; Dovidio, John F.

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The effect of stereotype content on anger versus contempt in “day-to-day” conflicts

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Elze G. Ufkes,¹ Sabine Otten,¹ Karen I. van der Zee,¹
Ellen Giebels² and John F. Dovidio³

Abstract

Depending on how involved parties appraise day-to-day conflicts, they either may feel angry or contemptuous toward the other party, which, in turn, may result in stronger confronting or avoiding intentions. In this paper we investigated how the content of stereotypes associated with the group to which an outgroup perpetrator belongs affects appraisals, emotions, and behavior. In two experiments, we demonstrated that stereotyping an outgroup as less warm resulted in increased feelings of anger, and tendencies to react forcefully toward an outgroup party in a conflict. Specifically, this effect of low stereotype warmth was explained by increased appraisals of negative intentions. Stereotyping an outgroup as less competent in the same situation elicited increased feelings of contempt, and tendencies to avoid an outgroup party in a conflict. This effect of stereotype incompetence was due to decreased appraisals of control over the other party.

Keywords

anger, conflict, contempt, intergroup emotions, stereotype content

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Social categorizations and the stereotypes associated with them play an important role in many day-to-day conflicts. Imagine, for instance, a male versus a female waiter spilling drinks over your new pants, or a student versus an elderly lady next door listening to loud music late in the evening. Stereotypes associated with such social categories may affect people's reactions toward different outgroups in conflict situations. One may react in an aggressive or forceful way. For example, in a restaurant one may shout at the waiter and try to get him or her fired, or residents may threaten

their neighbors with calling the police. However, in many day-to-day conflicts people just as often react by avoiding the other party. For instance, by finishing one's dinner but never coming back

¹ University of Groningen

² University of Twente

³ Yale University

Corresponding author:

Elze G. Ufkes, Department of Psychology, Yale University,
PO Box 208205, New Haven, CT 06520, USA.

Email: elze.ufkes@yale.edu

to the same restaurant again; or by attempting to sleep in spite of the music, and avoiding all further contact with one's neighbors (Baumgartner, 1988; Chaurand & Brauer, 2008).

According to appraisal theories of emotion, peoples' specific emotions in a situation are an important determinant for how they will react (Frijda, Kuipers, & Ter Schure, 1989). This paper focuses on two emotions that both are particularly relevant for predicting confrontation versus avoiding reactions in situations of social irritation or conflict: Anger and contempt. Although both of these emotions commonly occur in negative social interactions, they are associated with different antecedents and consequences. That is, whereas anger may stem from an appraisal of negative intentions, contempt arises from an appraisal of low controllability. Moreover, whereas anger typically increases intentions to confront others, contempt increases intentions to avoid others (Fischer & Roseman, 2007; Frijda et al., 1989; Hutcherson & Gross, 2011; Mackie, Devos, & Smith, 2000). The aim of the research presented in this paper was to investigate how feelings of anger and contempt in daily-life irritations, along with their associated appraisals and action tendencies, may be influenced by the specific content of stereotypes associated with the outgroup membership of a perpetrator.

Conflict can be broadly defined as any situation in which an individual feels obstructed or irritated by another individual (Van de Vliert, 1997). Conflicts thus are subjective, and appraisals, emotions, and reactions in response to a conflict issue can vary between different individuals in a similar situation, or within the same individual in different situations. According to appraisal theories of emotion, people experience different emotions depending on how a given situation is *appraised* (Frijda et al., 1989; Roseman, Antonio, & Jose, 1996; for a review see Scherer, Schorr, & Johnstone, 2001). For instance, when harmed by another person, one may feel more or less anger depending on how intentional the harm is appraised to be (Weiner, 1980). Emotions, in turn, can be functional and serve to regulate behavior (Frijda et al., 1989; Scherer et al., 2001).

As Weiner (1980) proposed: "Attributions guide our feelings, but emotional reactions provide the motor and direction for behavior" (p. 186). In this way appraisal theories of emotion provide a good explanation for individual and temporal differences in emotional and behavioral reactions in the same event.

In negative social interaction, such as when being irritated by someone, one may feel either angry or contemptuous toward a perpetrator (Cottrell & Neuberg, 2005; Fischer & Roseman, 2007; Hutcherson & Gross, 2011; Mackie et al., 2000; Rozin, Lowery, Imada, & Haidt, 1999). One is more likely to feel anger when a negative event caused by another person is appraised as intentional, because then the other person can be blamed for it (Cottrell & Neuberg, 2005; Roseman et al., 1996; Smith & Lazarus, 1993). Contempt, on the other hand, stems from the appraisal that it is difficult or not worth the effort to change the other's negative behavior. In this vein, previous studies found that contempt may stem from appraisals of inferiority (Izard, 1977), or low status and power (Brewer & Alexander, 2002). More recently, it has been demonstrated that contempt, but not anger, is related to perceived incompetence (Hutcherson & Gross, 2011). In addition, emotions such as contempt have been linked to more specific appraisals of a lack of control of others over a negative event (Weiner, 1980) and appraisals of low levels of perceived control over the other person (Fischer & Roseman, 2007).

Moreover, depending on whether involved parties feel angry or contemptuous toward the other party, they may be more oriented to confront or avoid the other. That is, the social function of *anger* is to improve a negative situation by confronting others with the aim to change their behavior (Fischer & Roseman, 2007; Frijda et al., 1989; Mackie et al., 2000). The function of exclusion emotions, such as contempt, is to identify individuals or groups that should be avoided because of their behavior.¹ For instance, limiting contact with or ignoring the other party in a conflict can reduce the ability of that party to have a negative impact on oneself (Cuddy, Fiske, & Glick, 2007; Fischer & Roseman, 2007; Frijda

et al., 1989; Mackie et al., 2000). Appraisals of negative intentions and controllability therefore may be important determinants of one's reactions in social irritations.

Based on appraisal theories of emotion (which examine individual-level emotions; e.g., Frijda et al., 1989) and social identity and self-categorization theory (Tajfel, 1974; Turner, 1987), intergroup emotion theory (IET; Smith, 1993) states that in intergroup encounters, emotions and behavioral intentions are affected by how a specific intergroup context is appraised. For instance, people in an intergroup conflict situation experienced more anger, and were more inclined to confront outgroup members, when the other group was perceived as weaker rather than stronger than one's own group (Mackie et al., 2000). In this way, IET explains how emotions and action tendencies toward outgroup members can depend on appraisals of the intergroup situation—such as relative status, group size, or power.

