

# **Queen Bee Or Not Queen Bee, That Is the Question?**

Increasing insight into factors that bring about  
the Queen Bee Syndrome

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**MSc Thesis**

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## Abstract

Although the number of women climbing up the organizational ladder has increased over the last decades, women in leadership and management positions in large companies are still scarce. It is often suggested that women who do make it to high leadership or managerial positions can serve as agents of social change. However, previous research indicated that successful women often do not take up this role. Often, those women, who have the power to improve the position of other women and help to defer negative stereotypes about women, themselves, hold stereotypical expectations of women. Moreover, these women sometimes even oppose the women's movement. This phenomenon has been labeled the "queen bee syndrome". The present investigation examined which contextual variables cause successful women to become queen bees. Additionally, we examined which contextual variables could bring about the motivation to remain concerned with the welfare of the group. This research revealed that performing queen bee behavior is jointly determined by individual differences between women (e.g., level of group identification) and by the organizations in which women climb up the ladder (e.g., experiencing gender discrimination, personal and social identity protection, female mentoring relationships). The results demonstrated that the lower women were identified with other women, the more they were inclined to perform queen bee behavior. They also emphasized the important role organizations played in stimulating and reducing queen bee behavior. Organizations stimulated it, because experiencing discrimination towards women caused low identified women to stereotype other women and to perform queen bee behavior. Organizations also reduced queen bee behavior, because providing women with social identity protection, respect for female qualities and female mentoring relationships enabled women to work for personal status improvement and status improvement of women in general. Recommendations on how this can be achieved by organizations will be explained later on in this thesis.

## Increasing insight into factors that bring about the Queen Bee Syndrome

There is still a scarcity of women in leadership and management positions in large companies (Thomson, Graham, & Lloyd, 2005). There are many reasons for the underrepresentation of women in leadership positions and they interact in subtle and complex ways. Some reasons are historical, some stem from the nature of organizations themselves, others have to do with differences in the male and female mind which are related to differences in appearance, outlooks, attitudes and appetites these generate. And of course childbearing and child-rearing roles assigned to women by nature can also contribute to the scarcity of women at the top (Thomson et al., 2005).

Another possibility for the underrepresentation of women in leadership positions is that gender discrimination puts women at a disadvantage. It is a common belief that men are more inclined than women to endorse gender discrimination. However, women who have been individually successful in obtaining leadership positions have also been demonstrated to endorse gender stereotypes and have even been known to oppose the women's movement (Staines, Tavis, & Jayaratne, 1974). The present research is aimed at demonstrating under what kind of circumstances women who climbed the ladder and finally are in positions of power actually come to behave in such a way that they are the ones holding the strongest stereotypical views against other women.

### *Gender discrimination*

From a social and economic point of view, it is of great importance that men and women have equal opportunities in organizations. Various studies have found that men and women are equal in leadership competence, self-confidence, perceived power and effort, but the fact remains that men and women do not receive the same career opportunities (Cooper, 1997). Although women's educational level is equal or even higher than that of men, and

women show equal ambition in their careers (Ellemers, De Gilder, & Van Den Heuvel, 1998), women generally work in lower level jobs, earn less than men, and do not have the same career opportunities as men (Bartol, 1999; Hultin, 2003, as described in Ellemers & Barreto, in press).

Nowadays many people think that discrimination is not a problem within our society anymore. We think that we are open and honest and give the same chances to all people (Ellemers & Barreto, in press). But it is a misunderstanding to think that gender-based discrimination no longer occurs and that the current workplace offers equal chances for men and women (Swim, Aiken, Hall, & Hunter, 1995). For instance, a recurring finding is that for men the correlation between level of education and job level tends to be much stronger than it is for women. This indicates that it is more self-evident for men that a higher level of education will translate into a higher job level, than it is for women (Roos & Gatta, 1999, as described in Ellemers & Barreto, in press).

The fact that differential outcomes between men and women do not clearly relate to differences in leadership competence, self-confidence, perceived power, educational level or effort, indicates that there must be another type of explanation for the underrepresentation of women in leadership positions. A possible process that hinders the implementation of equal chances for all people is modern sexism. Sexism still prevails in modern societies, even though it has taken new forms of expression. Modern sexist views emerge from statements showing denial of gender discrimination, antagonism towards women's demands, and resentment of special favors to women (Barreto & Ellemers, 2005, Swim et al., 1995). There is a denial of gender discrimination and people defend that women do get the same opportunities as men. This implies that any lack of career success can only stem from women's inferior abilities and/or effort compared to men's. In other words, modern sexists say that women either are unable or do not wish to pursue a career (Barreto & Ellemers,

2005). So, many people think that gender discrimination is ruled out, because traditional stratifications according to gender seem to have lost a lot of their original meaning and impact (Ellemers, 2001), but still sexism is a major problem in our society. Although it may seem that it is beneficial for women that people refrain from expressing sexist views in an old-fashioned or hostile way, modern expressions of sexism can even be more harmful for women, because they are more subtle and often go undetected (Barreto & Ellemers, 2005, Ellemers & Barreto, in press, Swim et al., 1995).

