

Personality and Social Sciences

Stereotype threat in salary negotiations is mediated by reservation salary

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Tellhed, U. & Björklund, F. (2010). Stereotype threat in salary negotiations is mediated by reservation salary. *Scandinavian Journal of Psychology*.

Women are stereotypically perceived as worse negotiators than men, which may make them ask for less salary than men when under stereotype threat (Kray *et al.*, 2001). However, the mechanisms of stereotype threat are not yet properly understood. The current study investigated whether stereotype threat effects in salary negotiations can be explained by motivational factors. A total of 116 business students negotiated salary with a confederate and were either told that this was diagnostic of negotiating ability (threat manipulation) or not. Measures of minimum (reservation) and ideal (aspiration) salary goals and regulatory focus were collected. The finding (Kray *et al.*, 2001) that women make lower salary requests than men when under stereotype threat was replicated. Women in the threat condition further reported lower aspiration salary, marginally significantly lower reservation salary and less eagerness/more vigilance than men. Reservation salary mediated the stereotype threat effect, and there was a trend for regulatory focus to mediate the effect. Thus, reservation salary partly explains why women ask for less salary than men under stereotype threat. Female negotiators may benefit from learning that stereotype threat causes sex-differences in motivation.

Key words: Stereotype threat, salary negotiation, mediation.

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INTRODUCTION

Asking for a little less salary than one's co-workers can prove to be a big mistake. The amount asked for in a salary negotiation largely determines the outcome (Barron, 2003; Galinsky & Musweiler, 2001) and one's starting salary has a significant, cumulative effect on one's life earnings (Babcock & Laschever, 2003; Bowles, Babcock & McGinn, 2005; Gerhart, 1990; Gerhart & Ryne, 1991). It is therefore a serious matter that women have been shown to ask for less salary than men in negotiations (Barron, 2003; Stevens, Bavetta & Gist, 1993; Sæve-Söderbergh, 2003).

Stereotype threat

Recent findings suggest that sex differences in negotiating performance may, at least partly, be explained as a stereotype threat effect (Kray, Galinsky & Thompson, 2002; Kray, Reb, Galinsky & Thompson, 2004; Kray & Thompson, 2005; Kray, Thompson & Galinsky, 2001). The aim of this study is to investigate the psychological processes behind stereotype threat effects in salary negotiations. Why do women under stereotype threat ask for less salary than men? In the present research it will be predicted that stereotype threat causes sex differences in motivation, which in turn causes sex differences in salary requests.

Steele and Aronson (1995) coined the term "stereotype threat" when they observed that black American students performed worse on an intellectual task when it was framed as diagnostic of intellectual ability compared to when it was framed as non-diagnostic of ability. No such effect was found for white American students. The authors reasoned that when a person wishes to do well at a task, but an in-group stereotype predicts him or her to perform badly, it creates a "threat in the air" which can cause the

person to underperform (Steele, 1997). Stereotype threat is therefore believed to be a situational threat that has the potential to affect group members' performance "whenever there is a negative group stereotype, a person to whom it could be applied, and a performance that can confirm the applicability of the one to the other" (Steele, Spencer & Aronson, 2002, p. 387).

The concept "stereotype threat" has been slightly differently defined in the literature (Shapiro & Neuberg, 2007). Steele (1997, p. 614) conceptualizes it as a concern about "...being negatively stereotyped, with being judged or treated stereotypically, or with the prospect of confirming to the stereotype". Shapiro and Neuberg (2007) propose that there may be qualitatively different types of stereotype threat, depending for instance on whether the concern regards oneself or the in-group. However, regardless of the nature of the concerns that a negative stereotype gives rise to, stereotype threat is predicted to cause decrements in group members' performance (Shapiro & Neuberg, 2007).

Since Steele and Aronson's (1995) now classic series of studies, hundreds of articles investigating stereotype threat have been published concerning several negative stereotypes; such as women being bad at math (Spencer, Steele & Quinn, 1999), men being bad at processing affective information (Leyens, Desert, Croizet & Darcis, 2000), and for the focus of this article, the stereotype portraying women as bad negotiators (Kray *et al.*, 2001, 2002, 2004).

It should be noted that learning that a stereotype predicts an *out group* to perform badly can sometimes boost the performance of those who are not negatively stereotyped, a phenomenon denoted stereotype lift (Walton & Cohen, 2003). Thus, sex differences in negotiating behavior may be the result not only of women experiencing stereotype threat but also of men experiencing stereotype lift. However, stereotype lift effects are usually smaller than

stereotype threat effects ($d = 0.10$, compared to $d = 0.29$, Walton & Cohen, 2003).

Negotiations and gender stereotypes

There is a correspondence between the negotiator stereotype and gender stereotypes (Kray *et al.*, 2001). Efficient negotiators, and men, are typically seen as “assertive” and “decisive” and inefficient negotiators, and women, are typically seen as “emotional” and “accommodating” (Kray *et al.*, 2001). Kray *et al.* (2001) reasoned that this stereotype overlap put female negotiators at risk of experiencing stereotype threat. In a series of studies, the authors showed that male negotiators outperform female negotiators in a stereotype threat context, where a negotiation is presented as diagnostic of negotiating ability. However, when the stereotype threat is lifted, by presenting the negotiation as non-diagnostic of ability, there are no sex differences in negotiating performance (Kray *et al.*, 2001). In the present study, we will try to replicate this effect and denote it “the stereotype threat effect”.

The findings by Kray *et al.* (2001) suggest that sex differences found in real life negotiations might at least partially be explained by female negotiators experiencing stereotype threat. In their studies, stereotype threat was experimentally manipulated by presenting a negotiation as diagnostic of ability. In real life negotiations, there is of course no experimental manipulation. However, it is reasonable to assume that a real life negotiation is usually perceived as a test of one’s negotiating ability.

Mediation of stereotype threat effects

The vast amount of research replicating and generalizing the stereotype threat phenomenon demonstrates the power of negative stereotypes to affect the performance of group-members. But less is known about the way stereotypes exert their effect. Why does performance suffer when a negative stereotype predicts it to? Many psychological variables have been proposed and tested as possible mediators of stereotype threat effects but the results have been varied (for reviews see Shapiro & Neuberg, 2007; Smith, 2004; Wheeler & Petty, 2001). Stereotype threat effects were initially believed to be caused by anxiety, brought on by concerns about the stereotype (Steele & Aronson, 1995). But the evidence for anxiety as a mediator has been mostly lacking (for reviews see Shapiro & Neuberg, 2007; Smith, 2004; Wheeler & Petty, 2001). There is a need for more systematic searches for mediators of the stereotype threat phenomenon. The present study investigates the motivational factors of outcome goals and regulatory focus as possible mediators of a stereotype threat effect in a negotiation context.

Motivational factors and stereotype threat

Outcome goals. Before a negotiation, people usually reflect upon the potential outcome they can reap from the negotiation. The negotiator ponders different outcome goals: the *aspiration* outcome, i.e. the ideal outcome the negotiator aspires to achieve, and the *reservation* outcome, i.e. the minimum outcome the negotiator is willing to accept (Neale & Fragale, 2006). In a salary negotia-

tion the aspiration outcome is the ideal salary that the negotiator aims for in the negotiation (aspiration salary) and the reservation salary is the minimum salary the negotiator is willing to accept (reservation salary) in the negotiation. Much research has shown that more challenging outcome goals lead to better negotiation results (Bazerman, Magliozzi & Neale, 1985; Huber & Neale, 1987; Locke & Latham, 1990; Neale & Bazerman, 1985).