In addition, more general conceptions about an outgroup, such as stereotypes, may affect how intergroup situations are appraised. In line with this idea, research on the stereotype content model (SCM) and the behaviors from intergroup affect and stereotypes (BIAS) map has shown that stereotype content can predict the different emotions and actions tendencies that people generally associate with specific outgroups (Cuddy et al., 2007; Cuddy, Fiske, & Glick, 2008; Fiske, Cuddy, Glick, & Xu, 2002). For instance, whereas groups that stereotypically are seen as competent and friendly generally elicit admiration, groups that stereotypically are seen as competent but unfriendly typically elicit feelings of envy (Fiske et al., 2002). Importantly, the stereotype content model and BIAS map focus on the emotions and action tendencies that people chronically associate with particular outgroups. The aim of the current research was to combine the literature on intergroup emotions and stereotype content model. Specifically, we investigated how directly manipulating the stereotypes associated with a particular outgroup may affect discrete situation-specific appraisals, emotions and behavioral intentions when being irritated by an outgroup member.

Previous research has consistently demonstrated that perceptions of others are determined by how they are perceived jointly on two universal dimensions: Warmth and competence (e.g., Cislak & Wojciske, 2008; Wojciske, 1994). Additionally, warmth and competence have been identified as the two central dimensions that underlie the specific content of outgroup stereotypes (Cuddy et al., 2007; Fiske et al., 2002, Phalet & Poppe, 1997; see Cuddy et al., 2008 for an overview). That is, stereotype warmth refers to how friendly, sincere, and sociable members of other groups are typically viewed. Noncompetitive groups in society (such as housewives) are stereotypically seen as warm and as having positive intentions, whereas competitive groups, who are stereotypically seen as cold (e.g., successful immigrant groups, such as Jews or Asians in the USA), are perceived as having more negative intentions. Stereotype competence, in turn, refers to how intelligent, capable, and successful members of another group typically are viewed. For instance, subordinate groups in society, such as elderly or most immigrant groups, are often stereotypically seen as less competent than successful groups, such as young professionals or business women (Cuddy et al., 2007; Fiske et al., 2002). Stereotype content thus provides information about the positivity of the intentions of members of a particular group (i.e., warmth) and their capabilities to act as they intend (i.e., competence; Cuddy et al., 2007, 2008; Fiske et al., 2002). We propose that this information may have important implications for how social irritations caused by outgroup members are appraised, and therefore for how people tend to react in such a situation.

Specifically, as outlined before, members of groups low in warmth are perceived to have more negative intentions. Appraisals of negative intentions, in turn, may especially cause anger and confronting intentions. We therefore expect that, when in conflict with an outgroup member, stereotyping an outgroup as low in warmth will lead to increased appraisals of intentionality. These appraisals may increase feelings of anger as well as intentions to confront an outgroup perpetrator. In addition, stereotyping an outgroup as

incompetent may result in lower appraisal of controllability over a negative event. That is, appraisals of a lack of controllability may occur either because the other lacks control over the situation, or because oneself is incapable of exerting control over the other. When irritated by an outgroup member, stereotypes about low competence may signal that the other cannot help being a nuisance and may even be unaware of causing the negative event (i.e., the other has little control over the situation; Weiner, 1980). As such, it would be hard to reason with or confront the perpetrator (Fischer & Roseman, 2007). Appraisals of incompetence and controllability, in turn, are especially relevant for contempt, and subsequent intentions to avoid others (Fischer & Roseman, 2007; Hutcherson & Gross, 2011). As Fischer and Roseman (2007) explained: "We suggest that contempt would be especially felt for those groups who are considered inferior in status or position and who are also difficult to control, like people who are mentally retarded, who are drug addicts, or who are homeless" (p. 117). We therefore predict that when an outgroup member causing a negative event is perceived to be doing this out of incompetence, people will appraise the other as less in control and controllable, and therefore be more likely to avoid him or her.

In sum, the goal of the present research was to test how varying the content of stereotypes about outgroup perpetrators affects people's appraisals, emotions, and behavior resulting from a conflict. We predicted that when being irritated by an outgroup member: (1) stereotyping the outgroup as lower in warmth results in increased appraisals of negative intentions, and subsequently in more anger and higher confrontation intentions; and (2) that stereotyping the outgroup as lower in competence, in the same context, results in lower appraisals of controllability, and therefore increase feelings of contempt and avoiding intentions. To test these predictions, we conducted two experiments in which we manipulated the characteristics of an outgroup on the dimensions defined by the stereotype content model. Subsequently, we had participants react to a hypothetical conflict situation with an individual member of this outgroup

and measured participants' appraisals, emotions, and behavioral intentions.

Experiment 1

In Experiment 1 we manipulated stereotype warmth and competence in a paradigm that was based on the distant planet paradigm (Hoffman & Hurst, 1990). We presented participants with information about traits of various individual members of a fictitious group, called the Morfs. To prevent any associations with real groups we used pictures of green, classical alien-like, creatures. Apart from that, we did not provide any additional information about this species. Using a fictitious group to manipulate stereotype content has the advantage that we actually can attribute all of the effects to the content of the stereotype dimensions warmth and competence. Also, this approach rules out any confounds of pre-existing beliefs about real groups.

Method

Participants and procedure Participants were 79 undergraduate students of the University of Groningen (43 women and 36 men; mean age 22 years; $SD = 4.05$), participating for partial course credits. Participants participated in groups of approximately 10 participants per session. Each session was randomly assigned to one of the conditions of our 2 (Stereotype Warmth: Low vs. High) $\times$ 2 (Stereotype Competence: Low vs. High) design.

As a cover story, we told participants that because an increasing number of students spend time abroad, we were doing a study on remembering personal information and handling stressful situations in new environments. Next, we introduced participants with 12 individual members of a fictitious group—the Morfs—living on a distant planet. We showed a passport of each member containing a picture, information about the individuals' Intelligence Quotient (IQ), Emotional Quotient (EQ) and two personality traits typical for this individual. Each picture was an adaptation of one template picture; therefore,

Table 1. Scale descriptives and inter-scale correlations, Experiment 1.

	1	2	3	4
1. Anger	3.70 (1.57)	.45**	.56**	.49**
2. Contempt		2.82 (1.53)	.53**	.48**
3. Confronting			2.47 (1.19)	.64**
4. Avoiding				2.86 (1.26)

Note: Scale means, and standard deviations within parentheses, are represented on the table diagonal. ** $p < .01$.

it was clear that all pictures were showing different individuals belonging to the same group. To make sure that participants were familiar with the concepts of IQ and EQ scores, the meaning, as well as the distribution of these scores (population mean of 100, and *SD* of 15), were explained in the introduction of the study.

