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Sex differences in emotion expression

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Chapter 5

Social motives for regulating anger: Determinants or rationalizations?

Situations that elicit anger can be identified as situations in which something negative has happened. This negative event is seen as unjust and someone is blamed for it (Averill, 1982). In contrast with the appraisals of powerlessness that characterize incidents eliciting sadness and fear, appraisals of (relative) power characterize incidents eliciting anger (Roseman, Dhawan, Rettek & Naidu, 1995). Experiencing and (especially) displaying these anger appraisals is seen as a stereotypically male concern. To express anger, at least in an aggressive way, is consistent with the power-oriented gender role of men rather than with the relationship-oriented gender role of women (Chodorow, 1978; Fischer, 1993; Shields, 1987).

To date, however, empirical studies have not supported these stereotypical beliefs about anger. In his study on anger, Averill (1982) concludes that "Women become angry as frequently and as intensely as men, for much the same reasons and with about the same effectiveness" (p. 311). Indeed, in most studies with regard to the *experience* of anger no sex differences have been found (Kring, 2000). With regard to the *expression* of anger, Frodi and Macaluary (1977) reported in their review evidence of sex differences only in self-report measures of general hostility or aggressiveness. Further, Eagly and Steffen's (1986) meta-analysis showed that this effect is especially pronounced for physical aggression. One other robust sex difference is related to the *type of anger expression*: Women are more likely than men to cry when angry (Averill, 1982; Brody & Hall, 1993).

Other sex differences are inconsistent across studies and seem largely dependent on specific contexts. Vignette studies, for example, show that women report expressing more anger than men do, especially when the object and target of the anger are different (Timmers, Fischer & Manstead, 1998). Studies in which responses towards emotional slides or films are used show that the type of target is also an important factor in men's and women's anger expressions. Men are more likely to express anger towards other males or male strangers than women are, whereas women are more likely to express anger towards close others (Eagly & Steffen, 1986; Fehr, Baldwin, Collins, Patterson & Benditt, 1999; Kring, 2000).

In general, people believe that expressing anger decreases liking from others (Clark, Pataki & Carver, 1995). However, when men display anger the anger is seen as an emotion of entitlement, because it displays self-confidence, superiority, and authority. An angry man is not an emotional man, but a person who knows what he wants (Fischer, 1993; Shields, 1987). Men themselves believe that displaying anger is a matter of management, rather than a breakdown of control (Timmers et al., 1998). They also believe, at least when they express anger to an unfavorable target, that they are seen as heroic and that they act appropriately (Campbell & Muncer, 1987). On the other hand, a woman who expresses anger, especially in the form of aggression, is seen as out of control and emotional (Shields, 1987). Women themselves believe that they are seen as manipulative and childish when they express anger, especially when they do that by means of crying. When expressing anger in an aggressive way, they see themselves as hysterical. They also feel guilty and are afraid of rejection by their partner (Campbell & Muncer, 1987).

In different studies it has been shown that these beliefs of men and women influence the *consequences* men and women anticipate when expressing anger. Assuming that people are aware of the different consequences of their anger expression, in an earlier study (see Chapter 2) we investigated whether men and women had different social motives for expressing anger. Men were more likely than women to believe that expressing anger made them appear self-confident, whereas women reported suppressing anger because they believed that expressing anger might hurt someone else's feelings. This greater prevalence of men's social motive to appear self-confident versus women's empathic motive for regulating anger may explain our finding in the same study that men expressed anger more directly, namely, towards the object of their anger, while women tended to express their anger more indirectly, that is, towards another person.

Other studies have reported evidence consistent with this suggestion, showing that men anticipate more positive consequences (except when they express anger towards their romantic partners), whereas women anticipate more negative outcomes of expressing anger (Campbell & Muncer, 1987; Fehr et al., 1999). However, all these studies were correlational in nature and made use of self-report measures. It is not unlikely that these reports are very much influenced by people's beliefs about anger episodes, rather than what actually happens: For example Deffenbacher, Oetting, Lynch and Morris (1996) found

that both women and men report experiencing negative consequences of expressing anger. In a previous study, (see Chapter 3), we also found that the consequences of expressing anger for both men and women were negative. However, the consequences for men and women were not the same: Men encountered mainly instrumental consequences, whereas the consequences for women were mainly of a relational nature.

Thus, the evidence that different social motives affect the regulation of one's anger expression is still scarce. Self-reported social motives found in earlier studies may be rationalizations that were developed after having expressed or suppressed anger. These rationalizations are likely to be reinforced by the different beliefs men and women have about anger (Feldman Barrett, 1997; Feldman Barrett, Robin, Pietromonaco & Eyszel, 1998).

The present study therefore focuses on the relation between social motives and anger expression by manipulating social motives in anger-evoking situations. We assumed that if sex differences in anger expressions are caused by sex differences in social motives, these sex differences in anger expressions should decrease when men and women have the same social motive in an anger-provoking situation.

In short, the aim of this study was to investigate whether different social motives lead to different types of anger expression. We hypothesized that sex differences in anger expressions would be smaller in the experimental conditions compared to the control conditions: (1) sex differences in anger expressions should decrease when men and women have the same motive, whether this motive is showing self-confidence or showing empathy; (2) men and women who are motivated to act self-confidently should express more anger than men and women who are motivated to act empathically; and (3) in control conditions, in which motives are left manipulated, men should express more anger than do women.