Outcome goals are interesting in relations to stereotype threat in negotiations as women have been shown to set lower outcome goals than men in negotiations (Kray *et al.*, 2002; Stevens *et al.*, 1993). To our knowledge, outcome goals have not yet been tested as mediators of stereotype threat effects but there are some interesting findings that suggest their significance for the stereotype threat process. Stevens *et al.* (1993) did not manipulate stereotype threat in their study, but found that a sex-difference in negotiated salary was mediated by sex differences in aspiration salary. Also, Kray *et al.* (2002) found that aspiration goals mediated sex differences in negotiation performance when the negotiator stereotype was manipulated to portray a female advantage.

In the present study, we will investigate both aspiration salary and reservation salary as possible mediators of a stereotype threat effect in a salary negotiation. The prediction is that women under stereotype threat will have lower reservation salary and aspiration salary than men before the negotiation. However, we expect no sex differences in outcome goals when the stereotype threat is lifted from the negotiation.

Regulatory focus. Considering that the higher the outcome goal, the better the negotiation results, it is not only relevant to take into account the actual level of a negotiator’s aspiration and reservation salary. It is also relevant to consider whether the negotiator mainly focuses on the aspiration or the reservation salary in the negotiation, as the former is a more challenging goal. Galinsky, Leonardelli, Okhuysen and Mussweiler (2005) found that negotiators who focus on their aspiration salary make more extreme opening bids and claim more resources than negotiators who focus on their reservation salary. It has been proposed that negotiators are likely to focus either on their aspiration goal or on their reservation goal at any given time, and not on the two goals simultaneously (Neale & Fragale, 2006). Our capacity for controlled processes is limited (Shiffrin & Schneider, 1977) and as negotiations have a rather complex nature, negotiators are unlikely to have enough available capacity to be able to focus on aspirations and reservations at the same time (Neale & Fragale, 2006).

Tory Higgins’ (1997, 1998) regulatory focus theory is relevant for this line of reasoning. Higgins distinguishes between two different systems of self-regulation: promotion and prevention. People in a promotion focus are guided by “nurturance needs” where they focus on attaining positive outcomes in a state of eagerness. In contrast, people in a prevention focus are guided by “security needs” where they focus on avoiding negative outcomes in a state of vigilance. Applied to a negotiating context, this means that a negotiator with a promotion focus will eagerly focus on attaining his or her aspiration salary, whereas a negotiator with a prevention focus will vigilantly focus on avoiding going under his or her reservation salary. In addition to investigating sex differences in the level of outcome goals in the present study, we will also investigate the possibility that the stereotype threat manipulation causes

sex differences in regulatory focus, and that this mediates sex differences in salary requests.

According to regulatory focus theory, people are differentially inclined to habitually adopt either a promotion focus or prevention focus. However, in addition to being an individual difference variable, regulatory focus can also shift temporarily across situations. A situation that somehow conveys information about gain vs. non-gain of a desired end state is likely to induce a promotion focus, whereas a situation that conveys information about non-loss vs. loss is likely to induce a prevention focus (Higgins, 1997, 1998). This makes regulatory focus an interesting variable in relation to stereotype threat, as the negatively stereotyped individual is likely to focus on avoiding the predicted failure. Seibt and Förster (2004) showed that activation of negative in-group stereotypes (as in a stereotype threat context) causes an increase in prevention focus. On the other hand, activation of positive in-group stereotypes causes an increase in promotion focus as it conveys information about gain vs. non-gain (approaching the predicted success).

To our knowledge, regulatory focus has not been tested as a mediator of stereotype threat effects in the context of a negotiation, although there is some support for regulatory focus to mediate stereotype threat effects in math performance. Keller and Dauenheimer (2003) showed that the promotion-related emotion "dejection", measured after a math test, mediated a stereotype threat effect for girls on a math test.

In the present study, we will investigate regulatory focus as a mediator of a stereotype threat effect in a negotiation. We predict that women under stereotype threat will be more prevention focused and less promotion focused than men. However, when stereotype threat is lifted, we predict no sex differences in regulatory focus.

Predictions and hypotheses

Hypothesis 1: A stereotype threat manipulation moderates the relationship between sex and salary requests, such that women make lower salary requests than men, only under stereotype threat (the stereotype threat effect).

Hypothesis 2: (a) A stereotype threat manipulation moderates the relationship between sex and outcome goals, such that women have lower outcome goals than men, only under stereotype threat (b) The stereotype threat effect is mediated by outcome goals (i.e. a mediated moderation, see Baron & Kenny, 1986).

Hypothesis 3: (a) A stereotype threat manipulation moderates the relationship between sex and regulatory focus, such that women are more prevention focused and less promotion focused than men, only under stereotype threat (b) The stereotype threat effect is mediated by regulatory focus.

METHOD

Participants

The participants were 116 business students (57 men, 59 women), at Lund University in Sweden, who volunteered to participate in the study

with negotiation advice as compensation. The mean age of the participants was 24.98 years ($SD = 5.01$) and the mean level of education was 3 years at university ($SD = 1.5$).

Design and procedure

The design was a 2 (sex: men vs. women) \times 2 (stereotype threat manipulation: diagnostic of ability vs. non-diagnostic of ability) between-subjects factorial. The participating men and women were randomly assigned to the stereotype threat manipulation conditions. The participants were tested individually and each session took approximately one hour. The experiment began with the experimental manipulation, where the participants were asked to carefully read the instruction that either presented the upcoming salary negotiation as diagnostic of negotiating ability (stereotype threat) or not.

Next, the participants were instructed to read the job-advertisement carefully and imagine that they had recently graduated and were offered this position. They were also given information about the standard salary boundaries for the position. They then filled out the measures of the motivational variables (the outcome goals and regulatory focus). They were also asked to state their previous salary negotiating experience (the mean experience was 0.84, $SD = 1.78$ times) and to report their level of interest for the particular job on a scale ranging from "Not at all interested" (1) to "Very interested" (7). The mean score was 4.63 ($SD = 1.68$).

As stereotype threat theory predicts stereotype threat to occur only for group-members that are highly identified with the task (Steele, 1997), the participants were also asked to report how important they think it is to be an efficient salary negotiator on a scale from "Not important at all" (1) to "Very important" (7). The mean score was 5.78 ($SD = 1.15$), reflecting that the participants were highly identified with salary negotiating.

When all measurements had been collected, the experimenter escorted the participants to an adjacent room where the salary negotiation took place with the confederate negotiator, a male actor. After the negotiation, the participants rated how realistic the experimental negotiation had felt on a scale ranging from "Not realistic at all" (1) to "Very realistic" (7). The mean score was $M = 4.31$ ($SD = 1.52$).¹ The participants then filled out demographic information and completed a funneled debriefing (Bargh & Chartrand, 2000). Lastly, the participants were given feedback on their negotiation performance and a written compilation of negotiation advice. The oral feedback was based on the assertiveness of the participant's salary request and the relevance of their argumentation.