We independently manipulated stereotype warmth and competence by systematically varying the information about Morfs. In the low warmth conditions, we described the Morfs as having a low EQ (mean for the 12 individuals was 70, varying from 60–80), and with traits typically associated with groups that are seen as cold (e.g., egoistic, aggressive). In the high warmth conditions we described the Morfs as having a high EQ (mean 130, varying from 120–140), and with traits that are typically associated with groups that are seen as warm (e.g., friendly and sociable). We manipulated stereotype competence in a similar way. In the low competence conditions, we described the Morfs as having a low IQ (mean 70, varying from 60–80) and traits associated with stereotypically incompetent groups (e.g., inefficient, unintelligent). In the high competence conditions we described the Morfs as having a high IQ (mean 130, varying from 120–140) and traits associated with stereotypically competent groups (e.g., intelligent, capable).

As an unobtrusive manipulation check, allegedly introduced as a memory task, we then presented participants two more passports with a

picture of a Morf, without descriptions. We told participants that these were passports of two randomly selected individuals they were just introduced to, and asked them to recall the IQ and EQ score, and personality descriptions of these individuals. Actually, the pictures on the passports were two new pictures that participants had not seen before. We encouraged participants to make a guess if they did not remember the information.

Next, we asked participants to imagine that after walking around on the distant planet for some time, they would return to their spaceship to find a Morf carrying their luggage out of the spaceship, making it difficult for them to leave the planet. We asked participants to take a moment to think about this situation and then to answer the questions about their emotions and their behavioral intentions. After that, as a second manipulation check, participants filled out a questionnaire on what they considered stereotypical traits of the Morfs. Finally, participants were thanked and debriefed.

Dependent variables All dependent variables were measured with 7-point Likert-type scales ranging from 1 (totally disagree) to 7 (totally agree) unless noted otherwise. See Table 1 for the scale means, standard deviations, and the inter-scale correlations.

Manipulation checks The open-ended questions about the two additional targets functioned as a first manipulation check. We aggregated participants' answers on the IQ questions, $r(77) = .95$, $p < .001$, and the EQ questions, $r(77) = .96$, $p < .001$, for the first and second target. As a second manipulation check, we assessed participants' stereotypes regarding the Morfs at the end of the study using a stereotype content questionnaire. This questionnaire contained two scales, each with six items: stereotype warmth (honest, peaceful, helpful, tolerant, polite, humble; $\alpha = .94$) and stereotype competence (capable, quick-witted, clever, self-confident, efficient, driven; $\alpha = .93$). An example item is "In general, I think the Morfs are honest".

Emotions and behavioral intentions We measured emotional reactions toward the out-group by asking participants to indicate how much they would feel a specific emotion when imagining themselves in the situation (7 items; e.g., “When thinking about this situation I would feel angry”). In the current study we were mainly interested in the two items anger and contempt. The other emotion items functioned as filler items. We measured behavioral intentions by asking participants how likely it would be that in this situation they would react in a specific way (4 items). We constructed two scales for behavioral intentions. Confronting was measured with the items: “I would start a fight with the Morfs”, and “I would argue with the Morfs”, $r(77) = .47$, $p < .001$, and Avoiding with: “I would leave the planet as soon as possible” and “I would never want to see the Morfs again”, $r(77) = .42$, $p < .001$.

Results

Manipulation checks As a manipulation check we performed analyses of variance (ANOVAs) with stereotype warmth and competence as factors, and EQ-rating, IQ-rating, the stereotype warmth scale, and the stereotype competence scale as dependent variables. For EQ-ratings we found a large and significant effect of the warmth manipulation, $F(1, 75) = 1284.18$, $p < .001$, partial $\eta^2 = .95$. As intended, in the low warmth conditions participants gave lower EQ-ratings ($M = 70.43$, $SD = 8.80$) than in the high warmth conditions ($M = 127.54$, $SD = 4.46$). In addition, there was no significant effect of the competence manipulation, $F(1, 75) = 1.26$, $p = .266$, and no significant interaction effect, $F(1, 75) < 0.01$, $p = .967$, on the EQ-ratings. In a similar way there was a large and significant effect of the warmth manipulation on the stereotype warmth scale, $F(1, 75) = 77.52$, $p < .001$, partial $\eta^2 = .51$. In the low warmth conditions participants had a general view of the Morfs as less warm ($M = 2.97$, $SD = 1.01$) than in the high warmth conditions ($M = 4.97$, $SD = 1.00$). There was no significant effect of the competence manipulation, $F(1, 75) < 0.01$,

$p = .973$, nor a significant interaction effect, $F(1, 75) = 0.07$, $p = .405$.

For the IQ-ratings there was a large and significant main effect of competence $F(1, 75) = 997.95$, $p < .001$, partial $\eta^2 = .93$. As intended, in the low competence conditions participants gave lower IQ-ratings ($M = 68.84$, $SD = 3.28$) than in the high competence conditions ($M = 127.15$, $SD = 11.37$). There was no significant effect of stereotype warmth, $F(1, 75) = 1.06$, $p = .306$, nor a significant interaction effect, $F(1, 75) = 0.08$, $p < .783$. In a similar way, there was a highly significant effect of the competence manipulation on the stereotype competence scale, $F(1, 75) = 111.56$, $p < .001$, partial $\eta^2 = .60$. In the low competence conditions participants had a general view of the Morfs as less competent ($M = 2.99$, $SD = 1.11$) than in the high competence conditions ($M = 5.33$, $SD = 0.78$). In addition, there was no significant effect of the warmth manipulation, $F(1, 75) = 0.09$, $p = .766$, nor a significant interaction effect, $F(1, 75) = 0.03$, $p = .859$ on the stereotype content scale. Based on these results we may conclude that the warmth manipulation was successful in manipulating in stereotype warmth without affecting stereotype competence, and that the competence manipulation successfully manipulated stereotype competence without affecting perceptions of warmth.

Anger and contempt According to the predictions participants would experience more anger in an intergroup conflict when stereotyping an outgroup as cold rather than warm, and more contempt when stereotyping an outgroup as incompetent rather than competent. Results confirmed these predictions. An ANOVA, with stereotype warmth and competence as factors, revealed that the predicted effect of stereotype warmth on anger was significant, $F(1, 75) = 9.49$, $p = .003$, partial $\eta^2 = .11$. When stereotype warmth was low, participants indeed experienced more anger toward the Morfs ($M = 4.20$, $SD = 1.60$) than when stereotype warmth was high ($M = 3.16$, $SD = 1.37$). The effect of stereotype competence on anger was not significant, $F(1, 75) = 1.32$,

$p = .254$, and there was no significant interaction effect, $F(1, 75) = 0.13$, $p = .717$.