Study 1

Method

Participants and Design

Sixty-three students (average age 22 years, 29 males and 34 females) from several different majors (Economics, Law, Chemistry, Geography, Literature, Physics, Biology and Psychology) participated in this study. Students signed up as a participant following an advertisement in the university newsletter. Participants were each paid 15 Dutch guilders. The advertisement text stated that all participants in the study would receive 15 Dutch guilders (about \$7.50); it was also stated that, in the event of winning, there was a possibility of receiving 50 Dutch guilders (about \$25.00). After completion of the study, each participant received a letter in which he or she was fully debriefed.

The experiment had a 2 (sex of respondent: male vs. female) x 3 (motive: self-confident vs. relational-oriented vs. control) design. Each participant was randomly assigned to one of the three conditions. Male and female participants were equally divided between the conditions.

Procedure and Materials

Participants were told that the study was concerned with negotiation. When arriving at the laboratory, they were introduced to the other participant, who was a confederate. Then they were told they would be seated in separate rooms, because the study was concerned with written negotiations. They were left in a separate room and received further instructions in written form.

They were informed that they had to negotiate in four rounds about the distribution of one hundred guilders, following the format of the ultimatum game (Guth et al., 1982). The aim of playing this ultimatum game was to elicit anger in the participant. Other research has shown that negotiations easily provoke anger (Pillutla & Murnighan, 1996). In an ultimatum game the instruction is to divide an amount of money. One 'player' is the 'offerer', the other the 'receiver'. The offerer proposes a division of the money; the receiver can accept or refuse the proposed division. If the receiver accepts the division, both players get the amount of money proposed by the offerer. If the receiver refuses the division, neither player receives anything. In the present experiment, the offerer (i.e., the

confederate) elicited anger by acting in a way that was likely to deprive the respondents of money. The confederate was instructed to act in an egocentric way: The standard offers he proposed were very unfair.

The instructions stated that the aim of the study was the investigation of written versus face-to-face negotiations, that the participant had been assigned to the written condition, and that he or she had to negotiate by means of short (written) notes that could be put in an envelope and could be given to their negotiation partner (i.e., the confederate) by the experimenter.

After having read this information about the game, the participant had the opportunity to ask questions to the experimenter. Next, the participant received one of the experimental manipulations. In the experimental condition, the participant received a written story about 'Mr. A'. The last sentence of the story was: "Mr. A was acting self-confident [or empathic, depending on the experimental condition] in this negotiation situation, and as a result of his behavior, he achieved his goal. From different studies it can be concluded that people are most successful when they are acting self-confidently (or empathically, depending on the experimental condition). The chances of succeeding in negotiations are greatest when people behave in such a way. Therefore, we ask you to imagine yourself acting self-confidently (or empathically, depending on the experimental condition) in the following negotiation-situation." In the control condition, no instructions were given.

It was explicitly stated that the aim of the game was to earn as much as money as they possibly could, and that they would receive the exact amount of money that they had won during the game. It was further explained that participants had to state clearly in the notes whether they would or would not accept the offer, including a comment on the offer in which they had to try to influence the strategy of the other participant (i.e., the confederate).

Then the experimenter drew lots in order to assign the offerer and a receiver roles. This was arranged such that the participant always was the receiver. Next, the first round of the ultimatum game started: The first (standard) distribution offer of the offerer (i.e., the confederate) was given to the receiver (i.e., the participant) by the experimenter. When the

game was over participants in the experimental conditions completed a short questionnaire in order to check the effectiveness of the manipulation.

Confederate. The confederate always was the 'offerer' and acted in a standard way giving very unfair offers and by sending unpleasant, blunt negotiation notes. The offers and the notes of the confederate were also standard: four distribution-offers and three comment notes. All these notes were written in advance and were put in an envelope by the experimenter. The two first distribution offers were 22 guilders for the offerer and 3 guilders for the receiver, the two latter distribution offers were 19 guilders for the offerer and 6 guilders for the receiver. The three negotiation/comment notes were as follows: "Why? You have to explain what you mean"; "Because I am the offerer, I can determine the division"; "Are you satisfied now?" These notes always appeared to fit with the written comments sent by the participants.

Face-to-face interaction. Then participants were told that the second part of the experiment would take place in another room. Respondents were also told that there were not enough rooms available and that respondents in the written condition therefore had to use a room with a video camera which normally was used for respondents in the face-to-face condition. First, the confederate was brought to the waiting room, so that the experimenter had the opportunity to start the video camera. Then the participant was brought to this room and was told that he or she would have to wait for the experimenter to return with further instructions.

The participant was given the opportunity to communicate spontaneously with the offerer (i.e., the confederate). The aim of this part of the experiment was to investigate whether respondents spontaneously expressed any anger to the offerer. The confederate was not allowed to provoke the participant. He was instructed to give 'neutral' answers, or to repeat what the participant was asking, for example "What do you mean doing it with purpose?" Thus, the confederate did not initiate any interaction, but only provided uninformative responses to questions posed by the participants. For instance, when the participant asked "Why did you behave like that?" the confederate answered "What do you mean, behaving like that?" Finally, if neutral answers were no longer possible, the confederate was allowed to say "I wanted to earn as much money as I could possibly earn".

