The glass cliff: When and why women are selected as leaders in crisis contexts

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The glass cliff refers to women being more likely to rise to positions of organizational leadership in times of crisis than in times of success, and men being more likely to achieve those positions in prosperous times. We examine the role that (a) a gendered history of leadership and (b) stereotypes about gender and leadership play in creating the glass cliff. In Expt 1, participants who read about a company with a male history of leadership selected a male future leader for a successful organization, but chose a female future leader in times of crisis. This interaction – between company performance and gender of the preferred future leader – was eliminated for a counter-stereotypic history of female leadership. In Expt 2, stereotypically male attributes were most predictive of leader selection in a successful organization, while stereotypically female attributes were most predictive in times of crisis. Differences in the endorsement of these stereotypes, in particular with regard to the ascription of lower stereotypically female attributes to the male candidate mediated the glass cliff effect. Overall, results suggest that stereotypes about male leadership may be more important for the glass cliff effect than stereotypes about women and leadership.

Women who aspire to positions of organizational leadership are often confronted with a glass ceiling – various impenetrable barriers that their male colleagues do not contend with and that block them from upper management (Kanter, 1977; see Stroh, Langlands, & Simpson, 2004, for an overview). Although there is clear evidence that gender discrimination persists in higher management, it may operate through increasingly subtle processes (Agars, 2004; King, 2006; Schmitt, Ellemers, & Branscombe, 2003). The current research considers the circumstances under which women do achieve positions of organizational leadership, despite the glass ceiling. Recent research (Ryan & Haslam, 2005, 2007) suggests that the present global economic crisis may be a prime time for women to achieve leadership positions. Consider Lynn Laverty Elsenhans, who became...
chief executive officer (CEO) of the oil company Sunoco after shares fell by 52% in 2008 (Churchman, 2009) or Jóhanna Sigurðardóttir, who was appointed first female prime minister of Iceland after the country’s economy was hammered and the previous government resigned following violent street protests (Moody, 2009). The stories of these women and the circumstances in which they obtained powerful positions may not be as exceptional as they sound. Research suggests that women are more likely to achieve leadership positions when those are associated with a state of crisis and a higher risk of failure, a phenomenon termed the glass cliff (Haslam & Ryan, 2008; Ryan & Haslam, 2005).

The present research expands on prior work in two distinct ways. First, we consider a possible moderator of when the glass cliff emerges – whether the organization has a predominantly male history of leadership or not. Second, we consider stereotypes about gender and leadership as a possible reason for why it emerges. We assess whether different stereotypical attributes predict leader selection in prosperous times versus times of crisis and explore the mediating role of a differential endorsement of these stereotypes.

The glass cliff
In an examination of when the top 100 companies on the London Stock Exchange appoint women to their executive boards, Ryan and Haslam (2005) found that companies were more likely to do so when they had experienced a consistently poor performance during the prior months. Selecting women for such positions has negative implications for their future career possibilities, because directors of unsuccessful companies are subsequently less likely to be appointed to other leadership positions (Ferris, Jagannathan, & Pritchard, 2003).

Laboratory experiments have revealed that the glass cliff also emerges for fictitious organizations and among many types of research participants (Haslam & Ryan, 2008). Participants who read about an organization whose performance had been poor were more likely to favour a future female leader than participants who read about a successful organization. Across studies, both male and female participants showed this glass cliff pattern and sexist attitudes did not moderate the effect. In all these studies, an interaction between company performance and candidate gender emerged – compared to a male candidate, participants evaluated a female candidate more favourably in times of crisis than in times of success.

Possible explanations for the glass cliff
The experimental studies conducted thus far provide considerable insight into factors that are unlikely to be the central cause of the effect, for example, blatant sexism, women being forced to take any position offered to them, or women intentionally seeking the challenge – all explanations that participants suggested when Ryan, Haslam, and Postmes (2007) asked them to speculate about causes of the glass cliff. Nevertheless, the central question remains: what processes lead people to select women for precarious leadership positions and to prefer men under more promising circumstances? Multiple factors are likely to play a role in creating the glass cliff (Ryan & Haslam, 2007). Our goal is to address a possible moderator of when the effect occurs, namely organizational history of leadership (Expt 1), and a possible mediator of why it occurs, namely expectations of a future leader that are driven by gender stereotypes (Expt 2).
History of leadership

Women are increasingly achieving leadership positions, but in most companies upper management remains predominantly male (e.g., Catalyst, 2009; US Bureau of Labor Statistics, 2006) and, with very few exceptions, the history of leadership in most organizations has been male dominated. There are (at least) two reasons why the emergence of a glass cliff should be more likely in a context of male-dominated leadership.

Status-quo bias. As long as a company performs well, there should be no perceived need to change, resulting in a bias towards maintaining the status quo (e.g., Samuelson & Zeckhauser, 1988). A predominantly male history of leadership should thus lead to a higher selection of men for leadership positions in times of success and a glass ceiling for women who aspire to the same positions. When a company performs poorly, there should be a perceived need for change. If men have manoeuvred the organization into trouble, appointing a female leader will appear as one way to achieve the transformation needed to turn things around (see Ryan & Haslam, 2007 for a related discussion).