The experimental manipulation: the stereotype threat induction

The experimental manipulation was based on the manipulation used by Kray *et al.* (2001). To induce stereotype threat in women, the participants read the following (the diagnostic condition):

You will soon negotiate your salary with an experimenter called (male name). The negotiation is very challenging for novice negotiators and is therefore an accurate gauge of your genuine negotiating abilities and limitations. Researchers at the department of psychology will analyze and judge your negotiating ability. Your skills as a salary negotiator will impact your future earnings and since this negotiation is diagnostic of your true negotiating ability, we recommend that you use this negotiation as an opportunity to practice and develop your negotiation technique.

In the control condition (non-diagnostic condition) the participants read the following:

You will soon negotiate your salary with an experimenter called (male name). The negotiation is very easy, even for novice negotiators, and is therefore not an accurate gauge of your genuine negotiating abilities and limitations. Since this negotiation is not diagnostic of your true negotiating ability, we recommend that you'll use this negotiation as an opportunity to practice and develop your negotiation technique.

The salary negotiation

A job advertisement, meant to appeal to business students, was chosen with help from the university career council for business students. The selected advertisement looked for a financial manager and the job assignments were perceived to be challenging but manageable for a newly graduated business student. The company behind the advertisement was contacted and agreed to the use of the advertisement in the study (with the company name replaced by a dummy name). The company confirmed that they could imagine hiring a newly graduated business student for the position and stated an approximate salary range they would be willing to pay. The participants were told that the union had provided them with the information that the approximate monthly salary level ranged from SEK 23,000 (\approx €2,400) to SEK 27,000 (\approx €2,820).

Kray *et al.* (2001) found that women's negotiating performance only suffered when their negotiating opponent in a diagnostic negotiation was male. We therefore employed a male actor as a confederate negotiator in the present study. The confederate negotiator's name was included in the experimental manipulation to make his sex salient. We chose to employ a trained actor for the position of confederate negotiator for two reasons: First, to make the negotiation experience as authentic as possible and secondly to maximize the probability that all participants would be treated equally.

Prior to the study, the confederate negotiator was trained in negotiation technique, to be able to assess the participants' negotiation skills and give appropriate feedback. He was blind to the experimental conditions, i.e. whether the negotiation had previously been described as diagnostic or non-diagnostic of negotiating ability.

For the experiment, the confederate negotiator wore a suit and was seated in a university office behind a desk with a computer and a pile of documents. He was instructed to look confident and assertive and display authority towards the participants. He followed a script for the negotiation. First, he welcomed the participant and explained that he or she would negotiate their salary with him. He then said, in a calm and assertive manner: "Yes, about the position as financial manager. [Pause] We are willing to offer you SEK 24,000 (\approx €2,510) as a commencing salary. [Pause] I think it is a very suitable commencing salary, well in tune with the market. [Pause] Well, is that all right with you?"

The salary request that the participant then responded with was used as the negotiation performance measure (the dependent variable) in this study. The negotiation then continued for approximately 5–10 minutes with the experimental confederate disputing the participant's request and asking for arguments that could justify why the participant should earn a salary that was higher than what he had offered.

The measures of the motivational variables

Outcome goals. The aspiration salary measure consisted of the item "What is your ideal salary for this job that you're aiming for in the negotiation? SEK ____ per month". The reservation salary measure consisted of the item "What is the minimum salary amount you are willing to accept for this job in the negotiation? SEK ____ per month".

To ensure that a potential mediating effect of outcome goals is not confounded with salary *expectations*, a measure of the participants' *expected* salary was also collected. The participants were asked "What salary amount do you realistically expect to attain in the negotiation? SEK ____ per month".

Regulatory focus. There are several established measures of regulatory focus available (see Higgins, Friedman, Harlow, Idson, Ayduk & Taylor, 2001; Higgins, Shah & Friedman, 1997 and Higgins and Kruglanski, Thompson, Higgins *et al.*, 2000). Most of these measures are best suited to tap into regulatory focus as a general personality trait. In the present study, the aim was to measure a situationally induced regulatory focus (by a stereotype threat induction), specifically related to a negotiation context. We therefore decided to use measures of regulatory focus that are less validated, but have been previously used for similar purposes.

The first measure, denoted "the approach/avoidance measure", was based on the measure used by Galinsky *et al.* (2005, Exp. 1) to capture situational variability in regulatory focus in a negotiation context. The participants were asked, "Do you focus more on avoiding going under your minimum salary goal, or do you focus more on approaching your ideal salary goal, in the negotiation?" The participants responded on a seven-point scale ranging from "I focus more on avoiding going under my minimum salary goal (1)" to "I focus more on approaching my ideal salary goal" (7). Lower scores indicate a prevention focus and higher scores indicate a promotion focus.

The second measure was denoted "the eagerness/vigilance measure" and was based on the measure used by Seibt and Förster (2004, Exp. 5) measuring regulatory focus after manipulating participants to activate negative versus positive ingroup stereotypes. Promotion focus was assessed by the participant rating themselves on the item "I'm eager to show that I'm a good negotiator". Prevention focus was assessed by the participants rating themselves on the item "I have to be careful and avoid negotiating badly". The participants responded on a seven-point scale ranging from "Disagree completely" (1) to "Agree completely" (7).

RESULTS

The stereotype threat effect

A multiple regression analysis was conducted to test hypothesis 1: that the stereotype threat manipulation moderates the relationship between sex and the salary request such that women make lower salary requests than men, only in the diagnostic condition (the stereotype threat effect).² The dichotomous variables were coded with contrast codes in all regression analyses as follows: sex (woman = 0.5, man = -0.5), stereotype threat manipulation (diagnostic of ability = 0.5, non-diagnostic of ability = -0.5), following the recommendation for coding in regression models with nominal scale interactions by Cohen, Cohen, West and Aiken (2003).

The first salary request was screened for outliers prior to the analyses. Two participants had standardized scores exceeding 3.29 ($p < 0.01$, two-tailed tests) and were therefore assigned a score that was one unit (SEK 1) larger than the next extreme score in the distribution, as recommended by Tabachnick and Fidell (1996).³

The salary request was regressed on sex, the stereotype threat manipulation and the interaction variable between sex and the stereotype threat manipulation. Sex significantly predicted the salary request ($B = -994.66$, $\beta = -21$ $p = 0.02$) but the stereotype threat manipulation did not ($B = -52.13$, $\beta = -0.12$ $p = 0.90$). The interaction effect between sex and the stereotype threat manipulation significantly predicted the salary request ($B = -1741.78$, $\beta = -0.19$, $p = 0.04$), which confirms the prediction that the stereotype threat manipulation moderated the relationship between sex and the salary request (see path c in Fig. 1). The regression model was significantly different from zero [$R^2 = 0.08$, $F(3, 112) = 3.24$, $p = 0.03$].

Independent samples *t*-tests (see Table 1 for the descriptive statistics) showed that, as predicted, there was no sex difference in salary request in the non-diagnostic condition ($t < 1$), but the women asked for SEK 1865.56 (€194.90) less monthly salary than the men, in the stereotype threat condition [$t(56) = -2.95$, $p < 0.01$, $\eta^2 = 0.13$], see Fig. 2. The results thus supported hypothesis 1 and replicate previous results of stereotype threat effects in negotiations (Kray *et al.*, 2001).