After four minutes, the video recording was stopped and the confederate was collected from the waiting room. The participant stayed in the waiting room and was given two questionnaires to complete, one about their emotions during the experiment and one about their social value orientation. With respect to the latter, respondents were told that these questions had nothing to do with the tasks they had just been doing. After the participant had completed the questionnaires the recording was started again. The experimenter returned to the waiting room and asked the participant: "How do you think the negotiation task went?" This question was asked to gather an 'object is not target' measure of anger expression. After that, respondents received their 15 (or 18 in the case where all offers were accepted) Dutch guilders.

Dependent Measures

Questionnaire: Self-reported experience and expression of emotions

Evaluation of confederate. The first question was: "What do you think about the behavior of your negotiation partner?" Responses could be made by making a rating on each of the following scales: honest, competitive, sneaky, nice, selfish, irritating and malevolent. Answers were scored on a 7-point scale ranging from 1 (not at all) to 7 (very strongly).

Emotional experience. The second question was: "How did you feel during the negotiation-task?" Responses could be rated on each of the following scales: disappointed, insecure, surprised, angry, satisfied, proud, powerless, irritated. Again, answers were scored on a 7-point scale from 1 (not at all) to 7 (very strongly).

Actiontendency. This was measured by asking "Did you have the urge to do something during the negotiation task? Responses could be rated on each of the following statements: 'I would like to hit my negotiation partner', 'I would like to call names at my negotiation partner', 'I would like to stop with the negotiation-task', 'I would like to walk away', 'I would like to shout of joy' and 'I would like to talk with my negotiation partner'. Each statement was rated on a 7-point scale from 1 (not at all) to 7 (very strongly).

Emotion expression. To measure how respondents perceived their own expression of emotion they were asked: "What did you do during the negotiation task and/or when you met your negotiation partner?" A number of statements followed, each of which was rated

on a 7-point scale from 1 (not at all) to 7 (very strongly). The statements were the following: 'I expressed my pride'; 'I expressed my irritation'; 'I expressed my powerlessness'; 'I expressed my anger'; 'I expressed my disappointment'; 'I expressed my insecurity'; 'I expressed my disappointment'; 'I suppressed my anger' and 'I suppressed my irritation'.

Motives for expressing and suppressing anger/irritation. To get insight into the (self-confident and empathic) motives of the respondents in the control condition, two questions were asked. The first was "Why did you express your anger/irritation?" A number of statements followed which were supposed to measure a self-confident motive. The options were: 'Because I want the other person to stop his behavior'; 'Because I am not the kind of person to be mocked'; 'Because I want the other person to regret his/her behavior' and 'Because I want to appear self-confident'. Each statement was rated on a 7-point scale, from 1 (not at all) to 7 (very strongly).

The next question asked was: "Why did you suppress your anger/irritation?" A number of statements followed each of which was rated on a 7-point scale from 1 (not at all) to 7 (very strongly). The statements, which were intended to measure an empathic motive, were 'Because I did not want to hurt my negotiation partner'; 'Because I want to take into account the feeling of my negotiation partner' and 'Because I did not dare to show that I felt angry/irritated'.

Manipulation checks. After these questions, a check of the manipulation followed. The first part of this check was intended to assess whether participants remembered the instructions (i.e., to act in a self-confident way or to act in an empathic way) they received before starting the negotiation task. The question was: "Do you remember which advice you had to follow when you started the negotiation task?" The options were: (1) I was not allowed to let my negotiation partner persuade me (2) I had to act self-confidently (3) I had to act in an empathic way (4) I had try to give my opinions as clearly as possible.

The second part of the manipulation check was intended to get insight into the extent to which respondents had acted in a self-confident or an empathic way, according to the condition they were in. The questions were: "To what extent did you resist your negotiation partner's persuasion attempts?" "To what extent did you behave self-confidently?"; "To what extent did you behave in an empathic way?". "To what extent did

you express your opinions as clearly as possible?" Answers were made on a 7-point scale from 1 (not at all) to 7 (very strongly).

Videorecording.

To indicate if, and to what extent, respondents expressed their anger to the confederate and/or to the experimenter, their behavior in the waiting room was recorded. Two coders who were blind to the participant's experimental condition scored the following behavioral measures: (1) *Nonverbal behavior*: 'frowning eyebrows'; 'clenched teeth' and 'head turned aside'. (2) *Verbal behavior*: 'criticizing the confederate'; 'calling the confederate names (sarcastic remarks, being offensive)'; 'criticizing the experiment or the situation' and 'negative language/ calling names in general'. Answers were made on a 3-point scale with 1 (no), 2 (a little) and 3 (yes) as the options.

Finally, two subjective ratings of the extent of anger expression were made. The first question referred to the situation in which the respondent was in the waiting room together with the confederate. The question was "*Is this respondent angry?*". To generate an 'object is not target' measure for the expression of anger, the same question was asked when the respondent was together with the experimenter. Answers to both questions were rated on a 7-point scale with 1 (totally not) and 7 (very much) as the endpoints of the scale.