Stereotypes about gender and leadership. A less obvious reason why the glass cliff may be particularly strong in a context of a male history of leadership is stereotypes about gender and leadership. When leadership has always been predominantly male, this will affect stereotypes about what leaders are or ought to be like (Dasgupta & Asgari, 2004; Eagly, 2007). Research showing that leadership roles have been historically and continue to be associated with the male gender role abounds (Eagly, 2007; Heilman, 2001; Powell, Butterfield, & Parent, 2002). For most people, the ‘typical manager’ shares many attributes with the ‘typical man’, but only very few with the ‘typical woman’, an effect referred to as the think manager–think male bias (Schein, 1973). Typical attributes that capture this stereotype are agentic traits such as competitive or self-confident (Schein, 2001).

In a context of crisis, these stereotypical assumptions of what makes a good leader are likely to change. A recent set of studies (Ryan, Haslam, Hersby, & Bongiorno, 2009; also see Ryan & Haslam, 2007) compared gender stereotypes with perceptions of managers in successful versus unsuccessful organizations. For the success context, a think manager–think male bias emerged. However, the typical leader of an unsuccessful company was more similar to the typical woman than the typical man. Moreover, the attributes rated as desirable for a manager in an unsuccessful company were more similar to descriptions of typical women than of typical men. In other words, participants tended to think crisis–think female. Stereotypically female characteristics seen as needed in times of crisis included interpersonal qualities such as intuitive or aware of the feelings of others.

Thus, people may favour men for leadership in a context of success because they think manager–think male, but may favour women in times of crisis due to think crisis–think female notions. These different leader stereotypes and their endorsement should be particularly strong in a context that strengthens the stereotypical association of men with leadership and women with supportive roles (Dasgupta & Asgari, 2004). To the extent that these stereotypes about gender and leadership may promote the glass cliff, the effect should be particularly strong in a context of predominantly male leadership.
The present research
In sum, both a status quo framework and an explanation of the glass cliff that focuses on stereotypes about gender and leadership, predict that the glass cliff effect should be more pronounced in or even limited to a context in which male leadership is the norm. Expt 1 will test this moderation hypothesis. For an organization with a male history of leadership, we predict a glass cliff. Participants will be more likely to choose a female candidate in times of crisis than in times of success. In a context of female leadership, this effect should no longer be present.

Expt 1 addresses when the glass cliff emerges – depending on history of leadership. In Expt 2, we will turn away from this moderation hypothesis and to the somewhat different question of why the glass cliff emerges. We will assess the role of stereotypes about gender and leadership for the effect. Since, based on Expt 1, we do not expect the glass cliff to arise in a context of predominantly female leadership, Expt 2 will dispense with a female history of leadership condition and will test the importance of stereotypical attributes for leader selection in times of crisis versus success in a typical company, where we expect the glass cliff effect to emerge. In a context of success, where people tend to think manager–think male, we expect that stereotypically male, agentic attributes will predict leader selection; in a context of crisis, where people tend to think crisis–think female (Ryan et al., 2009), stereotypically female, interpersonal attributes will be most predictive of who is chosen as new leader. Moreover, Expt 2 will explore whether think manager–think male and think crisis–think female stereotypes are endorsed to a different degree depending on company performance and whether this mediates the glass cliff effect.

EXPERIMENT 1

Method
Participants
Introductory psychology students (56 women, 63 men) at the University of Kansas participated in an on-line study for course credit. The study web site randomly assigned participants to conditions in a 2 (company performance: successful, crisis) × 2 (history of leadership: male, female) × 2 (candidate gender: male, female) design. Company performance and history of leadership varied between participants and candidate gender within participants.

Materials and procedure
Participants read two newspaper articles about an organic food company. The first article covered the retirement of the company’s present CEO and gave an overview of the organization’s history. In the male history condition, the three previous leaders mentioned in the text and the present CEO had male first names; in the female history condition they had female first names. The second article addressed the company’s present economic performance. In the crisis condition, the article described a ‘tremendous downward trend’ throughout the last years in the company’s stock market value, the closing down of several stores, and resulting employee layoffs. In the successful performance condition, the article covered the company’s outstanding financial performance and economic growth.
Next, participants answered two manipulation check items. The first one asked participants how successful they perceived the company to be (from 1 = not successful to 7 = very successful). To insure that participants perceived the unsuccessful company to be in a long-lasting and severe crisis, a second item required them to make a prediction where the company would stand 5 years from now (from 1 = bankruptcy to 10 = among the most successful companies).

Participants then read brief descriptions of a male and an equally qualified female candidate for the CEO position. Candidate gender was counterbalanced with respect to person description and order of presentation. To draw participants' attention away from the fact that they had to decide between a male and a female candidate we informed them that there were a total of four candidates, but that they were only going to read about two of them.

As the crucial dependent variable, participants indicated which candidate they would choose as new CEO. After this decision, participants answered another manipulation check item concerning whether the company's previous CEOs had mostly been male or female (on a bipolar seven-point scale, from male to female).

Last, participants provided demographic information and were probed for suspicion. Participants did not perceive any connection between the candidates' gender and the company's performance or the gendered history of leadership.