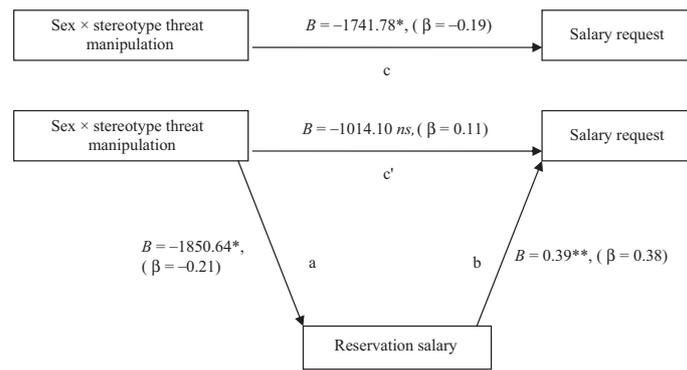


Fig. 1. The stereotype threat manipulation moderated the relationship between sex and the salary request (i.e. the stereotype threat effect). When reservation salary was included in the regression, the interaction effect of sex and the stereotype threat manipulation no longer significantly predicted the salary request. * $p < 0.05$, ** $p < 0.01$.

Table 1. Descriptive statistics for the salary request and the predicted mediators, separated for sex and the stereotype threat manipulation

	Men diagnostic condition		Men non-diagnostic condition		Women diagnostic condition		Women non-diagnostic condition	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
The salary request	27675.90	2947.32	26857.14	1752.55	25810.34	1718.67	26733.37	2459.21
Reservation salary	24982.83	2759.90	24000.00	1737.39	23965.52	1426.35	24833.33	2695.40
Aspiration salary	34500.04	10108.76	32607.14	6741.74	28660.71	3249.08	34600.07	9926.11
Approach/avoidance	3.41	1.74	3.64	1.45	3.17	1.58	3.33	1.52
Eagerness/vigilance	0.07	1.67	-1.04	1.48	-1.14	1.96	-0.63	1.85

Mediation of the stereotype threat performance effect

Next, we performed a series of standard multiple regressions to test hypotheses 2 and 3. The prediction is that the stereotype threat performance effect is mediated (mediated moderation) by the motivational variables outcome goals and regulatory focus. “Mediated moderation” means that a moderator effect is significantly reduced when a mediating variable is included in the regression (Baron & Kenny, 1986). In this case, the stereotype threat effect is mediated if the moderator effect that the stereotype threat manipulation has on the relationship between sex and the salary request is significantly reduced when the mediating variable is included in the regression model.

Outcome goals – preliminary analyses: The outcome goal variables “reservation salary” and “aspiration salary” were screened for outliers prior to the analyses. Three participants had standardized scores exceeding 3.29 ($p < 0.01$, two-tailed tests) on the variables and were therefore assigned a new score that was one unit (SEK 1) larger than the next extreme score in the distribution, as recommended by Tabachnick and Fidell (1996). The relationship between reservation salary and aspiration salary was investigated using Pearson product-moment correlation analysis. There was a medium sized (Cohen, 1988), positive correlation between the two variables [$r = 0.41$, $n = 116$, $p < 0.01$].

Hypothesis 2a: The results from a regression analysis showed, as predicted in hypothesis 2a, that the interaction between sex and the stereotype threat manipulation significantly predicted both reservation salary ($p = 0.03$, see path a in Fig. 1) and aspiration salary ($p = 0.01$). See Table 2.

The salary request (SEK)

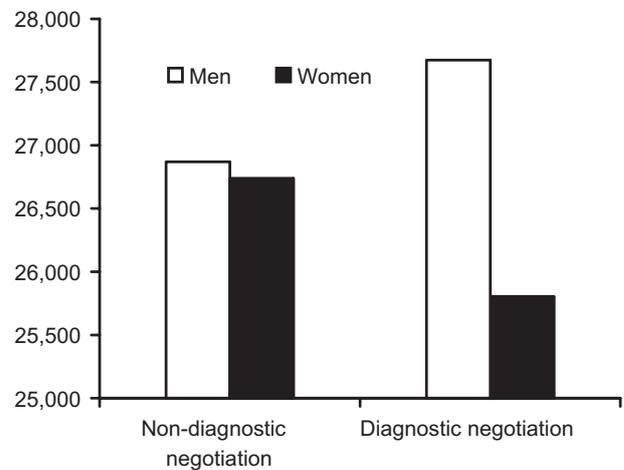


Fig. 2. The women asked for less salary than men in the diagnostic condition, although there were no sex differences in the non-diagnostic condition (the stereotype threat effect).

Independent samples *t*-tests (see Table 1 for descriptive statistics) showed no sex differences in reservation salary in the non-diagnostic condition. However, in the stereotype threat condition, the women had significantly lower aspiration salaries than men [$t(54) = -2.91$, $p < 0.01$, $\eta^2 = 0.13$] and marginally significantly lower reservation salaries than men [$t(56) = -1.76$, $p = 0.09$, $\eta^2 = 0.05$].

Hypothesis 2b: Next, the salary request was regressed on sex, the stereotype threat manipulation, the interaction variable between

Table 2. Summary of four multiple regression analyses that tested whether the stereotype threat manipulation moderated the relationship between sex and outcome goals and sex and regulatory focus

Variable	<i>B</i>	β	<i>R</i> ²	<i>F</i>
Reservation salary			0.04	1.67
Sex	-91.99	-0.02		
STM	57.51	0.01		
Sex × STM	-1850.64*	-0.21*		
Aspiration salary			0.08	3.37*
Sex	-1923.20	-0.12		
STM	-2023.23	-0.12		
Sex × STM	-7832.25*	0.24*		
Approach/Avoidance			0.01	0.44
Sex	-0.28	-0.09		
STM	-0.20	-0.06		
Sex × STM	0.07	0.01		
Eagerness/Vigilance			0.07	2.82*
Sex	0.40	-0.11		
STM	0.30	0.08		
Sex × STM	1.61*	-0.23*		

Note: *N* = 116. STM = Stereotype threat manipulation.

* = significant at *p* < 0.05.

sex and the stereotype threat manipulation and the outcome goal variables reservation salary and aspiration salary to test hypothesis 2b, that the stereotype threat performance effect was mediated by the outcome goals. The results showed that reservation salary ($B = 0.34$, $\beta = 0.32$, $p < 0.01$) significantly predicted the salary request. However, aspiration salary was not a significant predictor of the salary request ($B = 0.04$, $\beta = 0.03$, $p < 0.14$).⁴ The interaction variable between sex and the stereotype threat manipulation no longer significantly predicted the salary request ($B = -802.62$, $\beta = -0.09$, $p = 0.34$). The regression model was significantly different from zero [$R^2 = 0.23$, $F(5, 108) = 6.55$, $p < 0.01$].

Since only reservation salary significantly predicted the salary request, the analysis was repeated with reservation salary as the only predicted mediator. The results showed that while reservation salary significantly predicted the salary request ($B = 0.39$, $\beta = 0.38$, $p < 0.01$, see path b in Fig. 1), the stereotype threat manipulation no longer moderated the relationship between sex and the salary request. That is, the interaction variable between sex and the stereotype threat manipulation no longer significantly predicted the salary request ($B = -1014.10$, $\beta = 0.11$, $p = 0.21$, see path c' in Fig. 1). The regression model was significantly different from zero [$R^2 = 0.22$, $F(4, 111) = 7.69$, $p < 0.01$].