Intercoder reliability was determined by conducting correlation analyses between the scores of the two coders for one-third of the cases. For nonverbal expressions, the correlation between coders was .73; for verbal behavior the correlation was 1.0; the correlation for subjective ratings of anger expression towards the confederate was .73, and the correlation for subjective ratings for anger expression toward the experimenter was .78. Based on these results the ratings of one of the coders were used in the analyses.

Results

Combination of scales. In order to create the dependent measure *anger experience* the ratings of 'feeling angry' and 'feeling irritated' were combined (Cronbach's alpha was .74). To create the dependent measure *to attack* the ratings of 'I would like to hit my

negotiation partner' and 'I would like to call my negotiation partner names' were combined (Cronbach's alpha was .74).

To create the dependent measure *anger expression* the ratings 'I expressed my anger' and 'I expressed my irritation' were combined (Cronbach's alpha was .85). To create the dependent measure *anger suppression* the ratings of 'I suppressed my anger' and 'I suppressed my irritation' were combined (Cronbach's alpha was .77).

To create the dependent measure *self-confident motives for expressing anger* the ratings of 'Because I want the other person to stop his behavior', 'Because I am not the kind of person to be mocked', 'Because I want the other person to regret his/her behavior' and 'Because I want to appear self-confident' were combined (Cronbach's alpha was .73).

To create the dependent measure *empathic motives for suppressing anger* the ratings of 'Because I did not want to hurt my negotiation partner', 'Because I want to take into account the feelings of my negotiation partner' and 'I did not dare to show that I felt angry/irritated' were combined (Cronbach's alpha was .71).

Self-reported experience, expression and motives

Data were entered into a 2 (sex of respondent: male vs. female) x 3 (experimental condition: self-confident vs. relational vs. control) analysis of variance.

Manipulation. The first issue to be addressed is whether respondents remembered the advice they received before starting the negotiation task and whether they actually had behaved consistently with these instructions (i.e., self-confident or empathic). All respondents, except for one, remembered the instructions. This respondent was omitted from further analyses.

The second part of the manipulation was intended to assess the extent to which respondents acted in a self-confident or an empathic way, in accordance with the instructions they had received. The results showed that respondents in the self-confident condition indicated that they behaved more self-confidently ($M = 6.09$; $SD = 1.07$) than respondents in the empathic condition did ($M = 5.73$; $SD = 1.10$). However this difference was not significant. Responses to the question about the extent to which respondents thought they had acted in an empathic way revealed the same pattern: Respondents in the empathic condition indicated that they had behaved more empathically ($M = 5.35$, $SD =$

1.58) than respondents in the self-confident condition did ($M = 4.86$, $SD = 1.91$), but this difference was again not significant.

Further, it was shown that, in general, respondents acted more self-confidently ($M = 5.94$, $SD = 1.03$) than empathically ($M = 5.30$, $SD = 1.58$), $t(35) = 2.36$, $p < .05$. A further analysis was concerned with sex differences in acting self-confidently or empathically. Note that only the respondents in the experimental conditions (not the respondents in the control conditions) were entered into the analyses. As expected, no sex differences were found.

Because the manipulation of social motives was not entirely satisfactory, we conducted a median split. Respondents in the self-confident condition whose ratings on the empathic question were 5.00 or higher were omitted from the analyses. Similarly, respondents in the empathic condition whose ratings were 6.00 or higher on the self-confident scale were omitted from the analyses. However, after doing this there were not enough respondents left in each condition. Based on the results of the first part of the manipulation check we therefore decided to include all respondents in the analyses.

Confederates. To check whether there were significant differences on the dependent variables as a function of which of the three confederates had participated, analyses of variance with confederate as the factor were conducted. We found a significant multivariate effect on expressing anger and irritation, $F(2, 60) = 2.42$, $p < .10$. In the case of one particular confederate ($M = 1.46$, $SD = 1.05$), participants expressed less anger than in case of the other confederates ($M = 2.36$, $SD = 1.41$; $M = 2.50$, $SD = 1.71$, respectively). We also found a significant confederate effect on expressing disappointment, $F(2, 59) = 2.85$, $p < .001$. In this latter case, the same confederate evoked less expression of disappointment ($M = 1.46$, $SD = 1.20$) than did the other confederates ($M = 3.00$, $SD = 2.06$; $M = 2.71$, $SD = 2.15$, respectively). A further check of the means of the dependent measures with a t -test revealed that this same confederate differed significantly from the other two confederates on participants' expressions of pride, irritation, anger, disappointment and surprise, and on their suppression of anger. A possible explanation for these results is that this particular confederate indicated to the experimenter that he had felt quite nervous during the experiment. Based on these results the 14 respondents who had

participated with this confederate were omitted from further analyses. Thus, 49 respondents remained, 23 men and 26 women.