**Results**

**Participant gender**

Participant gender did not influence leader choice, \( \chi^2 < 1 \), and did not interact with history of leadership or company performance, all Wald \( \chi^2 \) values < 1. Therefore, we dropped participant gender from all further analyses.

**Manipulation checks**

Participants in the successful performance condition perceived the company as more successful (\( M = 5.60, SD = 1.14 \)) and predicted greater future success (\( M = 6.62, SD = 1.42 \)) than participants in the crisis condition (\( M = 3.62, SD = 1.19 \) and \( M = 5.62, SD = 1.67 \), respectively), \( t(117) > 3.50 \), \( p \text{ values} \leq .001 \), \( d \text{ values} > .64 \). Participants in the male history of leadership condition remembered that most of the previous CEOs of the company had been male, indicated by a mean value (\( M = 1.64, SD = 0.96 \)) below the mid-point of the scale, \( t(52) = -17.84, p < .001 \); participants in the female history condition remembered that the company's previous CEOs had mostly been female, indicated by a mean value (\( M = 5.28, SD = 1.90 \)) above the mid-point, \( t(64) = 5.42, p < .001 \). History of leadership produced no significant main or interaction effect with company performance on the manipulation check items, all \( F \text{ values} < 2.92 \), all \( p \text{ values} > .09 \).

**History of leadership and the glass cliff**

When the context of leadership was predominantly male, the predicted glass cliff effect emerged (Figure 1, left panel): the interaction between company performance and gender of chosen candidate was significant, \( \chi^2(1, N = 53) = 5.25, p < .03, d = .93 \). When the company with a male history of leadership was successful, participants tended to choose the male candidate (62%) over the female candidate (38%),...
However, when the same company with a male history of leadership was in a serious crisis, participants significantly preferred the female candidate (69%) over the male candidate (31%), \( \chi^2(1, N = 29) = 4.17, p < .05, d = .82 \).

No such glass cliff effect emerged when the history of leadership was predominantly female. The company performance by candidate gender interaction on leader selection was not significant, \( \chi^2(1, N = 66) = 0.07, p = .79 \). There were also no main effects: participants were equally likely to select either of the two candidates, regardless of gender or company performance, \( \chi^2 \text{ values < 1} \) (Figure 1, right panel).

Thus, as predicted, the glass cliff emerged in the male history of leadership condition and disappeared completely in the female history condition.

**Discussion**

Expt 1 replicated the glass cliff effect and identified how it can be eliminated. For a company with a typical, predominantly male history of leadership, we found the interaction between company performance and candidate gender indicative of a glass cliff: participants chose the female candidate for a company that was in trouble, and tended to favour the male candidate for a successful company. This interaction disappeared completely for a counter-stereotypic history of female leadership. In that case, participants were equally likely to choose either of the two equally qualified candidates. To our knowledge, this is the first experimental demonstration of a possible way to eliminate the glass cliff effect – a finding with considerable implications. Importantly, these findings imply that the phenomenon has something to do with the way most companies have been historically and continue to be structured, with top management positions being primarily held by men and with the resulting strong stereotypical association of maleness and leadership.

Although the primary purpose of Expt 1 was to test whether the glass cliff is contingent on a stereotypical male history of leadership, the findings for a female history of leadership give us some first hints at possible processes leading to the glass cliff. If the glass cliff was about, or only about a perceived need for change in times of crisis and
a bias to maintain the status quo in more prosperous times, one would expect a reverse trend for a female history of leadership compared to a company with a male history of leadership: a preference for a female leader in times of success and for a male leader in times of crisis. Although it could be argued that a line of four female senior managers was not enough for participants to perceive a female status quo of leadership, it should have been sufficient for a male candidate to represent change in times of crisis and to be favoured accordingly, but this did not occur.

The data do fit well with an explanation that focuses on stereotypes about gender and leadership. In a typical company with a male history of leadership, stereotypical associations of maleness and leadership, i.e., the think manager–think male stereotype, as well as associations of women and supportive roles including think crisis–think female notions (Ryan et al., 2009) should be particularly strong (Dasgupta & Asgari, 2004). As a result, men may appear as a better fit for leadership in general (Heilman, 2001), and women may appear as better suited to lead in times of crisis. In a context where female leadership is more prevalent, such stereotypic associations weaken (Dasgupta & Asgari, 2004). To the extent that these stereotypes play an important role for creating the glass cliff, the effect should be reduced or even disappear in case of a female history of leadership. However, following this reasoning it should not reverse as a status quo explanation suggests since a reversal would require something like a think manager–think female stereotype which is very unlikely due to the strong association of maleness and leadership (Eagly & Karau, 2002; Schein, 2001). Thus, the present findings are more in accord with an explanation of the glass cliff that focuses on stereotypes about gender and leadership than with a status quo framework.

However, although our findings fit well with this second explanation, Expt 1 is a rather indirect test of the hypothesis that stereotypes about gender and leadership play an important role in creating the glass cliff. To directly address this idea, Expt 2 moved away from the question of stereotypicality of the context and directly tested the importance of stereotypes about gender and leadership and their endorsement for leader selection in times of success and in times of crisis.