Significance testing of the mediation effect (using the modification of Sobel's (1982) test by Baron and Kenny (1986)) showed that the mediated moderation effect was reliable [$z = -1.96$, $p = 0.03$] and that reservation salary thus significantly mediated the stereotype threat effect, as predicted (see Fig. 1).

Regulatory focus – preliminary analyses: The participants' score on the measure of vigilance was first subtracted from the participants' score on the measure of eagerness to create a measure where positive values indicate more promotion focus (eagerness) than prevention focus (vigilance) and negative values indicate more prevention focus than promotion focus before the negotiation. This followed the procedure described in Förster, Higgins and Strack (2000). The relationship between the approach/

avoidance measure and the eagerness/vigilance measure of regulatory focus was investigated using Pearson product-moment correlation coefficient. There was a small (Cohen, 1988), positive correlation between the two variables [$r = 0.26$, $n = 116$, $p < 0.01$], with high levels of promotion focus on the approach/avoidance measure being associated with high levels of promotion focus on the eagerness/vigilance measure.

Hypothesis 3a: The results from a regression analysis showed, as predicted in hypothesis 3a, that the interaction between sex and the stereotype threat manipulation significantly predicted eagerness/vigilance ($p = 0.02$, see Table 2). However, contrary to the prediction, the interaction did not predict approach/avoidance ($p = 0.91$, see Table 2). Independent samples *t*-tests (see Table 1 for descriptive statistics) showed, as predicted, no sex differences in eagerness/vigilance in the non-diagnostic condition, but a significant sex difference in the stereotype threat condition, with the women being more prevention focused/less promotion focused than the men [$t(56) = 2.53$, $p = 0.01$, $\eta^2 = 0.10$].

Further analyses

The overall mean for the approach/avoidance measure indicated that the participants focused more on avoiding negotiating a salary below their reservation salary goal, than on approaching their aspiration salary goal ($M = 3.39$, $SD = 1.57$). This indicates that on average, the participants were more prevention focused than promotion focused. Approach/avoidance also significantly predicted the salary request, as it did in the study by Galinsky *et al.* (2005). A regression analysis showed that the more promotion focused (approach), and less prevention focused (avoidance) an individual was, the higher the salary request ($B = 325.49$, $\beta = 0.22$, $p = 0.02$).

Hypothesis 3b: Since the stereotype threat manipulation only moderated the relationship between sex and the eagerness/vigilance measure of regulatory focus, only this measure was further investigated as a potential mediator of the stereotype threat effect (hypothesis 3b). The results from the regression analysis showed that the eagerness/vigilance measure of regulatory focus significantly predicted the salary request ($B = 272.93$, $\beta = 0.21$, $p = 0.03$) while the interaction effect of sex and the stereotype threat manipulation no longer significantly predicted the salary request ($B = -1302.56$, $\beta = -0.14$, $p = 0.13$). The regression model was significantly different from zero [$R^2 = 0.12$, $F(4, 111) = 3.79$, $p < 0.01$]. However, significance testing of the mediation effect (using the modification of Sobel's 1982 test by Baron and Kenny, 1986) showed that the mediated moderation effect was only marginally statistically significant [$z = -1.60$, $p = 0.055$] and that there thus was a trend for the eagerness/vigilance measure of regulatory focus to mediate the stereotype threat effect.

Stereotype threat or stereotype lift?

The aim of this study was not to determine whether sex differences in salary requests are best explained as a stereotype threat or a stereotype lift effect, or a combination of both. However,

we conducted a series of independent samples *t*-tests to explore these different possibilities. Concerning the salary request and reservation salary, there were no significant mean differences across conditions, neither for the women nor for the men. Concerning aspiration salary, the women lowered their aspiration salaries with SEK 5939.36 (€620.20) in the stereotype threat condition, as compared to the non-diagnostic condition [$t(56) = -3.02, p < 0.01, \eta^2 = 0.05$]. There were no differences in the men's aspiration salaries across conditions ($t < 1$). Concerning eagerness/vigilance, the men were less prevention focused/more promotion focused (less vigilant/more eager) in the stereotype threat condition, as compared to the non-diagnostic condition [$t(55) = -2.64, p < 0.01, \eta^2 = 0.04$]. There were no significant differences in the women's scores across conditions. Thus, the results are inconsistent and we are unable to determine whether threat or lift best explains the emergence of sex differences in diagnostic negotiations.

Salary expectations: The hypothesis in the present study was that motivational factors mediate stereotype threat effects in salary negotiations. To ensure that the mediating effect is based on differences in motives, rather than in expectations, the participants' salary expectations were also investigated. The measure of salary expectation was regressed on sex, the stereotype threat manipulation and the interaction variable between sex and the stereotype threat manipulation. The interaction effect between sex and the stereotype threat manipulation did not significantly predict the salary expectations ($B = -1136.61, \beta = -0.13, p = 0.17$), which means that the stereotype threat manipulation did not moderate the relationship between sex and salary expectation. No further meditational analyses of salary expectations were therefore executed.

DISCUSSION

Reservation salary mediates the stereotype threat effect

The purpose of the present study was to close in on an explanation of why women ask for less salary than men in diagnostic negotiations. This is important, as it is still unclear what psychological variables mediate stereotype threat effects in negotiations. The stereotype threat effect found in previous studies (Kray *et al.*, 2001) was replicated, showing that women ask for less salary than men when a negotiation is described as diagnostic of ability, although there are no sex differences in salary requests when the negotiation is described as non-diagnostic of ability.

We tested motivational variables as possible mediators of the stereotype threat effect and found that the outcome goal measure "reservation salary" significantly mediated the effect and that there was a trend for the regulatory focus measure "eagerness/vigilance" to mediate the effect. To our knowledge, this is the first study that has shown that a stereotype threat effect in a negotiation is mediated by reservation salary.

Reservation salary is the minimum outcome a negotiator is willing to accept in a negotiation. Research has previously shown that setting a more challenging outcome goal leads to better negotiation results (Bazerman *et al.*, 1985; Huber & Neale, 1987; Locke & Latham, 1990; Neale & Bazerman, 1985). This was the case

also in the present study. However, the interesting finding in the present study is that a stereotype threat manipulation causes sex differences in outcome goals. When the negotiation was described as diagnostic of ability, the women's aspiration salaries was SEK 5,839 (€610) less than the men's and their reservation salaries was SEK 1,017 (€106) less than the men's. When the negotiation was described as non-diagnostic of ability – that is, when stereotype threat was lifted – there were no sex differences in outcome goals.

The conclusion to be drawn by these findings is that stereotype threat causes sex differences in outcome goals and that the differences in reservation salary is part of the explanation of why women ask for less salary than men in negotiations. We believe that this result is important for understanding stereotype threat effects in negotiations and for learning how to counteract them. It is already known that outcome goals are important for negotiation outcomes. However, our anticipation is that female negotiators can benefit from learning that stereotype threat causes sex differences in outcome goals, which in turn causes sex differences in salary requests. Hopefully, learning about the effect that stereotype threat has on negotiators' outcome goals gives female negotiators a chance to resist stereotype threat effects, by consciously deciding upon a more challenging goal. This is of course a speculation and future research may want to investigate the possibility that learning about the effect stereotype threat has on outcome goals can reduce stereotype threat effects on salary requests.