Evaluation. Respondents were asked to evaluate the behavior of their negotiation partner. A 2 x 3 multivariate analysis of variance with evaluations of the negotiation partner as the dependent measures was conducted. No multivariate main or interaction effects were found. Thus, as intended, no effects of sex of respondent or type of manipulation were found on evaluation of the confederate. The means for the different evaluation statements were honest ($M = 6.25, SD = 1.35$), irritating ($M = 5.27, SD = 1.77$), competitive ($M = 5.12, SD = 1.98$), sneaky ($M = 4.02, SD = 1.90$), malevolent ($M = 3.81, SD = 1.73$), selfish ($M = 2.88, SD = 1.95$) and nice ($M = 2.35, SD = 1.23$).

Experience of emotion. First, responses on the dependent measure emotional experiences (disappointed, insecure, angry, surprised, satisfied, proud, powerless) were entered into a 2 x 3 multivariate analysis of variance. No significant main or interaction effects were found.

Action tendencies. Multivariate analysis of variance with the action tendencies 'attack', 'I would like to stop with the negotiation task', 'I would like to walk away', 'I would like to shout of joy' and 'I would like to talk with my negotiation partner' as the dependent measures revealed a marginally significant main effect of condition, $F(10, 76) = 1.68, p < .10$. Respondents in the empathic condition ($M = 2.50, SD = 1.58$) felt a greater urge to attack than did respondents in the other conditions (self-confident $M = 1.95, SD = 1.06$, and control $M = 1.58, SD = .70$, respectively), $F(2, 43) = 2.63, p < .10$. For the other dependent measures no significant main or interaction effects were found.

Expression of emotion. First, the responses on the dependent measure 'emotion-expression' were entered into a 2 x 3 multivariate analysis of variance. A main effect was found for sex of respondent, $F(7, 37) = 2.00, p < .10$. Men ($M = 2.87, SD = 1.71$) were more likely to report that they had expressed their anger than were women ($M = 2.02, SD = 1.25$), $F(1, 43) = 4.36, p < .05$. No other significant main or interaction effects were found. However, a closer look into the simple main effect showed the predicted, albeit only marginally significant, effect that men in the control condition ($M = 3.28, SD = 1.58$) expressed more anger than did females ($M = 1.75, SD = .99$) in that condition, $F(1, 43) = 3.35, p < .08$. For the other conditions, as predicted, no sex differences were found.

For the other dependent variables, referring to other emotions, no significant main or interaction effects were found.

Suppression of anger. An analysis of variance with the dependent variable 'anger suppression' and sex of respondent and experimental condition as the factors, revealed no significant main or interaction effects. Analyzing within experimental conditions or within sex of the respondents also revealed no significant effects.

Motives for expressing and suppressing anger. We found significant main and interaction effects for the dependent measure empathic motives to suppress anger. For sex of the respondent, there was a marginally significant main effect, $F(1,44)=3.31, p<.10$. Women ($M = 2.84, SD = 1.65$) indicated that they suppressed anger more because of empathic motives than men did ($M = 2.35, SD = .92$).

Videos

Data were entered into a 2 (sex of respondent: male vs. female) x 3 (manipulation: self-confident vs. relational vs. control) analysis of variance with the nonverbal, verbal and two subjective anger ratings (one object is the same as target and one object is not the same as target measure) as the dependent variables. No significant effects were found. The means for observed male and female anger, expressed toward the confederate (thus, the object is same as target measure) were: $M_m = 3.56, SD = 1.83$ and $M_w = 3.29, SD = 1.60$. The means for male and female anger expressed toward experimenter (thus, the object is not target measure) were $M_m = 3.50, SD = 1.55$ and $M_w = 4.00, SD = 1.45$. The means for male and female anger expressed in a verbal way were: $M_m=1.29, SD = .37$ and $M_w = 1.31, SD = .35$. The means for male and female anger expressed nonverbally were: $M_m = 1.43, SD = .53$; and $M_w=1.30, SD = .37$.

The data were then entered into a 2 (sex of respondent: male vs. female) x 2 (social value orientation: individualistic vs. prosocial) analysis of variance with the same dependent variables as before. Individualistic oriented persons ($M = 1.49, SD = .46$) expressed significantly more anger in a nonverbal way than did prosocial oriented persons ($M = 1.07, SD = .19$), $F(1,29) = 9.67, p <.05$.

Discussion

We hypothesized (1) that we would not find sex differences in anger expressions within experimental conditions; (2) that we would find sex differences in anger expressions in the control condition; and (3) that we would find that men as well as women who were acting in a self-confident way would express more anger than men and women who were acting in an empathic way.

Considering the self-report measures, we can conclude that the first and second hypotheses were confirmed: Albeit men expressed their anger in general more than women, no sex differences in anger expressions in the experimental conditions were found, whereas there were sex differences in anger expressions in the control condition. In the latter case, men expressed more anger than did women. With respect to types of motives, we found that women suppressed anger more than men because of empathic motives. These results are consistent with findings from earlier studies (Kring, 2000; Timmers et al., 1998). However, we did not find sex differences in observational measures of anger (i.e., the video-ratings) in the control condition. The fact that there is a discrepancy between self-reported measures and observed measures concerning anger might be due to the influence of beliefs on respondents in the control condition. It is possible that these beliefs influenced self-report measures, whereas they were less likely to have influenced behavior (Feldman Barrett, 1997; Feldman Barrett et al., 1998).