**EXPERIMENT 2**

We designed Expt 2 to test whether the interplay of gender stereotypes and of expectations of leaders in times of success versus crisis contributes to the glass cliff effect. We predicted that in a context of success, participants should think manager–think male; they should perceive stereotypically male, agentic attributes as most important in a future leader and as a consequence, these attributes should predict leader selection. However, these characteristics should not be favoured to the same extent in times of crisis. When a company is struggling with major difficulties, stereotypically female attributes such as communication skills or the ability to motivate others might be seen as more important. As a result, stereotypically male attributes should cease to matter and instead, stereotypically female, interpersonal attributes should become most predictive of leader selection.

Expt 2 also tested whether company performance would influence the endorsement of these stereotypes. If different stereotypic attributes matter depending on a company’s performance, participants might endorse stereotypes with respect to these attributes more in a context where the respective characteristics are seen as particularly important. For example, participants might endorse stereotypes about women’s higher
or men’s lower) interpersonal attributes to a higher degree in times of crisis where these attributes are seen as particularly important and are thus more readily accessible than in times of success. Since these are the characteristics that should predict leader choice in times of crisis, a higher endorsement of this stereotype should result in a preference for the female candidate under these circumstances. Accordingly, Expt 2 tested whether the ascription of stereotypic attributes to a male and a female candidate, i.e., the endorsement of stereotypes about gender and leadership, changes depending on the performance context and to what extent this might mediate the glass cliff effect.

**Method**

**Prestudy**

Ryan et al. (2009) obtained evidence for a think crisis–think female association by comparing stereotypes about men and women with leader attributes in different contexts. We undertook a prestudy to test whether we could replicate this association for stereotypes about male and female leaders and to select items that would best capture these notions. We compiled 50 attributes based on research about gender and leadership (Abele, 2003; Ryan et al., 2009; Sczesny, 2003a). Undergraduates (31 women, 31 men) rated these attributes with regard to whether they were more characteristic of a typical male leader or more characteristic of a typical female leader and whether they were more needed in a leader in a thriving company or more needed in a leader in a serious crisis (on bipolar seven-point scales). The order of these two sets of ratings was counterbalanced.

Participants rated six items as significantly more needed in a thriving company. In accord with a think manager–think male stereotype for successful organizations, four of these were rated as more descriptive of a typical male leader (independence, competition, dynamic, striving for power), but only one as more descriptive of a typical female leader (fairness); one item (professionalism) was neutral with regard to gender typicality, t < 1. Accordingly, the attributes that participants saw as more needed in a thriving company were on average rated as more descriptive of a male leader than of a female leader as indicated by a mean value significantly below zero, (M = −0.60, SD = 0.64), t(61) = 7.40, p < .001.

Participants judged 11 items as more needed in crisis. In accord with a think crisis–think female stereotype, five of these were more typical of a female leader (ability to build confidence in others, cooperation, communication skills, ability to encourage others, ability to work in teams) while the remaining six items were neutral with regard to gender typicality (ability to deal with conflict, rationality, ability to motivate others, inspiration, determination, innovative thinking). t values < 1.62; p values > .11. Accordingly, the 11 attributes needed in times of crisis were rated as more descriptive of a typical female leader than a typical male leader, indicated by a mean value significantly higher than zero (M = 0.32, SD = 0.70), t(61) = 3.64, p = .001. Thus, we found evidence for think manager–think male notions that revolve around agentic traits as well as for think crisis–think female notions that centre on interpersonal attributes.

**Participants and design**

In the actual experiment, University of Kansas introductory psychology students (61 women, 61 men) participated on-line in a 2 (company performance: successful,
crisis) × 2 (candidate gender: male, female) design. Company performance varied between participants, candidate gender within participants.

**Materials and procedure**
Participants read about a supermarket chain that was either very successful or in a serious crisis. The article also mentioned that the CEO position in the company would soon be vacant. We did not explicitly manipulate history of leadership, but assume that participants imagined a typical company with predominantly male leadership. We dispensed with a female history of leadership condition, since based on Expt 1 we did not expect the phenomenon under study, i.e., the glass cliff effect, to emerge in that condition. Because we are interested in the role of stereotype endorsement in facilitating the glass cliff, conditions that would reliably produce a glass cliff were needed. Participants answered the same manipulation check items as in Expt 1 and then read brief descriptions of a male and a female candidate for the CEO position. Again, we counterbalanced which description referred to the male and the female candidate.

Next, participants rated their impression of each candidate with regard to 10 stereotypical attributes that we selected based on the prestudy and previous research (Ryan *et al.*, 2009; Schein, 1973). Stereotypically female attributes that are more needed in a crisis were: *communication skills, willing to cooperate, able to work in teams, and able to encourage others* (Cronbach’s $\alpha = .74$ for the female candidate, $\alpha = .75$ for the male candidate). The stereotypically male attributes needed in a successful company were: *independent, competitive, dynamic, striving for power, decisive, and objective* (Cronbach’s $\alpha = .78$ and .72).

As dependent variables, participants evaluated the two candidates on seven items concerning their suitability for the position (e.g., *is suitable for the position, would be a good leader*; $\alpha = .85$ and .83) and then chose one of the two candidates as new CEO. Last, participants provided demographic information and were probed for suspicion.