Why mediation from reservations but not aspirations?

When aspiration salary and reservation salary were tested in the same regression model, only reservation salary significantly predicted the salary request. This result was unexpected, as previous research has found that aspiration goals mediate sex-differences in negotiating performance (Kray *et al.*, 2002; Stevens *et al.*, 1993). However, in the previous research, reservation goals were never assessed nor did the design include a stereotype threat manipulation.

A speculative interpretation is that perhaps reservation salary was the only unique predictor of the salary request because the participants in the present study were more prevention focused than promotion focused. The result on approach/avoidance showed that the participants generally focused more on avoiding going under their reservation goal than on approaching their aspiration goal. It is possible that aspiration salary, and not reservation salary, would have been the significant mediator of the stereotype threat effect, had the participants instead mainly focused on approaching their aspiration salary goal. This is of course only a speculation and future research is needed to investigate this possibility. Further, an implication of the different results for the outcome measures is that it is useful to include both aspiration goals and reservation goals in the design of negotiation studies.

Galinsky *et al.* (2005) showed that negotiators who focus on their aspiration goal make more extreme opening bids than negotiators who focus on their reservation goal, which in turn is related to a better outcome. This result was replicated in the present study. It is therefore good advice to negotiators to focus on their aspirations in negotiations. However, one possible implication of the finding that only reservation salary mediated the stereotype

threat effect in the present study is the importance for female negotiators to specifically decide upon a challenging reservation goal. Although it is better to focus on one's aspiration salary, chances are that one's focus will be on the reservation salary, which makes it important to ensure that the reservation goal is not set too low.

Regulatory focus

Regulatory focus was also tested as a possible mediator of the stereotype threat effect in the present study. Seibt and Förster (2004) have shown that activation of negative in-group stereotypes causes an increase in prevention focus and activation of positive in-group stereotypes causes an increase in promotion focus. As Galinsky *et al.* (2005) found that a prevention focus is associated with lower opening bids, we hypothesized that the stereotype threat manipulation would cause sex-differences in regulatory focus, which in turn would cause sex-differences in salary requests.

The results showed that the approach/avoidance measure of regulatory focus did not mediate the stereotype threat effect, but the results for the eagerness/vigilance measure partly supported our hypothesis. As predicted, the women were more prevention focused (vigilant) and less promotion focused (eager) than the men when the negotiation was described as diagnostic of ability, although there were no sex differences in the non-diagnostic condition. However, the test for mediation showed only a marginally significant result.

The measures of regulatory focus used in the present study were adopted from the previously mentioned studies (Galinsky *et al.*, 2005; Seibt & Förster, 2004). Neither of the measures is well validated, and this may perhaps explain why they yielded different results. Unfortunately there are no established measures of situationally induced regulatory focus at present, although a measure is currently being developed by Tory Higgins at Columbia University. The two measures used in the present study were positively related, but the size of the relationship indicates that they only capture the same concept to a limited degree. Since we failed to find a significant mediation effect, our hypothesis that the stereotype threat effect in salary negotiations is mediated by regulatory focus was not supported. However, the finding of a non-significant trend in the direction of the hypothesis may be interpreted as encouraging and point to the possibility of returning to regulatory focus in the future with more sensitive measures.

Stereotype threat or stereotype lift?

Although it was not a research question in the present study, we explored the possibility that the stereotype threat effect was perhaps better explained as a stereotype lift effect or a combination of both threat and lift (see Walton & Cohen, 2003). The results from the data exploration left this question unanswered, as the results were inconsistent. The women lowered their aspiration salaries in the diagnostic condition suggesting a threat effect. However, the men became less prevention focused in the diagnostic condition, suggesting a lift effect. For the salary request and reservation salary measures the men's and the women's reaction to the manipulation was opposite, but there were no significant single

effects. Future research may want to investigate the presence of stereotype threat versus lift effects in negotiations. However, regardless of whether the sex differences in salary negotiations are better explained as a threat or a lift effect, the overall conclusion is the same: the stereotype suggesting that there are sex-differences in negotiating performance seems to create sex-differences in negotiations.

What drives sex-differences in outcome goals?

The main contribution of the present study is the finding that reservation salary mediates stereotype threat effects in negotiations. However, we are still left with the unanswered question of *why* the stereotype threat manipulation affected the outcome goals and regulatory focus differently for men and women.

In a previous study (Gustafsson & Björklund, 2008) we found that female negotiators self-stereotype with feminine stereotypical traits following a stereotype threat manipulation. The women under stereotype threat categorized themselves as women and began thinking of themselves as more caring, selfless, considerate, sympathetic and understanding, than otherwise. With that finding in mind, it is possible that the sex differences in outcome goals in the present study are an effect of self-stereotyping. Self-described negative femininity has previously been shown to cause negotiators to lower their outcome goals and negotiate inferiorly. Amanatullah, Morris and Curhan (2008) found that negotiators with a high level of unmitigated communion had lower negotiation outcomes, and that this effect was mediated by reservation goals. Unmitigated communion is defined as a personality "orientation involving high concern for and anxiety about one's relationships coupled with low self-concern" (Amanatullah *et al.*, 2008, p. 723). It thus reflects a focus on others to the exclusion of the self. Unmitigated communion represents negative aspects of stereotypically feminine traits as it is unbalanced by self-concerns (Spence, Helmreich & Holohan, 1979). It is possible that a stereotype threat manipulation temporarily raises the level of unmitigated communion in women, perhaps as an effect of self-stereotyping with feminine traits. In that case, self-stereotyping and a shift in unmitigated communion might explain women's lower outcome goals and salary requests. Future research could investigate this possibility.

Descriptive and prescriptive stereotypes

Amanatullah *et al.* (2008) further showed that the reason why negotiators with high levels of unmitigated communion set lower reservation goals was because they were afraid to otherwise hurt the relationship with their fellow negotiator. This leads us to the interesting question of whether *prescriptive* aspects of gender stereotypes may be relevant in stereotype threat situations. Could sex differences in outcome goals emerge from women's fear of violating gender norms?

One of the unusual features of gender stereotypes is that they are not only descriptive, but also highly *prescriptive* in nature (Prentice & Carranza, 2002, 2004). That is, gender stereotypes not only tell how men and women *are* (supposedly) but also tell how men and women *should* be. In this study, we focused on the descriptive aspects of gender stereotypes, implying that the nego-

tiation task was diagnostic of negotiation ability, a domain where women are stereotyped to perform badly. Stereotype threat theory is based on the assumption that negative, descriptive stereotypes regarding group members' ability can cause decrements in their performance. However, the prescriptive aspect of gender stereotypes can also be problematic for female negotiators (Bowles, Babcock & Lai, 2007; Small, Gelfand, Babcock & Gettman, 2007). Gender stereotypes prescribe that women should be polite and friendly and proscribe arrogant and controlling behavior (Prentice & Carranza, 2002). Women can therefore experience negotiating benefits for oneself as a violation of gender norms (but not necessarily negotiating for others, see Bowles *et al.*, 2005). It may thus be that sex differences in outcome goals and salary requests emerge because stereotype threat makes prescriptive stereotypes more salient. Women may fear penalties from their fellow negotiators for making high demands.