We did not find support for our third hypothesis. Neither in the self-report measures nor in the observations we found that respondents instructed to act self-confidently expressed more anger than did respondents instructed to act empathically. One explanation for this result can be found in the fact that we were not able to manipulate social motives in a "clean" way: In other words, the instruction to behave in a self-confident or empathic way also had effects on the unmanipulated social motive. This was reflected in the manipulation check measures: Respondents indicated, independently of experimental manipulation, that they were acting both self-confidently and empathically. The manipulation checks also showed that, in general, respondents were acting more self-confidently than empathically. This may be due to the fact that a negotiation situation is more readily associated with self-confidence. In addition, the confederate acted in quite an

egocentric way and thus self-confident behavior matched the behavior of the confederate more than did empathic behavior.

In conclusion, although we only obtained significant differences for dependent variables referring to *anger*, this study does not provide conclusive support for the idea that social motives are the major causes of the differences between male and female anger expressions. Further studies of the effects of specific social motives on the expression of anger should meet the following criteria. First, they should manipulate one social motive (i.e., self-confidence or empathy) and at the same time rule out the influence of the other social motive. Second, the anger-provoking situation should not be self-confidence evoking, or be easily associated with self-confidence. Finally, the manipulated social motives should match the behavior of the confederate; that is, the behavior of the confederate should invite both empathic and self-confident behavior.

Study 2

To fulfil the above criteria, we developed a questionnaire containing two anger-provoking vignettes. An advantage of using a questionnaire with vignettes by comparison with conducting an experiment in which anger is actually elicited is that it is possible to have greater control over factors that might give rise to unintended effects.

A prime advantage of using vignettes is that one can use everyday life anger-provoking situations. In a laboratory situation the use of daily life anger-provoking situations is limited. Because our study needs an anger-provoking situation that is evocative of both self-confident and empathic behavior and which is equally anger-provoking for men and for women, the range of anger-provoking situations that can be implemented in a laboratory is even more limited.

An apparent disadvantage of using vignettes is that respondents have to imagine that they are acting in a self-confident or an empathic way, rather than really doing so. However, this reduces the likelihood that unintended behavior (e.g., self-confident behavior in the empathic experimental condition) will occur. Finally, unintended variations in the behavior of confederates will be not be a factor in a vignette study.

Thus, the use of vignettes may contribute substantially to achieving the primary aim of the present study, namely to demonstrate that enhancing self-confident or empathic motivation will have differential effects on the anger expressions of men and women.

Obviously, there are also other disadvantages of using vignettes, the most obvious being the need to rely on self-reports of men and women regarding how they would act in a situation as described in the vignette. As noted in the introduction to this chapter, it is possible that emotion beliefs will influence these self-reports. However, there is a sense in which the influence of beliefs on perceptions (and ultimately of course on behavior) is precisely the object of study in the present research. The manipulation of motive is in effect a manipulation of respondents' beliefs about the value of acting in a self-confident or empathic way in the social situations described in the vignettes.

The hypotheses in the present study are the same as those in Study 1: (1) sex differences in anger expressions should be absent when men and women share the same motive, whether this be acting self-confidently or empathically; (2) men and women who are motivated to act self-confidently should express more anger than men and women who are motivated to act empathically; (3) under control conditions, men should express more anger than women.

Method

Participants and Design

Sixty-five participants (average age 33 years, 38 males and 27 females) with different occupations or courses of study (information technology, teachers and students) participated in this study by completing a questionnaire. The experiment had a 2 (sex of respondent: male vs. female) x 3 (motive: self-confident vs. empathic vs. control) design. Each participant was randomly assigned to one of the three conditions. Male and female participants were divided equally between the conditions.

Questionnaire

Each questionnaire contained two vignettes designed to elicit anger. These vignettes are shown (translated from the original Dutch) in Appendix C. The object of the anger in the vignette is the same as the target of the anger. In the control condition these vignettes

were used as they stand in Appendix C. In the self-confident condition the sentence 'You decide to stand for your interests' was added to each vignette; in the empathic condition the sentence 'You take into account his situation' was added to the vignettes. Thus, all in all there were six different vignettes, varying in content and in motive manipulation.

The general instruction for completing the questionnaires was: "This research is about the behavior of people in social situations. We ask you to read two different stories and to imagine yourself as the main character in the vignette." In both conditions it was also stated that: "In general, people behave self-confidently or empathically in a social situation". Then, the effects of these two types of behavior were briefly described: "From different studies it can be concluded that people think self-confident [empathic] behavior is most satisfying. These studies also show that people are most successful when they act self-confidently [empathically]. Imagine yourself as the main character in the stories and imagine that you are acting self-confidently [empathically] in the situation described in the stories".

Dependent measures

After each vignette, the following questions were asked:

Evaluation. The first question was: "How would you evaluate the behavior of the other person?" Responses could be made by making a rating on each of the following scales: not nice, secretly, anti-social, selfish, irritating and malevolent. Answers were made on a 7-point scale ranging from 1 (not at all) to 7 (very strongly).

Emotional experience. The second question was: "How would you feel in such a situation?" Responses could be rated on each of the following scales: insecure, surprised, angry, disappointed, powerless, irritated. Answers were made on a 7-point scale ranging from 1 (not at all) to 7 (very strongly).