**Results**
We excluded four participants from the analyses who either rated the successful company as unsuccessful (below the scale mid-point) or the company in crisis as successful (above the mid-point).

**Participant gender**
Participant gender exerted no significant main effect on any of the variables and did not interact with company performance (all Wald $\chi^2$ values < 1, all $F$ values < 1.18, all $p$ values > .20). Accordingly, we dropped participant gender from further analyses.

**Manipulation checks**
Participants evaluated the company as significantly less successful ($M = 2.73, SD = 1.00$) and predicted lower future success ($M = 5.02, SD = 1.73$) in the crisis condition than in the success condition ($M$ values = 5.98 and 7.32, $SD$ values = 1.02 and 1.19, respectively), $t$ values > 8.49, $p$ values < .001, $d$ values > 1.54.
Glass cliff effect

Perceived suitability for the position

A mixed ANOVA revealed the expected company performance by candidate gender interaction indicative of a glass cliff effect for suitability ratings, $F(1, 108) = 4.77$, $p < .04$, $\eta^2 = .04$ (see Figure 2). In line with predictions, participants rated the male candidate as better suited for the position in the successful company ($M = 5.51$, $SD = 0.73$) than the female candidate ($M = 5.05$, $SD = 0.73$), $F(108) = 16.43$, $p < .001$. Unexpectedly, they did not rate the female candidate as better suited for leadership in times of crisis than the male candidate, $F < 1$. It is also remarkable that company performance had no effect on ratings of the female candidate ($M$ values = 4.99 and 5.05, respectively), while the male candidate was rated as more suitable for leadership when company performance was successful ($M = 5.51$, $SD = 0.89$) than when it was poor ($M = 5.01$, $SD = 0.73$), $t(111) = 3.25$, $p < .01$, $d = .61$.

Choice of new leader

As predicted, the interaction between company performance and gender of chosen candidate was significant, $\chi^2(1, N = 119) = 9.97$, $p < .01$, $d = .66$ (see Figure 3). Participants in the successful company condition favoured the male candidate (67%) over the female candidate (33%), $\chi^2(1, N = 54) = 6.00$, $p < .02$, $d = .71$. This was almost completely reversed in the crisis condition, where 37% of the participants selected the male candidate while 63% chose the female candidate, $\chi^2(1, N = 64) = 4.00$, $p < .05$, $d = .52$.

What predicts leader selection?

We hypothesized that different leader attributes become relevant in times of crisis relative to times of success. Specifically, we predicted that stereotypically male, agentic characteristics should matter most for leader selection in a successful company, while stereotypically female, interpersonal attributes should matter most for leader selection in times of crisis.

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**Figure 2.** Evaluation of the candidates’ general leadership ability by company performance condition, Expt 2.
We tested this prediction with logistic regressions. We regressed gender of chosen candidate (coded as 0 = female, 1 = male) on company performance (0 = crisis, 1 = successful), on the difference in the ascription of each set of stereotypical attributes to the candidates (male candidate–female candidate), and on the interaction terms: company performance by difference in interpersonal attributes and company performance by difference in agentic attributes; we used difference scores to avoid problems of multicollinearity since ascriptions of the same attributes to the two candidates were highly correlated.

Company performance significantly predicted leader selection, Wald $\chi^2 = 6.36$, $p < .02$; participants were more likely to choose the male candidate in the success condition than in the crisis condition (vice versa for the female candidate). The effect of stereotypically male agentic characteristics was not significant, Wald $\chi^2 = 2.04$, $p > .15$, while the effect of stereotypically female interpersonal attributes was significant, Wald $\chi^2 = 8.30$, $p < .01$. Since the interactions were included in the model, these do not represent ‘main effects’, but rather conditional effects (Jaccard, 2001), that is, the effect of the respective attributes, given that company performance is poor (the reference category coded with 0). Accordingly, as hypothesized, stereotypically female attributes predict leader selection in times of crisis, while stereotypically male attributes do not (see Table 1).

![Figure 3. Selection of the male versus female candidate in per cent by company performance condition, Expt 2.](image)

![Table 1. Conditional effects of the attribution of stereotypical attributes on leader selection in Expt 2](table)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Conditional effect</th>
<th>$B$ (SE)</th>
<th>Exp($B$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company in crisis</td>
<td>Difference in ascription of stereotypically male attributes (FC–MC)</td>
<td>0.84 (0.59)</td>
<td>2.31</td>
</tr>
<tr>
<td></td>
<td>Difference in ascription of stereotypically female attributes (FC–MC)</td>
<td>1.40 (0.62)*</td>
<td>4.06</td>
</tr>
<tr>
<td>Successful company</td>
<td>Difference in ascription of stereotypically male attributes (FC–MC)</td>
<td>3.41 (1.18)**</td>
<td>30.19</td>
</tr>
<tr>
<td></td>
<td>Difference in ascription of stereotypically female attributes (FC–MC)</td>
<td>1.37 (0.53)*</td>
<td>3.92</td>
</tr>
</tbody>
</table>

Note. $B$, unstandardized regression weight; SE, standard error; exp($B$), odds ratio; FC, female candidate; MC, male candidate; * $p < .05$; ** $p < .01$. 