In addition, an ANOVA with stereotype competence and warmth as factors and contempt as dependent variable, revealed a significant main effect of stereotype competence, $F(1, 75) = 19.72$, $p < .001$, partial $\eta^2 = .21$. When stereotype competence was low participants experienced more contempt toward the Morfs ($M = 3.45$, $SD = 1.55$), than when stereotype competence was high ($M = 2.11$, $SD = 1.15$). Unexpectedly, contempt was also affected by stereotype warmth, $F(1, 75) = 7.23$, $p = .009$, partial $\eta^2 = .09$. When stereotype warmth was low, participants experienced more contempt ($M = 3.22$, $SD = 1.59$) than when stereotype warmth was high ($M = 2.39$, $SD = 1.35$). The interaction effect of stereotype competence and warmth on contempt was not significant, $F(1, 75) = 0.04$, $p = .852$.

Next, we examined whether the unexpected effect of warmth on contempt could be explained by the fact that anger and contempt were highly correlated, $r(77) = .45$, $p < .001$, and therefore partially shared the same variance. We performed an Analysis of Covariance (ANCOVA), with stereotype competence and warmth as factors, anger as covariate, and contempt as dependent variable. In line with our hypothesis we found that, when adding anger as a covariate, $F(1, 75) = 12.53$, $p < .001$, partial $\eta^2 = .15$, the effect of competence on contempt remained significant, $F(1, 75) = 18.17$, $p < .001$, partial $\eta^2 = .20$, whereas the effect of warmth decreased to non-significant, $F(1, 75) = 2.35$, $p = .129$. Therefore, it appeared that the unpredicted effect of warmth on competence was a byproduct of the relationship between contempt and anger.

Behavioral intentions In addition, we predicted that participants would have higher confronting intentions when in conflict with a member of a stereotypically cold group, and have higher avoiding intentions when in conflict with a member of a stereotypically incompetent group. ANOVAs with stereotype warmth and competence as independent variables, and behavioral intentions as

the dependent variable, confirmed these predictions. For stereotype warmth we found, as expected, a significant effect on confronting, $F(1, 75) = 6.67$, $p = .012$, partial $\eta^2 = .08$. In the low warmth conditions participants indeed showed higher confronting intentions ($M = 2.79$, $SD = 1.25$) than in the high warmth conditions ($M = 2.12$, $SD = 1.02$). In addition, our analyses revealed significant effects of stereotype competence on confronting, $F(1, 75) = 4.47$, $p = .038$, partial $\eta^2 = .06$. Participants had higher confronting intentions in the low competence condition ($M = 2.72$, $SD = 1.26$) than in the high competence condition ($M = 2.18$, $SD = 1.05$). There was no significant interaction effect of stereotype competence and warmth on confronting, $F(1, 75) = 1.03$, $p = .304$.

Additionally, the predicted effect of stereotype competence on avoiding was significant, $F(1, 75) = 7.98$, $p = .006$, partial $\eta^2 = .10$. In the low competence conditions participants showed higher avoiding intentions ($M = 3.20$, $SD = 1.24$) than in the high competence conditions ($M = 2.47$, $SD = 1.17$). In addition, we found an effect of warmth on avoidance, $F(1, 75) = 13.62$, $p < .001$, partial $\eta^2 = .15$. Inspection of the means suggested that in the low warmth conditions participants showed higher avoiding intentions ($M = 3.31$, $SD = 1.35$) than in the high warmth condition ($M = 2.37$, $SD = .93$). There was no significant interaction effect of stereotype competence and warmth on confronting, $F(1, 75) = 0.07$, $p = .784$.²

Mediation analyses Lastly, we tested the main predictions, namely that the effect of stereotype warmth on confronting is mediated by anger, and that the effect of stereotype competence on avoiding is mediated by contempt. Our previous analyses showed, in line with these hypotheses, that stereotype competence was related to contempt and avoiding, and stereotype warmth to anger and confronting. To test whether these effects on behavioral intentions were mediated by anger and contempt we used a bootstrapping method to calculate the indirect effects based on 5000 resamples, as recommended by Preacher and Hayes (2008). Anger and contempt conditions

Figure 1. Anger and contempt as mediators in Experiment 1. The numbers in the figure represent the standardized regression coefficients. See text for indirect effects and confidence intervals. The numbers within parentheses represent the total effect of the independent on the dependent variable. * $p < .05$; ** $p < .01$.

were coded -0.5 for the low conditions and 0.5 for the high conditions. The confidence intervals reported here are bias corrected 95% confidence intervals.

We first tested whether anger significantly mediated the effect of warmth on confronting. In addition to the total effects of warmth on anger and confronting demonstrated before, anger was significantly related to confronting, $\beta = 0.42$, $p < .001$. In addition, the results showed, as predicted, that the indirect effect of warmth on confronting intentions through anger was significant, $\beta = -0.43$, $[-0.85, -0.16]$. Also, the total effect of warmth on confronting, $\beta = -0.67$, $p = .010$, was reduced to non-significant when adding the mediator, direct effect: $\beta = -0.24$, $p = .298$ (see Figure 1a). Secondly, we tested whether contempt indeed significantly mediated the effect of competence on avoiding. In line with this prediction we found that contempt was positively associated with avoiding, $\beta = 0.35$, $p < .001$. In addition, the indirect effect of competence on avoiding through contempt was significant, $\beta = -0.48$, $[-1.03, -0.17]$. Also, the total effect of competence on avoiding, $\beta = -0.73$, $p = .009$, was reduced to non-significant when adding the mediator, direct effect: $\beta = -0.25$, $p = .369$ (see Figure 1b).

The results of these two mediation models together thus form support for the prediction that stereotype warmth is negatively related to anger, and therefore to confronting intentions, toward an outgroup perpetrator. Moreover, they support the prediction that stereotype competence was negatively related to contempt, and therefore to avoiding intentions, toward an outgroup perpetrator.

Discussion

In Experiment 1 we found support for our predictions that people are more likely to experience anger when in conflict with a member of a group that is seen as stereotypically low in warmth. Subsequently, participants were more likely to choose confronting types of reactions to handle the situation. Additionally, when confronted with a member of a group that is seen as stereotypically incompetent, participants were more likely to feel contempt and subsequently showed a greater preference for avoidance behavior. These findings fit with the idea that anger is mainly relevant when the conflict is attributed to bad intentions of an outgroup member—and one is motivated and able to force the other to change the negative behavior. Contempt, on the other hand, appears to be more relevant when an outgroup member causing a conflict is perceived to be uncontrollable—and avoiding the other appears to be the most feasible reaction to prevent experiencing more negative events caused by this outgroup member.