Emotion expression. To assess how respondents thought that they would act in terms of expressing their emotion in this situation, they were asked: "What would you do in such a situation?". A number of statements followed, each of which was rated on a 7-point scale from 1 (not at all) to 7 (very strongly). Because we used videorecordings to assess respondents' emotional behavior in Study 1, in the present study we added some statements referring to emotional behavior. The statements were: 'I would express my irritation'; 'I

would show my powerlessness'; 'I would express my anger'; 'I would express my surprise'; 'I would express my insecurity'; 'I would suppress my anger'; 'I would suppress my irritation'; 'I would call names'; 'I would say nothing'; 'I would say in a friendly way that the tent was ruined' / 'I would say friendly that he is causing me trouble' (depending on the vignette); 'I would tear the tent down and show my anger clearly' / 'I would stop him and show him how angry I am' (depending on the vignette); 'I would say that I was angry'; and 'I would look angry, but I would not say anything'.

Motives for expressing and suppressing anger/irritation. The following question was posed as a manipulation check in the experimental conditions and as a dependent variable in the control conditions: "What do you think are good reasons for expressing anger in this situation?". Three statements followed which could be rated on a 7-point scale from 1 (not at all) to 7 (very strongly). The statements were: "Because I would cause the other person to stop his behavior"; "Because I would show that I am not the kind of person to be mocked"; and "Because I would like to appear self-confident" (Cronbach's alpha was .67).

Then the question "What do you think are good reasons for suppressing your anger?" was asked. Three statements followed "I do not want to appear hard", "I want to show that I understand his position"; and "Because I did not want to hurt my negotiation partner" (Cronbach's alpha was .75).

Manipulation checks. After these questions, two questions were posed to check the manipulation: "To what extent did you imagine that you would act self-confident in this situation?"; and "To what extent did you imagine that you would act empathic in this situation?". Again, answers were rated on a 7-point scale from 1 (not at all) to 7 (very strongly).

Results

Combination of scales

To create the dependent measure *anger experience* the ratings of 'feeling angry' and 'feeling irritated' were combined (Cronbach's alpha was .63 for both vignettes).

To create the dependent measure *anger expression* the ratings of 'I would express my anger', 'I would express my irritation', and 'I would say that I am angry' were

combined (Cronbach's alpha was .86). To create the dependent measure *anger suppression* the ratings of 'I would suppress my irritation' and 'I would suppress my anger' were combined (Cronbach's alpha was .77).

To create the dependent measure *self-confident motives for expressing anger* the ratings of 'Because I would cause the other person to stop his behavior', 'Because I would show that I am not the kind of person to be mocked' and 'Because I would like to appear self-confident' were combined (Cronbach's alpha was .67). To create the dependent measure *empathic motives for suppressing anger* the ratings of 'I do not want to appear hard', 'I want to show that I understand his position', and 'Because I did not want to hurt my negotiation-partner' were combined (Cronbach's alpha was .75).

Data were entered into a 2 (sex of respondent: male vs. female) x 3 (experimental condition: self-confident vs. emphatic vs. control) analysis of variance. No significant differences as a function of type of vignette were found. Responses were therefore taken together.

Manipulation check. The manipulation was successful. The multivariate main effect of condition was significant, $F(2,36) = 30.05, p < .001$. Univariate analyses showed that respondents in the 'self-confident' condition ($M = 5.65, SD = 1.42$) were more likely than respondents in the 'empathic' condition ($M = 4.10, SD = 1.87$) to report that they had imagined that they had acted self-confidently, $F(1,37) = 13.66, p < .05$. Respondents in the 'empathic' condition ($M = 5.39, SD = 1.16$) were more likely than respondents in the 'self-confident' condition ($M = 2.40, SD = 1.31$) to report that they had imagined that they had acted empathically.

There was no main effect for sex of the respondent. However, we found an interaction effect between sex of respondent and condition, $F(2,36) = 3.21, p < .10$. Men ($M = 4.77, SD = 1.96$) in the empathic condition were more likely than women to report that they had imagined acting self-confidently ($M = 3.00, SD = 1.07$), $F(1,37) = 6.58, p < .05$.

Evaluation. Responses were entered into a 2 (sex of respondent) x 3 (condition) multivariate analysis of variance. As intended, no significant main or interaction effects were found. Means showed that the other person was on average evaluated as not nice ($M = 4.54, SD = 1.78$), secretive ($M = 3.65, SD = 1.25$), anti-social ($M = 5.32, SD = 1.50$), selfish

($M = 4.42$, $SD = 1.46$), irritating ($M = 5.15$, $SD = 1.60$) and malevolent ($M = 2.72$, $SD = 1.55$).

Experience of emotion. Responses on the dependent measures emotion experience were entered into a 2 (sex of respondent) x 3 (condition) multivariate analysis of variance. No main or interaction effects were found. As intended, both men ($M = 5.25$, $SD = 1.50$) and women ($M = 4.76$; $SD = 1.73$) indicated that they would experience anger in the situations described in the vignettes.