Table 1. Conditional effects of the attribution of stereotypical attributes on leader selection in Expt 2
To obtain the conditional effects for the successful performance condition, i.e., to see what predicts leader selection in a successful company, we reran the analysis with successful performance as the reference category (see Jaccard, 2001). The conditional effects of both stereotypically female attributes, Wald $\chi^2 = 6.63$, $p < .02$, and stereotypically male attributes, Wald $\chi^2 = 8.30$, $p < .01$, were significant; both attributes predict leader selection in the successful company. However, in accord with predictions, the conditional effect of stereotypically male attributes is substantially higher than the effect of stereotypically female attributes (indicated by the odds ratios, see Table 1).

The interaction between company performance and stereotypically male attributes was significant, Wald $\chi^2 = 3.79$, $p = .05$, while the interaction between company performance and attribution of stereotypically female attributes was not, Wald $\chi^2 < 1$. In line with predictions, stereotypically male agentic attributes were highly predictive of leader selection in times of success, but did not matter in times of crisis. Stereotypically, female interpersonal attributes mattered for leader selection regardless of company performance; however, compared to agentic attributes, they mattered more in times of crisis and substantially less in times of success, which is again in line with predictions.

**Stereotopic perceptions depending on company performance**

Next, we tested whether participants ascribed different attributes to the candidates depending on organizational performance, that is, whether they differentially endorsed stereotypes. A mixed ANOVA revealed no significant main or interaction effect of company performance or candidate gender on the ascription of stereotypically male agentic characteristics, $F < 1$ (for means see Table 2).

**Table 2.** Means and standard deviations (in parentheses) of the ascription of stereotypical attributes to the male and the female candidates by company performance condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Stereotypically male attributes</th>
<th>Stereotypically female attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male candidate</td>
<td>Female candidate</td>
</tr>
<tr>
<td>Company in crisis</td>
<td>5.15 (0.71)</td>
<td>5.07 (0.84)</td>
</tr>
<tr>
<td>Successful company</td>
<td>5.16 (0.66)</td>
<td>5.18 (0.58)</td>
</tr>
</tbody>
</table>

For the ascription of stereotypically female attributes we found no significant main effects, $F$ values $> 2.30$, $p$ values $> .12$. However, the candidate gender by company performance interaction was marginally significant, $F(1, 116) = 3.44$, $p < .07$, $\eta^2 = .03$. In the successful performance condition, participants rated the male candidate and the female candidate as equally interpersonally skilled, $F < 1$. However, in times of crisis, their perceptions reflected prevalent gender stereotypes: they rated the male candidate as significantly less interpersonally skilled than the female candidate, $F(116) = 4.52$, $p < .05$ (see Table 2). Interestingly, company performance again influenced perceptions of the male candidate, $t(116) = 2.23$, $p < .05$, $d = .41$, but not of the female candidate, $t < 1$.

**Mediation analyses**

When the company was in trouble, participants perceived the male candidate as lacking interpersonal attributes, i.e., precisely those attributes that were predictive of
leader selection in times of crisis – a stereotype they did not endorse for a successful company where the male and the female candidates were seen as equally interpersonally skilled. The critical question is whether this difference in stereotype endorsement with regard to the male candidate’s crisis management skills can serve as an explanation of the glass cliff effect. Does the perception of the male candidate as lacking the interpersonal attributes needed in times of crisis explain why participants see him as less suitable for leadership when the company is in crisis than when it is doing well? Can it explain why they prefer a female candidate in times of crisis? We conducted two bootstrapping mediation analyses (MacKinnon, 2000) to answer this question. Bootstrapping is a resampling method that estimates confidence intervals (CIs) for statistical parameters by creating multiple new datasets from the original dataset and by estimating the respective parameters for each resampled dataset. This procedure has several advantages over more traditional approaches (e.g., Sobel, 1986) and is especially recommended for small to moderate samples (e.g., MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2004; Shrout & Bolger, 2002). We used the Preacher and Hayes (2004) bootstrapping methodology with 3,000 resamples to estimate 95% CIs for the indirect effects of company performance on suitability ratings (and leader choice, respectively) by ascription of stereotypically female interpersonal attributes to the male candidate. Interpretation of the bootstrap data is accomplished by determining whether zero is contained within the CIs; mediation is reliable when the CI does not include zero.

Suitability for leadership
Company performance predicted the male candidate’s perceived suitability for the position, $\beta = 0.29$, $p < .01$, and interpersonal attributes, $\beta = 0.20$, $p < .03$. When we considered ascription of stereotypically female attributes and company performance simultaneously, ascription of those characteristics predicted perceived suitability for the position, $\beta = 0.50$, $p < .001$, while the effect of company performance on suitability dropped to $\beta = 0.19$, $p < .02$. The estimated bias-corrected CI for the indirect effect was [.0240, .3359], indicating a significant indirect effect at the .05 level. The perception of the male candidate as lacking the attributes needed most in a crisis mediated the effect of company performance on his perceived suitability for the position.