Although our hypotheses were supported by these results, we also obtained unpredicted (negative) effects of stereotype competence on confronting intentions and of stereotype warmth on avoidance intentions. A possible explanation may reside in the fact the options for action were not mutually exclusive: Whereas the confronting actions described immediate actions, the avoidance actions were long-term focused. For instance, an example of a confronting item was, “I would argue with the Morfs” (referring to the present), and an example of an avoiding item was, “I would never want to see the Morfs again”

(referring to the future). In Experiment 2, we adapted the avoiding items in such a way that they also referred to more immediate actions (e.g., “For now, I would get out of the Morfs’ way”). In addition, the aim of Experiment 2 was to test whether the assumed underlying appraisals (i.e., perceived negative intentions and controllability), explain the effects reported in Experiment 1.

Experiment 2

Experiment 2 both seeks to replicate, and move beyond Experiment 1 by investigating how context-specific appraisals may mediate the link between stereotype content and emotional and behavioral reactions toward outgroup members causing social irritation. Specifically, with respect to stereotype warmth, we assumed that the negative effect on anger was due to decreased appraisals of negative intentions of an outgroup perpetrator. When stereotyped as low in warmth, members of groups are perceived to have more negative intentions. Appraisals of negative intentions, in turn, may especially be relevant for anger and confronting intentions. Therefore, in Experiment 2 we tested whether stereotype warmth is negatively related to appraisals of negative intentions of an outgroup member, and therefore with anger and intentions to confront the other.

With respect to stereotype competence, previous research provides less clear indications for which situation-specific appraisals may explain the link between competence and contempt. Generally, appraisals of a lack of controllability have been identified as a possible antecedent of contempt (Fischer & Roseman, 2007). However, as noted before, controllability can either refer to appraisals of *the other's* control over the situation (other-situational control; e.g., Weiner, 1980) or to appraisals of *one's own* control over the other person (relational control; Fischer & Roseman, 2007). As Roseman, Spindel, and Jose (1990, p. 911) proposed: “Controllability may refer to the intrinsic controllability of an event (Scherer, 1988) or to its controllability by means of one's own actions (Frijda, 1986)”. Experiment 2 was

designed to better understand whether, and which, appraisals of controllability may mediate the effect of stereotype competence on contempt. Specifically, we investigated whether stereotype competence would be positively related to appraisals of other-situational control, and/or to appraisals of relational control, and therefore with contempt.

Method

Participants and procedure Participants were 84 undergraduate students of Radboud University Nijmegen (79 women, 5 men; mean age was 19 years; $SD = 1.90$). Participants were randomly assigned to one of the four conditions of the 2 (Warmth: Low vs. High) $\times$ 2 (Competence Low vs. High) between-subjects design. We used the same manipulations as in Experiment 1 with the difference that this time the experiment was presented on a computer.

Measures All dependent variables were measured with 7-point Likert-type scales ranging from 1 (totally disagree) to 7 (totally agree) unless noted otherwise. See Table 2 for the scale means, standard deviations, and the inter-scale correlations

Manipulation checks As a first manipulation check, we used the answers on the two open-ended questions asking participants which information of the two Morfs's IQ and EQ levels they still remembered after being introduced to all 12 Morfs. We aggregated participants' answers on the IQ questions, $r(82) = .93, p < .001$, and the EQ questions, $r(82) = .88, p < .001$, for the first and second target.

Appraisals We measured appraisal of negative intentions with 3 items (e.g., “I think the Morfs mean it well, although they are causing nuisance” (reversed) and “I think the Morfs are hindering me on purpose”), $\alpha = .82$. Appraisals of relational control was measured with three items (e.g., “I think I would be able to stop the Morfs” and “I think that I could change this situation”), $\alpha = .73$ (Van Zomeren, Spears, Fischer, & Leach, 2004).

Table 2. Scale descriptives and inter-scale correlations, Experiment 2.

	1	2	3	4	5	6	7
1. Negative Intentions	2.80 (1.08)	.61**	-.27*	.60**	.54**	.38**	.28*
2. Other-situational control		3.09 (1.23)	-.19 [†]	.47**	.50**	.44**	.36**
3. Relational control			5.02 (1.01)	-.25*	-.30*	-.41**	-.41**
4. Anger				4.11 (1.32)	.67**	.53**	.49**
5. Contempt					3.14 (1.18)	.51**	.65**
6. Confronting						3.00 (1.14)	.51**
7. Avoiding							2.62 (1.11)

Note. Scale means, and standard deviations within parentheses, are represented on the table diagonal. ** $p < .01$; * $p < .05$;

[†] $p < .10$.

Appraisals of other-situational control was measured with three items (e.g., “I think the Morfs realize that they are causing irritations” and “I think that the Morfs know that they are bothering me”), $\alpha = .85$.

Emotions and behavioral intentions We measured emotional reactions toward the out-group by asking participants to indicate to what extent they feel a specific emotion when imagining the situation described in the scenario (e.g., “when thinking about this situation I would be angry with the Morfs”). Anger was measured with three Dutch synonyms of anger: angry, agitated, and irritated; $\alpha = .84$. Contempt was also measured with three synonyms: contempt, aversion, and disdain; $\alpha = .74$.

We measured behavioral intentions by asking participants how likely it would be that they would react in a specific way. Confronting was measured with 3 items (e.g., “I would start a fight with the Morfs” and “I would steal my luggage back from the Morfs”), $\alpha = .76$. Avoiding was measured with 3 items as well (e.g., “For now, I would go out the Morfs’ way” and “I would never want to see the Morfs again”), $\alpha = .76$.

Results

Manipulation checks An analysis of variance (ANOVA) with stereotype warmth and competence as factors, revealed a significant effect of warmth on the EQ-ratings, $F(1, 80) = 2177.38$, $p < .001$, partial $\eta^2 = .97$. In line with the manipulation, in the low warmth conditions participants gave lower EQ-ratings ($M = 71.66$, $SD = 6.86$) than in the high warmth condition ($M = 130.72$, $SD = 4.44$). In contrast, there was no significant effect of the competence manipulation on the EQ-ratings, $F(1, 80) = 2.52$, $p = .115$, and there was no significant interaction effect, $F(1, 80) = 0.35$, $p = .555$.