If this is the case, it is not an irrational fear (Bowles *et al.*, 2007; Prentice & Carranza, 2002, 2004; Rudman, 1998). Bowles *et al.* (2007) showed in a series of studies that women, but not men, were penalized for initiating a negotiation in a job interview. The men were less willing to work with a woman who had asked for a higher compensation than what she was offered in a job interview. However, the willingness to work with a man was unaffected by whether he had asked for a higher compensation or not. The results further showed that the reason why the men were unwilling to work with the women, who had asked for a higher compensation, was that these women were perceived as too demanding and not sufficiently nice. In other words, the women who did not just accept the salary they were offered were perceived as unfeminine and penalized for breaking gender norms.

How important are descriptive aspects versus prescriptive aspects of stereotypes for stereotype threat effects? To our knowledge there has not been a discussion about this in the literature. Very few stereotypes are prescriptive in nature (Prentice & Carranza, 2004) and stereotypes need not be prescriptive to cause stereotype threat effects. For example, there is not a prescription stating that black Americans *should* be intellectually inferior, but there is a descriptive stereotype stating that they are, which can cause stereotype threat effects (Steele & Aronson, 1995). However, when stereotypes are both descriptive and prescriptive in nature, there is the interesting possibility that both aspects contribute to performance decrements in in-group members. That is, a female negotiator may make lower salary bids than male negotiators, both because a descriptive stereotype portrays women as bad negotiators and because a prescriptive stereotype dictates that she should conform to a behavior that is non-efficient in the context. She is not only threatened by the possibility of being negatively stereotyped or with the prospect of conforming to the stereotype of being a bad negotiator (Steele, 1997). She is also threatened by the prospect of being disliked for breaking gender norms if she proves the stereotype wrong.

There is a need for a greater focus on the influence that descriptive versus prescriptive aspects of stereotypes has for stereotype threat effects. Do they impact performance through similar psychological processes or different? Is the effect on performance stronger when the stereotype is threatening both from a descriptive and a prescriptive perspective?

Stereotype threat and discrimination

When women make lower salary requests than their male colleagues, it is likely to have significant negative consequences for their life earnings (Babcock & Laschever, 2003; Bowles *et al.*, 2005; Gerhart, 1990; Gerhart & Rynes, 1991). Stereotype threat in negotiations should therefore be taken seriously and measures should be taken to counteract it, when possible. The results from the present study suggest the importance of reservation salary goals for stereotype threat effects.

Unfortunately, even when women overcome stereotype threat and ask for equal amounts to men in negotiations, women are still at risk of reaping a lower negotiation outcome than men. This is because women have been shown to receive lower counteroffers than men from their employers (Gerhart & Rynes, 1991; S ave-S oderbergh, 2003). Discrimination of female negotiators may be explained by the normative nature of gender stereotypes; there is a prize to pay for violating gender norms (Bowles *et al.*, 2007; Prentice & Carranza, 2002, 2004; Rudman, 1998). Thus, it is important to learn about the psychological processes that mediate stereotype threat effects in negotiations and how stereotype threat can be counteracted. However, it is also important to recognize that closing the gender salary gap implies more than women just overcoming stereotype threat. Women need to ask for what they want in negotiations, but when women do ask, they risk facing yet another obstacle: being judged as inappropriately unfeminine. Thus, closing the gender salary gap implies counteracting both stereotype threat and discrimination in negotiations.

The authors would like to thank Professor Lars-Gunnar Lundh and Professor Martin B ackstr om for their helpful comments. They would also like to thank Jon Dahlstr om for his excellent acting, portraying the confederate negotiator.

NOTES

¹ There were no gender differences in mean previous experience (Women = 1.30, Men = 1.21, $t < 1$), level of interest (Women = 4.71, Men = 4.54, $t < 1$), or how realistic the negotiation was considered to be (Women = 4.22, Men = 4.40, $t < 1$). However, women ($M = 6.10$) rated the importance even higher than men [$M = 5.46$, $t(114) = -3.1$, $p < 0.01$].

² A two-way ANOVA can test whether a dichotomous moderator (the stereotype threat manipulation) affects the relationship between a dichotomous independent variable (sex) and a dependent variable (salary request). But, as the purpose of this study was to test mediation of a moderation effect, we used a multiple regression analysis following the recommendations by Baron and Kenny (1986) and Kenny, Kashy and Bolger (1998). A two way ANOVA with sex and the stereotype threat manipulation as independent variables and salary request as the dependent variable showed a significant main effect of sex [$F(1, 112) = 5.50$, $p = 0.02$] but not of negotiation type ($F < 1$) and a significant interaction effect [$F(1, 112) = 4.21$, $p = 0.04$].

³ The results were still significant when the regression was executed on the raw data.

⁴ When the regression analysis was repeated with aspiration salary as the only outcome goal in the model, aspiration salary significantly predicted the salary request ($B = 0.09$, $\beta = 0.26$, $p < 0.01$). Aspiration salary was then also a marginally statistically significant mediator of the stereotype threat effect ($z = -1.61$, $p = 0.054$).