Choice of new leader
Company performance predicted leader choice, $\beta = 0.31$, $p < .01$, and attribution of stereotypically female characteristics to the male candidate (see above). When we considered company performance and ascription of stereotypically female attributes simultaneously, these attributes predicted leader choice, $\beta = 0.27$, $p < .01$, while we observed a slight drop in the path from company performance to choice, $\beta = 0.28$, $p < .05$. The estimated bias-corrected CI was [.0093, .4992], indicating a significant indirect effect at the .05 level. This suggests that participants’ perception of the male candidate as lacking the interpersonal skills needed in crisis when the company was performing poorly played a significant role in the lower preference for a male candidate for a company in crisis compared to a successful company, i.e., the glass cliff effect.
Discussion

Expt 2 again replicated the glass cliff effect and provided some insights into why it occurs. In accord with our predictions, stereotypically male agentic attributes were most predictive of who participants selected as a new leader for a successful organization; stereotypically female interpersonal attributes were most predictive of who participants selected as a new leader for an organization in crisis. Moreover, in a context of crisis, participants ascribed less of the interpersonal attributes that are desired in such a situation to a male candidate than they did in times of success; as a consequence of this differential endorsement of gender stereotypes depending on company performance, they perceived him as less suitable for the position in the troubled company than for the position in the successful company and were more likely to select the female candidate.

One might ask why we find this endorsement of stereotypes regarding the candidates’ interpersonal skills in the crisis condition, but not in the success condition. One reason why participants are more likely to endorse this stereotype in times of crisis may be that stereotypical attributes are more easily accessible in a context where the respective characteristics are particularly important, such as interpersonal attributes in times of crisis. Likewise, the organizational performance context may result in a different meaning of the relevant items being inferred (e.g., ability to encourage others). In times of success, these items might simply refer to sociability and might therefore not only be less important for a future leader to have, but might also not necessarily be gender stereotypic. Hence, we find no difference in the ascription of these attributes depending on candidate gender. However, in a crisis these items reference the kinds of qualities that Ryan et al. (2009) have termed the think crisis–think female stereotype, such as the ability to motivate employees in the face of declining organizational performance – and men might be perceived as possessing less of these specific crisis management skills than women.

We found no differences in the attribution of stereotypically male traits to the candidates, although it might be expected that stereotypes about these attributes would be more accessible and more likely to be endorsed in times of success than in times of crisis. However, previous research has shown that although people stereotypically perceive women as less agentic than men, they see female and male managers as equally agentic (Sczesny, 2003b).

In a context of crisis, participants did not perceive the female candidate as better suited for leadership than the male candidate, although they were more likely to actually select her in this condition. Participants perceived her as equally suited for leadership regardless of organizational performance, while they rated the male candidate as more suited for leadership in a successful than an unsuccessful company – a pattern also observed by Haslam and Ryan (2008, study 1). This is consistent with the finding that the glass cliff effect seems to be driven by changes in the perception and evaluation of the male candidate rather than the female candidate, which may seem surprising at first. However, Kulich, Ryan, and Haslam (2007) have argued that the romance of leadership, the overestimation of a leader’s influence on an organizations’ performance (Meindl, Ehrlich, & Dukerich, 1985), as well as the attribution of ability and charisma to a leader depending on the organizations’ performance (Shamir, 1992) may work differently for female leaders than for male leaders. In our Expt 2, perceptions of the male, but not the female candidate’s attributes, changed depending on the performance context providing additional support for the idea that there may be a romance of leadership for men, but not for women (Kulich et al., 2007).
Why then were participants more likely to choose a female future leader in times of crisis despite the fact that they did not evaluate her as more suitable? The mediational analyses suggest that the lower ascription of these attributes to the male candidate is part of the explanation. An additional element may be that - like actual appointment decisions - leader selection represented a forced choice, while suitability ratings did not. Participants could evaluate the male candidate as less suitable for the position in times of crisis than in times of success without letting this affect their evaluation of the female candidate. A lower selection of a male future leader in times of crisis, however, automatically leads to a higher selection of a female future leader.

Of course mediational analyses as we conducted them in Expt 2 are only one means of testing hypotheses about process and in many cases experimental methods may be advisable (Spencer, Zanna, & Fong, 2005). However, in the present experiment, we were interested in participants' stereotypical perceptions of the candidates as a potential mediator, not in the extent to which the candidates actually had these attributes. The most straightforward way to test the role of participants’ attributions is to ask them for their impressions of the candidates and then test whether these impressions mediate the glass cliff effect. Experimentally manipulating which attributes the candidates have would answer a different theoretical question. Nonetheless, differentiating between participants' perceptions of the extent to which the candidates possess stereotypic attributes and the extent to which candidates actually do possess stereotypic attributes might be an interesting question to address in future empirical research.

GENERAL DISCUSSION

The present research replicated the glass cliff effect in two experimental studies and provided some insights into when and why it emerges. Expt 1 helped to define the circumstances under which it emerges by demonstrating that it is contingent on a male history of leadership, that is, a context that serves to maintain strong associations between maleness and leadership and prevalent stereotypes about gender and leadership. Expt 2 helped to understand why the effect emerges by demonstrating the importance of stereotypes about gender and leadership and the differential endorsement of these stereotypes in different performance contexts. In times of success, stereotypically male attributes were most important for selection of a future leader; in times of crisis, stereotypically female attributes mattered most for leader selection. Moreover, in times of crisis, participants attributed less interpersonal attributes desired in a leader in times of crisis to the male candidate than they did in times of success. A mediation analysis revealed that participants evaluated the male candidate as less suitable for the position in the troubled company than in the successful company at least partly because they perceived the male candidate as lacking precisely those skills that were most important for leader selection in times of crisis and they chose the female candidate over the male candidate to lead the poorly performing company for the same reason.