For the IQ-ratings an ANOVA revealed a large and significant main effect of competence, $F(1, 80) = 1968.46$, $p < .001$, partial $\eta^2 = .96$. As intended, in the low competence conditions participants gave lower IQ-ratings ($M = 69.57$, $SD = 5.32$), than in the high competence conditions ($M = 128.44$, $SD = 6.78$). In contrast, there were no significant effects of the warmth manipulation on the IQ-ratings, $F(1, 80) = 1.49$, $p = .225$, nor a significant interaction effect, $F(1, 80) = 0.43$, $p = .512$. Therefore, our manipulation was successful.

Anger and contempt As in Experiment 1, ANOVAs with stereotype warmth and competence as factors, and respectively anger and contempt as dependent variables, confirmed the hypotheses that low levels of stereotype warmth resulted in more anger, and low levels of stereotype competence in more contempt. For anger the results showed that the effect of warmth was significant, $F(1, 80) = 4.22$, $p = .043$, partial $\eta^2 = .05$. Participants reported more anger in the low warmth conditions ($M = 4.40$, $SD = 1.18$) than in the high warmth conditions ($M = 3.80$, $SD = 1.40$). The effect of competence was not significant, $F(1, 80) = 0.33$, $p = .568$, nor was the interaction effect, $F(1, 80) = 1.98$, $p = .163$. For contempt, the results showed a significant effect of competence, $F(1, 80) = 4.44$, $p = .038$, partial $\eta^2 = .05$. In the low competence conditions participants reported more contempt ($M = 3.41$, $SD = 1.31$) than in the high competence conditions ($M = 2.87$, $SD = 0.98$). The effect of warmth on contempt was not significant, $F(1, 80) = 2.36$, $p = .129$, nor was the interaction effect, $F(1, 80) = 0.86$, $p = .356$.³

Behavioral intentions ANOVAs with stereotype warmth and competence as factors and respectively confronting and avoiding as dependent variables revealed, in line with our predictions, that confronting intentions were affected by stereotype warmth, and avoiding intentions by stereotype competence. Specifically, for confronting the results showed a significant effect of stereotype warmth, $F(1, 80) = 4.03$, $p = .048$, partial $\eta^2 = .05$. Confronting intentions were higher in the stereotype warmth low conditions ($M = 3.24$, $SD = 1.12$) than in the stereotype warmth high conditions ($M = 2.73$, $SD = 1.11$). The effect of competence on confronting was not significant, $F(1, 80) = 1.43$, $p = .236$, nor was the interaction effect, $F(1, 80) = 2.86$, $p = .095$. For avoiding, the results showed a significant effect of competence, $F(1, 80) = 5.10$, $p = .027$, partial $\eta^2 = .06$. Avoiding intentions were higher in the competence low conditions ($M = 2.91$, $SD = 1.28$) than in the

competence high conditions ($M = 2.37$, $SD = 0.85$). The effect of warmth on avoiding was not significant, $F(1, 80) = 0.60$, $p = .691$, nor was the interaction effect, $F(1, 80) = 0.04$, $p = .844$.

Appraisals Next to replicating the results of Experiment 1, the primary aim of the second experiment was to further investigate which underlying appraisals of the situation may explain these effects of stereotype content on emotions and behavioral intentions. To this end, we first performed ANOVAs with warmth and competence as factors, and respectively appraisals of negative intentions, appraisals of other-situational control, and appraisals of relational control as dependent variables. For appraisal of negative intentions the results revealed a significant effect of stereotype warmth, $F(1, 80) = 10.41$, $p = .002$, partial $\eta^2 = .12$. Appraisals of negative intentions were higher in the stereotype warmth low conditions ($M = 3.15$, $SD = 1.01$) than in the warmth high conditions ($M = 2.42$, $SD = 1.03$). The effect of competence was not significant, $F(1, 80) = 0.56$, $p = .485$, nor was the interaction effect, $F(1, 80) = 3.61$, $p = .061$.

For appraisals of control of the other over the situation the results revealed no significant effects. The effect of stereotype warmth was not significant $F(1, 80) = 0.52$, $p = .473$, nor was the effect of competence, $F(1, 80) = 0.02$, $p = .880$, or the interaction effect, $F(1, 80) = 3.25$, $p = .075$. Appraisals of other-situational control thus were not affected by stereotype warmth or competence. For appraisals of relational control the results showed a significant effect of stereotype competence, $F(1, 80) = 5.09$, $p = .027$, partial $\eta^2 = .06$. In the stereotype low competence conditions appraisals of relational control were lower ($M = 4.77$, $SD = 1.02$) than in the high competence conditions ($M = 5.26$, $SD = 0.95$). The effect of stereotype warmth was not significant, $F(1, 80) = 0.57$, $p = .453$, nor was the interaction effect, $F(1, 80) = 0.83$, $p = .366$. In summary, appraisals of negative intentions were affected by stereotype warmth but not by competence, appraisals of other-situational control were not

Figure 2. Path model for the effect of warmth and competence on negative intentions, anger, and confronting in experiment 2. The numbers in the figure represent the standardized coefficients. See text for model fit, indirect effects, and confidence intervals. Significant paths are represented by the solid lines, and non-significant paths by the dashed lines.

affected, and appraisals of relational control were affected by stereotype competence, but not by warmth.

Path analyses On the one hand, we predicted that stereotype warmth, but not competence, affects confronting intentions through anger and appraisals of negative intentions. On the other hand, we predicted that stereotype competence, but not warmth, affects avoiding intentions through contempt and appraisals of relational-control. In support of these predictions, the previous results showed that stereotype warmth, but not competence, was related to perceived intentionality, anger and confronting intentions, and that competence, but not warmth, was related to perceived control, contempt and avoiding intentions. Next, we directly tested whether, in line with our predictions, the effects of warmth and competence on behavioral intentions were mediated by appraisals and emotions. To this end, we conducted path analyses using AMOS 5.0 (Arbuckle, 2003).