REFERENCES

- Amanatullah, E. T., Morris, M. W. & Curhan, J. R. (2008). Negotiators who give too much: Unmitigated communion, relational anxieties and economic costs in distributive and integrative bargaining. *Journal of Personality and Social Psychology*, *95*, 723–738.
- Babcock, L. & Laschever, S. (2003). *Women don't ask: Negotiation and the gender divide*. Princeton, NJ: Princeton University Press.
- Bargh, J. A. & Chartrand, T. L. (2000). The mind in the middle: A practical guide to priming and automaticity research. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 253–285). New York: Cambridge University Press.
- Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182.
- Barron, L. A. (2003). Ask and you shall receive? Gender differences in negotiators' beliefs about requests for a higher salary. *Human Relations*, *56*, 635–662.
- Bazerman, M. H., Magliozzi, T. & Neale, M. A. (1985). Integrative bargaining in a competitive market. *Organizational Behavior and Human Decision Processes*, *35*, 294–313.
- Bowles, H. R., Babcock, L. & Lai, L. (2007). Social incentives for gender differences in the propensity to initiate negotiations: Sometimes it does hurt to ask. *Organizational Behavior and Human Decision Processes*, *103*, 84–103.
- Bowles, H. R., Babcock, L. & McGinn, K. L. (2005). Constraints and triggers: Situational mechanisms of gender in negotiation. *Journal of Personality and Social Psychology*, *89*, 951–965.
- Cohen, J. W. (1988). *Statistical power analysis for the behavioral sciences* (2nd edn). Hillsdale, NJ: Lawrence Erlbaum.
- Cohen, J., Cohen, P., West, S. G. & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd edn). Mahwah, NJ: Lawrence Erlbaum.
- Förster, J., Higgins, T. E. & Strack, F. (2000). When stereotype disconfirmation is a personal threat: How prejudice and prevention focus moderate incongruency effects. *Social Cognition*, *18*, 178–197.
- Galinsky, A. D. & Mussweiler, T. (2001). First offers as anchors: The role of perspective taking and negotiator focus. *Journal of Personality and Social Psychology*, *81*, 657–669.
- Galinsky, A. D., Leonardelli, G. J., Okhuysen, G. A. & Mussweiler, T. (2005). Regulatory focus at the bargaining table: Promoting distributive and integrative success. *Personality and Social Psychology Bulletin*, *31*, 1087–1098.
- Gerhart, B. (1990). Gender differences in current and starting salaries: The role of performance, college major, and job title. *Industrial and Labor Relations Review*, *43*, 418–433.
- Gerhart, B. & Rynes, S. (1991). Determinants and consequences of salary negotiations by male and female MBA graduates. *Journal of Applied Psychology*, *76*, 256–262.
- Gustafsson, U. & Björklund, F. (2008). Women self-stereotype with feminine stereotypical traits under stereotype threat. *Current Research in Social Psychology*, *13*, 219–231.
- Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, *52*, 1280–1300.
- Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 30, 1–46). San Diego, CA: Academic Press.
- Higgins, E. T., Friedman, R. S., Harlow, R. E., Idson, L. C., Ayduk, O. N. & Taylor, A. (2001). Achievement orientations from subjective histories of success: Promotion pride versus prevention pride. *European Journal of Social Psychology*, *31*, 3–23.
- Higgins, E. T., Shah, J. & Friedman, R. (1997). Emotional responses to goal attainment: Strength of regulatory focus as moderator. *Journal of Personality and Social Psychology*, *72*, 515–525.
- Huber, V. L. & Neale, M. A. (1987). Effects of self- and competitor goals on performance in an interdependent bargaining task. *Journal of Applied Psychology*, *72*, 197–203.
- Keller, J. & Dauenheimer, D. (2003). Stereotype threat in the classroom: Dejection mediates the disruptive effect on women's math performance. *Personality and Social Psychology Bulletin*, *29*, 371–381.
- Kenny, D. A., Kashy, D. A. & Bolger, N. (1998). Data analysis in social psychology. In D. T. Gilbert, S. T. Fiske & G. Lindzey (Eds.), *The handbook of social psychology* (4th edn, pp. 233–265). Boston, MA: McGraw-Hill.
- Kray, L. J., Galinsky, A. D. & Thompson, L. (2002). Reversing the gender gap in negotiations: An exploration of stereotype regeneration. *Organizational Behavior and Human Decision Processes*, *87*, 386–409.
- Kray, L. J., Reb, J., Galinsky, A. D. & Thompson, L. (2004). Stereotype reactance at the bargaining table: The effect of stereotype activation and power on claiming and creating value. *Personality and Social Psychology Bulletin*, *30*, 399–411.
- Kray, L. J. & Thompson, L. (2005). Gender stereotypes and negotiation performance: An examination of theory and research. In B. M. Staw & R. M. Kramer (Eds.), *Research in organizational behavior: An annual series of analytical essays and critical reviews* (pp. 103–182). Oxford: Elsevier Science/JAI Press.
- Kray, L. J., Thompson, L. & Galinsky, A. (2001). Battle of the sexes: Gender stereotype confirmation and reactance in negotiations. *Journal of Personality and Social Psychology*, *80*, 942–958.
- Kruglanski, A. W., Thompson, E. P., Higgins, E. T., Atash, M. N., Pierro, A., Shah, J. Y. & Spiegel, S. (2000). To “do the right thing” or to “just do it”: Locomotion and assessment as distinct self-regulatory imperatives. *Journal of Personality & Social Psychology*, *79*, 793–815.
- Leyens, J. P., Desert, M., Croizet, J. C. & Darcis, C. (2000). Stereotype threat: Are lower status and history of stigmatization preconditions of stereotype threat? *Personality and Social Psychology Bulletin*, *26*, 1189–1199.
- Locke, E. A. & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice Hall.
- Neale, M. A. & Bazerman, M. H. (1985). The effect of externally set goals on integrative agreements in competitive markets. *Journal of Occupational Behavior*, *6*, 19–32.
- Neale, M. A. & Fragale, A. R. (2006). Social cognition, attribution, and perception in negotiation: The role of uncertainty in shaping negotiation processes and outcomes. In L. L. Thompson (Ed.), *Negotiation theory and research* (pp. 27–54). New York: Psychology Press.
- Prentice, D. A. & Carranza, E. (2002). What women and men should be, shouldn't be, are allowed to be, and don't have to be: The content of prescriptive gender stereotypes. *Psychology of Women Quarterly*, *26*, 269–281.
- Prentice, D. A. & Carranza, E. (2004). Sustaining cultural beliefs in the face of their violation: The case of gender stereotypes. In M. Schaller & C. S. Crandall (Eds.), *The psychological foundations of culture* (pp. 259–280). Mahwah, NJ: Lawrence Erlbaum.
- Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counterstereotypical impression management. *Journal of Personality and Social Psychology*, *74*, 629–646.
- Säve-Söderbergh, J. (2003). Are women asking for low wages? An empirical analysis of individual wage bargaining and ability signaling. *Essays on gender differences in economic decision-making*. Stockholm: Swedish Institute for Social Research.
- Seibt, B. & Förster, J. (2004). Stereotype threat and performance: How self-stereotypes influence processing by inducing regulatory foci. *Journal of Personality and Social Psychology*, *87*, 38–56.
- Shapiro, J. R. & Neuberg, S. L. (2007). From stereotype threat to stereotype threats: Implications of a multi-threat framework for causes, moderators, mediators, consequences and interventions. *Personality and Social Psychology Review*, *11*, 107–130.
- Shiffrin, R. M. & Schneider, W. (1977). Controlled and automatic human information processing: II. Perceptual learning, automatic attending, and general theory. *Psychological Review*, *84*, 127–190.

- Small, D. A., Gelfand, M., Babcock, L. & Gettman, H. (2007). Who goes to the bargaining table? The influence of gender and framing on the initiation of negotiation. *Journal of Personality and Social Psychology*, 93, 600–613.
- Smith, J. L. (2004). Understanding the process of stereotype threat: A review of mediational variables and new performance goal directions. *Educational Psychology Review*, 16, 177–206.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural models. In S. Leinhardt (Ed.), *Sociological methodology* (pp. 290–312). San Francisco: Jossey-Bass.
- Spence, J. T., Helmreich, R. L. & Holahan, C. K. (1979). Negative and positive components of psychological masculinity and femininity and their relationships to self-reports of neurotic acting-out behaviors. *Journal of Personality and Social Psychology*, 37, 1673–1682.
- Spencer, S. J., Steele, C. M. & Quinn, D. M. (1999). Stereotype threat and women's math performance. *Journal of Experimental Social Psychology*, 35, 4–28.
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist*, 52, 613–629.
- Steele, C. M. & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69, 797–811.
- Steele, C. M., Spencer, S. J. & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 34, pp. 379–440). San Diego, CA: Academic Press.
- Stevens, C. K., Bavetta, A. G. & Gist, M. E. (1993). Gender differences in the acquisition of salary negotiation skills: The role of goals, self-efficacy, and perceived control. *Journal of Applied Psychology*, 78, 723–735.
- Tabachnick, B. & Fidell, L. S. (1996). *Using multivariate statistics* (3rd edn). New York: Harper Collins College.
- Walton, M. G. & Cohen, L. G. (2003). Stereotype lift. *Journal of Experimental Social Psychology*, 39, 456–467.
- Wheeler, S. C. & Petty, R. E. (2001). The effects of stereotype activation on behavior: A review of possible mechanisms. *Psychological Bulletin*, 127, 797–826.

Received 16 November 2009, accepted 17 August 2010