The two experiments further our understanding of the factors and processes underlying the glass cliff phenomenon. Expt 1 was concerned with a moderator of the glass cliff effect, while Expt 2 addressed the processes causing the effect. However, the results from both experiments nicely converge on the conclusion that stereotypes about gender and leadership play an important role in the aetiology of the glass
cliff – stereotypes that may come into play differentially depending on the stereotypicality of the context and that are endorsed differentially depending on a company’s performance.

**Implications**

An important theoretical implication of our findings is that even though the higher selection of women in times of crisis has been the focus of most previous work on the glass cliff (Ryan & Haslam, 2007; Ryan et al., 2007), it is at least equally important to consider the higher selection of men in times of success to fully understand the phenomenon. It might seem somewhat counter-intuitive that a higher selection of women for precarious positions should be at least as much, or even more so, about men and leadership than about women and leadership. In fact, it may not be so important for the glass cliff that women are stereotypically seen as possessing more of the attributes that matter in times of crisis, but rather that men are seen as lacking these attributes and that the attributes that men stereotypically have do not fit with what is perceived as needed in a leader in times of crisis.

The present research also has practical implications for ways to reduce or eliminate the glass cliff in corporate settings. In Expt 1, merely mentioning that the organization has had women leaders was sufficient for the glass cliff to disappear. This suggests that an effective way to avoid the emergence of glass cliffs in corporate settings would be to strive for a more diverse management. In the long run, a higher representation of women in positions of organizational leadership may well lead to changes in people’s associations between maleness and leadership (Dasgupta & Asgari, 2004) and this may eventually eliminate the glass cliff.

An important practical as well as theoretical question to address in future research is whether the glass cliff effect only applies to the selection of women versus men or whether there is a glass cliff for other groups underrepresented in higher management. For example, Jóhanna Sigurðardóttir is not only the first female prime minister of Iceland, she is also the world’s first openly lesbian woman to become head of state (Moody, 2009). To the extent that stereotypes about gender and leadership play an important role in the aetiology of the glass cliff one could speculate that not all minorities will be affected by the glass cliff to the same extent, but that it depends on how the stereotypes about the group match with what people desire in a leader in times of crisis. However, the present findings imply that it is not so much stereotypes about women that factor into the glass cliff, but rather stereotypes about men. Making a parallel prediction for minority groups, one could expect that in times of crisis people will not only prefer women for future leadership, but any candidate who seems to bring something to the table that the stereotypical male, white, straight manager might be seen as lacking.

An alternative explanation for some of our findings could be a sexist desire to set women up to fail (and to place men in more promising positions). However, we consider this possibility unlikely to fully explain our findings. Haslam and Ryan (2008) specifically tested and never found any influence of sexist attitudes. Moreover, in the present experiments participants’ predictions of future success or failure for the company that served as a manipulation check, did not predict leader selection, Wald $\chi^2$ values $< 1$; that is, whether participants thought the company in crisis would recover from its present difficulties or continue its path towards bankruptcy did not affect whether they chose a man or a woman as future leader. This further increases our
confidence that sexism alone cannot account for our findings. However, further research should address this issue more directly by testing to what extent sexist attitudes, potentially measured implicitly, matter for the glass cliff.

An important question that remains open for future research concerns the consequences of the glass cliff for women leaders in the corporate world. What will happen to Sigurðardóttir and Elsenhans if they fail to solve Iceland’s and Sonoco’s present problems? Will people acknowledge that the difficulties existed prior to their appointment? In general, directors of poorly performing companies are less likely to be appointed to other boards in the future (Ferris et al., 2003) suggesting that they are indeed blamed for continuously poor organizational performance. What if these women do in fact succeed? Will they receive the praise for turning things around under such poor prospects? Research into gender and the romance of leadership suggests that this may not necessarily be the case (Kulich et al., 2007). If we are to obtain a better understanding of the glass cliff effect and its importance for gender (in)equality in corporate settings, an important question for future research is whether such attributions of blame or praise are different for males and females leading in favourable and unfavourable conditions.

Conclusion
The present research offers some important insights into why men are more likely to be chosen for leadership in times of success and why women are more likely to achieve positions of organizational leadership when these positions reflect precarious glass cliffs. We found consistent support for the importance of gender stereotypes and organizational structures that maintain these stereotypes. Stereotypical think manager–think male notions lead to a preference for male leadership in times of success; in times of crisis, this stereotypically male ideal of leadership does not fit and stereotypically female attributes matter most in a future leader. Since men are perceived as having less of these characteristics than women, women are more likely to be chosen for glass cliff positions. Our findings indicate that women find themselves in precarious leadership positions not because they are singled out for them, but because men no longer seem to fit. There is, of course, a double irony here. When women get to enjoy the spoils of leadership (a) it is not because they are seen to deserve them, but because men no longer do, and (b) this only occurs when, and because, there are fewer spoils to enjoy.

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References


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