We first estimated a model testing the effects of warmth and competence (both coded -0.5 for the low conditions and 0.5 for the high conditions) on appraisals of negative intentions, anger, and confronting intentions (see Figure 2).⁴ To test the model fit, we conducted the χ^2 test, and calculated the comparative fit index (CFI) and the root

mean square error of approximation (RMSEA). Satisfactory fit is indicated by a non-significant χ^2 , CFI = 0.95, and a RSMEA = 0.06 (Hu & Bentler, 1999). This model achieved good fit, $\chi^2(5) = 2.22$, $p = .818$, CFI = 1.00, and RMSEA = 0.00. As demonstrated before, the stereotype warmth manipulation had a significant effect on anger, $\beta = -.34$, $p = .001$, whereas the effect of stereotype competence on anger was non-significant $\beta = -.07$, $p = .487$. Appraisals of negative intentions in turn, were a significant predictor of anger, $\beta = .60$, $p < .001$, and anger a significant predictor of confronting, $\beta = .47$, $p < .001$.⁵

We then tested the hypothesized indirect effect of stereotypes warmth on confronting through appraisals of negative intentions and anger, using a bootstrapping method (Preacher & Hayes 2008; Shrout & Bolger, 2002). We calculated the standardized indirect effects in the path model, and 95% bias corrected confidence intervals, based on 5000 resamples. As predicted, the indirect effect of stereotype warmth, through negative intentions on anger was significant different from zero, $\beta = -.20$, $[-.33, -.08]$. The indirect effect of appraisals of negative intentions, through anger on confronting intentions was also significant, $\beta = .28$, $[.15, .44]$. These results thus support our prediction that people may be less angry and may be less inclined to use confronting when stereotyping an outgroup as warm, because

Figure 3. Path model for the effect of warmth and competence on relational control, contempt, and avoiding in experiment 2. The numbers in the figure represent the standardized coefficients. See text for model fit, indirect effects, and confidence intervals. Significant paths are represented by the solid lines, and non-significant paths by the dashed lines.

they are less likely to appraise the negative event as intentional.

Second, we estimated a model testing the effect of warmth and competence on appraisals of control over the other party (relational control), contempt, and avoiding (see Figure 3). This model achieved good fit on the data, $\chi^2(5) = 5.97$, $p = .309$, CFI = 0.98, and RMSEA = 0.05. As predicted, stereotype competence had a significant effect on appraisals of relational control, $\beta = .24$, $p = .023$, but stereotype warmth did not, $\beta = .08$, $p = .430$. Relational control, in turn, had a significant negative relation with contempt, $\beta = -.30$, $p = .004$, and contempt a positive relation with avoiding intentions, $\beta = .58$, $p < .001$.⁶

Moreover, the results were in support of the predictions, showing that the indirect effect of competence through relational control on contempt was significant, $\beta = -.07$, $[-.19, -.01]$, as was the indirect effect of relational control through contempt on avoiding, $\beta = -.18$, $[-.31, -.05]$. The direct effect of relational control on avoiding remained significant, $\beta = -.24$. Contempt thus functioned as a partial mediator in this model. However, together, these indirect effects support our prediction that stereotype incompetence is related to contempt and avoiding intentions, because people feel less in control over an outgroup member when stereotyping the outgroup as less competent.⁷

Discussion

The results of Experiment 2 revealed support for the prediction that stereotype content can affect emotions in conflict situations, through context-specific appraisals. Previous research demonstrated how people, based on their stereotypes, generally associate specific emotions with specific outgroups in society (Cuddy et al., 2007; Fiske et al., 2002). The current results show, in addition, that by manipulating the content of stereotypes associated with a particular outgroup, peoples' appraisals and subsequent emotional and behavioral intentions in response to irritations caused by members of this group can change.

In line with the findings of Experiment 1, the results of Experiment 2 supported the prediction that in conflict situations stereotype warmth is negatively related to anger and intentions to confront the other person, whereas stereotype competence is related to contempt and intentions to avoid the other person. Additionally, the results revealed that when stereotyping the outgroup as low in warmth, people experienced more anger because they appraised the other to have more negative intentions. When stereotyping the outgroup as incompetent, people experienced more contempt because they felt less in control over the other's behavior.

Moreover, previous studies on the link between controllability and contempt focused on

two types of controllability: Appraisal of the other's control over the situation (Weiner, 1980) and appraisals of control over the other (Fischer & Roseman, 2007). In line with these previous studies, the results of the current experiments indeed showed significant negative relations between both controllability appraisals and contempt. Importantly, however, while the appraisal of relational-control was affected by stereotype competence, the appraisal of the other's situational-control was not.

General discussion

When in conflict with a representative of another group, stereotypes may be an important source of information to base one's appraisals of the situation and subsequent reactions on. In the last decade, studies on the intergroup emotion theory investigated how emotions and behavioral intentions can be affected by socio-structural characteristics of intergroup situations, such as group size, power, or status (e.g., Cottrell & Neuberg, 2005; Mackie et al., 2000). In addition, previous work on stereotype content has emphasized cultural perceptions of particular groups (Cuddy et al., 2007; Fiske et al., 2002). The present studies add to the existing literature by combining the insights of these two research lines, and by investigating how manipulations of stereotype content affect appraisals, emotions, and behavioral intentions that are specific for the context of being irritated by an outgroup member.

More specifically, in the context of day-to-day conflict one may be more oriented to confront or avoid the other, depending on whether one feels angry or contemptuous toward the other party. We therefore investigated how manipulating the characteristics of a novel group on the dimensions warmth and competence would affect anger and contempt responses when being irritated by an outgroup member. The results of two experiments revealed that when perceiving an outgroup as cold and unfriendly, people appraised a negative action by a member of that group as more intentional, and subsequently experienced more anger and confronting intentions. When

stereotyping an outgroup as incompetent, people appraised to have less control over the other party, and subsequently experienced more contempt and avoiding intentions.

When we compare the current results with those from previous studies on the stereotype content model, one noticeable difference is that we find that stereotype warmth and competence independently affected appraisals and emotions. That is, we did not find any interaction effects of stereotype warmth and competence. In contrast, previous studies on the SCM and BIAS-map typically find interaction effects of stereotype warmth and competence on chronic group emotions. For instance, people feel admiration toward groups that are seen as stereotypically competent and warm, but envy toward groups that are seen as stereotypically competent and cold (Fiske et al., 2002). In the current research anger appeared to be a consequence of warmth, but not of competence (which actually is in line with results reported in Fiske et al., 2002). Moreover, in both experiments we found a clearly distinctive effect of competence, but not of warmth, on contempt and avoiding. Importantly, although these results may differ from predictions of the stereotype content model, they are consistent with previous studies showing that contempt is directly linked to perceptions of inferiority (Izard, 1977), low status and power (Brewer & Alexander, 2002), and perceived incompetence (Hutcherson & Gross, 2011). Together, these results may suggest that, at least in conflict situations, people may not so much experience different emotions toward different types of outgroups, but a different level and mixture of emotions.