Expression of emotion. Analysis of variance with the dependent variable 'anger-expression' and sex of respondent and experimental condition as the factors revealed, as predicted, a significant main effect for condition, $F(2, 58) = 4.17$, $p < .05$. Respondents in the self-confident condition ($M = 4.48$, $SD = 1.07$) reported they would express more anger than did respondents in the empathic condition ($M = 3.38$, $SD = 1.42$). No interaction effects were found. Thus (as predicted) no sex differences within the experimental conditions were found. However, in contrast with what was predicted, no sex differences were found in the control condition either.

Simple main effects within experimental condition as the factor, showed that women tended to express more anger when acting self-confidently ($M = 4.31$, $SD = .99$) than when acting empathically ($M = 2.79$, $SD = 1.37$), $F(2, 58) = 2.89$, $p < .06$. For men we did not obtain significant results.

Suppression of anger. An analysis of variance with the dependent variable 'anger suppression' and sex of respondent and condition as the factors revealed, as predicted, a significant main effect of condition, $F(2, 58) = 3.42$, $p < .05$. Respondents suppressed anger more in the empathic condition ($M = 3.63$, $SD = 1.39$) than in the self-confident condition ($M = 2.82$, $SD = 1.09$).

To assess simple main effects, a further analysis within sex of respondent, with condition as the factor, revealed that women suppressed more anger when acting empathically ($M = 4.28$, $SD = 1.42$), than when acting self-confidently ($M = 2.50$, $SD = .99$), $F(2, 58) = 4.33$, $p < .05$. For men, the motive manipulation did not make a difference.

Motives for expressing or suppressing anger. Multivariate analyses of variance revealed no significant effects for respondents in the control condition. A *t*-test was used to compare the mean ratings of men and women in the control condition with the midpoint

(i.e., 4) on the 7-point scale. A significant t-value was found for empathic motives for suppressing anger: Men in the control condition ($M = 3.22$, $SD = .91$) reported significantly less than the midpoint of the scale to have an empathic motive for suppressing anger.

Discussion

The two motives were manipulated cleanly, in that respondents did not imagine acting self-confidently in the empathic condition or empathically in the self-confident condition. Also, both male and female respondents were equally likely to report that they would experience anger in the situations described.

The most interesting finding of the present study is that the regulation of *women's* anger expressions differed significantly as a function of type of social motive, whereas those of *men* did not. This raises the question of why women would be more likely than men to adapt their anger expressions to prevailing social motives. One explanation might be that men are more self-confident in general (as is seen in the manipulation checks), which leads to a ceiling effect and results in less differentiation between conditions. A second explanation is that because expressing anger is stereotypically seen as a male concern (i.e., Eagly & Steffen, 1987; Fischer, 1993), women were more likely than men to depend on contextual demands that is, in this case, the instruction of a social motive. To draw strong conclusions about the differences between men and women with respect to their adaptation of social motives in emotional contexts, however, powerless emotions, such as fear or sadness, have to be included in future studies.

As predicted, no significant sex differences were found within experimental conditions in relation to anger expressions. However, we did not find sex differences in the control condition, either. Thus, the absence of social motives did not lead to the expected sex differences in anger expressions. Social motives did influence regulation attempts, however. In general we can conclude that the motive to be self-confident leads to a greater amount of anger expressions than does the motive to be empathic, whereas the motive to be empathic leads to a greater amount of anger suppression.

General Discussion

The aims of Study 1 and Study 2 were the same: To investigate the influence of two social motives on the regulation of anger. Because the manipulation of social motives in Study 1 was not completely satisfactory, we were only able to test our hypotheses in Study 2. We will discuss the results of both studies.

The most important finding of both studies is that women are more inclined than men to regulate their anger. In Study 1 we found that women were more likely than men to suppress their anger because of empathic motives, whereas men's generally greater expression of anger did not vary as a function of social motives. The general effects of social motives on anger expressions could not be investigated in Study 1. These effects could be studied in Study 2 and there it was found that self-confidence leads to a greater amount of anger expression than does empathy, and that empathy leads to a greater amount of anger suppression than does self-confidence. However, a closer examination of the findings showed that this was the result of women's attempts to regulate their anger: The expression of women's anger varied as a function of type of social motive. Two possible explanations for this finding are given in the discussion of Study 2.

Further, we did not find significant sex differences in the observational measures of anger taken in Study 1, but we did find sex differences in the self-report measures of anger expression. In Study 2, however, self-report measures were used, but no sex differences were found in the control condition. We don't have an explanation for these inconsistent and unexpected results.

Another question is whether social motives can be considered to be determinants of emotion regulation or as mere rationalizations after having expressed an emotion. This is particularly the case when social motives are collected in the form of self-report measures. In the present study we showed that experimental manipulations of the social motive to be self-confident leads to greater anger expression, and less anger suppression, than does the social motive to be empathic. This supports the idea that these social motives play a role in the regulation of anger. However, to prevent appearing irrational, people try to account for their emotional behavior (Fischer & Jansz, 1995). It may therefore be the case that these social motives are used as rationalizations. Precisely because people are aware of the fact that these social motives sometimes regulate their anger, they may use them as accounts for

having expressed their anger. One of the difficult tasks for future research is to disentangle whether social motives regulate or rationalize anger.