Although the present results extend previous research on stereotype content, appraisals, emotions, and behavior in novel ways, we also acknowledge limitations of the work and suggest potential directions for future research. In line with previous research in this field, we chose to use scenarios, to rule out confounds of pre-existing beliefs about real groups, and to make it possible to test for causality (see Cuddy et al., 2007 for a similar argument). However, this approach may have the shortcoming of low

external validity inherent to most scenario studies. There is no guarantee that people's emotions and behaviors in scenarios will be the same as when they are experiencing an intense real-life conflict. Because of this limitation, future studies should ideally study the role of stereotypes and emotions in real-life contexts. However, we expect that the effects of attitudes on people's appraisals and reactions may actually be more strongly affected when under pressure in real-life situations, than when having the opportunity to deliberately think about the appropriate reactions (e.g., Fazio & Towles-Schwen, 1999).

Furthermore, in the present research we emphasized that it is important to distinguish between anger and contempt in their behavioral implications. However, we also found that the two were closely related. As Hutcherson and Gross (2011, p. 16) argued, the fact that anger and contempt often co-occur does not eliminate the importance of understanding when and why these emotions differ. Furthermore, in contrast to the predictions of appraisal theories of emotion, we found that both anger and contempt were correlated with confronting and avoiding intentions. A possible explanation may reside in the fact that participants were not asked to *choose* between different types of behavior (i.e., confronting *or* avoiding) but could indicate that they had strong intentions both to harm and to avoid the other person. Limiting participants' responses to their dominant behavioral intention—the type of choice that people often have to make in naturalistic circumstances—would likely produce more independent effects. Indeed, studies in which participants have to make such choices generally show greater distinction in the consequences of anger and contempt (e.g., Fischer & Roseman, 2007; Frijda et al., 1989).

In the current paper we applied insights from theories of intergroup emotion and stereotype content to the context of social irritations in everyday interactions. We specifically focused on anger versus contempt. Both of these emotions are often experienced in day-to-day interactions (Izard, 1977), and anger as well as contempt

involves negative evaluations of others and their actions (Cottrell & Neuberg, 2005; Fischer & Roseman, 2007; Mackie et al., 2000; Rozin et al., 1999). However, in other contexts, different emotions could be relevant as well. For instance, disgust may be a more relevant emotion in contexts in which one is confronted with a strong moral violation (Hutcherson & Gross, 2011). Additionally, in the context of a threatening intergroup conflict, fear may be particularly important. Fear may result from appraisals of threat to one's physical safety and increases behavioral intentions aimed at escaping (e.g., Cottrell & Neuberg, 2005). In line with this suggestion, incompetence may not always lead to lower appraisals of control, but this relationship might be moderated by conflict intensity (see Cottrell & Neuberg, 2005 for a similar argument). In the current paper we focused on situations in which people experience relatively mild irritations caused by an outgroup member. In such a context, low competence may signal that the other is unaware of causing nuisance, and that it therefore may be hard to control the other. However, in more intense conflict situations, in which outgroup members deliberately threaten one's personal or group safety, higher levels of competence may signal that the other will be hard to control or change. Indeed, previous research found that in threatening situations, reduced control led to less anger but more fear (e.g., Lazarus & Folkman, 1984; Roseman, Spindel, & Jose, 1990). These two ideas combined imply that, in threatening intergroup conflicts, stereotype competence will be negatively related with appraisals of control, and therefore leads to more fear. For future research it therefore may be worthwhile to consider conflict intensity—whether a conflict issue is merely causing irritation, or is posing a threat for one's safety—as a moderator for the effects of stereotype competence on appraisals of control and intergroup emotions. Thus, besides studying different emotions in different contexts, it may also be worthwhile for future studies to investigate how the type of context moderates the relation between stereotype content and emotions.

Previous research on intergroup conflict has focused on studying which emotions people generally associate with specific groups, and how they affect the structural relations between groups in society. In the present research we show that stereotype warmth and competence may affect discrete appraisals, emotions and behavioral intentions that are situation-specific for mild intergroup conflict situations. Inspired by the current results, we would like to emphasize the importance of taking the context and context-specific emotions into account in order to get a better understanding of the processes underlying difficulties in day-to-day intergroup interactions.

Notes

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- 1 Other studies in addition considered disgust as an exclusion emotion. However, because the situations of interest in the current studies do not involve moral transgressions of the type that has been found to evoke disgust (Cottrell & Neuberg, 2005; Rozin et al., 1999), we focused on the role of anger and contempt.
- 2 Additional analyses of covariance with respect to the unpredicted effects of warmth on avoiding and competence on coercion revealed that these effects remained significant when controlling for, respectively avoiding and coercion.
- 3 An additional analysis of covariance as performed in in Study 1, revealed that when adding anger as a covariate, $F(1, 79) = 58.24, p < .001$, partial $\eta^2 = .42$, the effect of competence on contempt remained significant, $F(1, 79) = 5.13, p = .023$, partial $\eta^2 = .06$, whereas the effect of warmth further was reduced, $F(1, 79) = 0.06, p = .803$.
- 4 We tested two theoretically based models rather than a single, more complex model, because,

according to the guidelines described by Kline (2010), the ratio of parameters to the number of cases should not exceed 1 parameter per 10 participants.

- 5 We also tested a model that, in addition to the paths in the current model, included direct paths from warmth to anger and from competence to anger. Although this model also showed good fit with the data, $\chi^2(3) = 2.12, p = .549$, CFI = 1.00, and RMSEA = 0.00, the fit was not significantly different from that of the more parsimonious model, $\Delta\chi^2(2) = 0.107, p = .948$. In addition, both of these paths were nonsignificant, respectively: $\beta = -.03, p = .784$, and $\beta = -.02, p = .862$. We therefore did not include these paths in the final model.
- 6 We also tested a model that, in addition to the paths in the current model, included direct paths from warmth to contempt and from competence to contempt. Although this model also showed good fit with the data, $\chi^2(3) = 1.56, p = .668$, CFI = 1.00, and RMSEA = 0.00, the fit was not significantly different from that of the more parsimonious model, $\Delta\chi^2(2) = 4.406, p = .110$. In addition, both of these paths were non-significant, respectively: $\beta = -.15, p = .155$, and $\beta = -.16, p = .122$. We therefore did not include these paths in the final model.
- 7 In addition to the path analyses, we tested the indirect effects of stereotype content on behavioral intentions, through emotions, with multiple mediation models as recommended by Preacher & Hayes (2008). These results show, in line with our predictions, that the indirect effect of warmth on confronting through anger was significant, $b = -.017 [-0.45, -.001]$, but through contempt was not, $b = -.011 [-0.37, .006]$. A second model showed that the indirect effect of competence on avoiding through contempt was significant, $b = -.028 [-0.67; -.003]$, but through anger was not, $b = -.002 [-0.17, 0.03]$.

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