#### *Women's hostility towards women*

The common belief that men are perpetrators of gender discrimination and that women are the victims of it (Hoekstra, 2007), has been taken as point of departure to explain the underrepresentation of women at higher levels in organizations and leadership positions (Brenner, Tomkiewicz, & Schein, 1989, as described in Ellemers, Van Den Heuvel, de Gilder, Maass, & Bonvini, 2004). This traditional explanation is based on the fact that men are supposedly more inclined to hold stereotypical expectations of women than women are. However, contrary to this traditional expectation, Ellemers et al. (2004) have shown in their research that when women do climb up the leadership ladder successfully, some of them come to hold more stereotypical views of other women than males do. Ellemers et al. (2004) demonstrated in their research that not male, but rather female faculty members were most inclined to hold stereotypically negative views of the work commitment of female compared to male PhD students. They compared the self-reported commitment of male and female PhD students to the way they were perceived by both male and female university faculty. The self-reports and the performance indicators of male and female PhD-students showed that male and female PhD-students were both equally ambitious and committed to their careers. However, in comparison to their male professor colleagues, female professors were more

inclined to think that female PhD-students were less career oriented than male PhD-students were.

The possibility that successful women in organizations hold biased evaluations of other women is usually not recognized as a form of gender discrimination. So the tendency to stereotype other women by successful women often goes undetected (Ellemers & Barreto, in press). It is expected that discriminatory views are held by members of one group about another group, thus endorsement of gender stereotypic views is not easily recognized as a form of sexism when expressed by a woman, rather than a man (Barreto & Ellemers, 2005; Baron, Burgess, & Kao, 1991). Important consequences of this stereotyping and the fact that (biased) judgments of women about the potential of other women are not questioned, is that it legitimizes the inferior standing of other, less successful women, and hence can stand in the way of social change. This in turn is harmful to the career opportunities of other women (Ellemers, 2001; Ellemers et al., 2004). Successful women who stereotype other women, thereby diminishing the chances of other women to become successful, are named ‘queen bees’ (Staines et al., 1974).

#### *Queen Bee Syndrome*

It is often suggested that those women who made it to a high leadership or managerial position in an organization, and thus have been successful in obtaining individual success, will serve as agents of social change. These women can use their newly acquired position to lead collective attempts to remove the barriers preventing full and equal advancement of other women (Ellemers et al., 2004). But often these women will not serve as agents of social change and conversely those women who have the power to work hard for their group will often pull up the ladder behind them. This is known as the “queen bee syndrome” (Staines et al., 1974).

To explain the queen bee syndrome, it has been argued that those women who have risen to the managerial level and have acquired leadership positions in male-dominated organizations are motivated to maintain the organizational culture that allowed them to be successful in their careers (Gibson & Cordova, 1999). Furthermore, some women like being the sole representatives of their gender at the top of their organizations. It gives them a cachet among their male colleagues, which would be diluted by the arrival of more women. Thereby, these women feel that, since they got to the top, despite the obstacles, they are under no obligation to make the climb easier for other women (Thomson et al., 2005). These successful women perceive themselves as unique group members, because it still is exceptional for women to occupy leadership positions in male dominated organizations. As a result they will distance themselves from other women who are not able to climb up the organizational ladder and start to behave in a manner consistent with the queen bee syndrome, for example by stereotyping other women.

Ellemers and colleagues (2004) did field research amongst the female faculty, who can be categorized as women who have individually been successful in a male-dominated environment. This research demonstrated that female faculty are more inclined to hold stereotypical views of the work commitment of female doctoral students. To be able to be successful, members of a disadvantaged group, in this case the female faculty, had to emphasize the ways in which they differed from other group members. This makes it harder for the female faculty to see that the qualities they demonstrate also apply to other members of their group (Weber & Crocker, 1983). These female professors thought of themselves as exceptional group members and described themselves as non-prototypical women. In fact, the self-descriptions of the female professors were even more masculine and less feminine in comparison to self-descriptions of their male professor colleagues. These findings have important implications for the future career opportunities of other women. When successful

women think of themselves and even present themselves as different from other women, the success of these women is less likely to reflect upon other women. Previous research has demonstrated the existence of queen bees in organizations and has hypothesized that both individual difference and contextual variables bring about the queen bee syndrome (Ellemers et al., 2004; Derks, Van Laar, & Ellemers, 2007b, in press).

### *Social identity theory*

Queen bees are mostly those women who do not identify strongly with other women and therefore pursue individual mobility in the face of devaluation of their gender group. This assumption is based on social identity theory (Tajfel & Turner, 1979, 1986). Social identity theory posits that individuals are motivated to have a positive self-concept and therefore need to have a positive perception of their personal identity as well as their social identity. The next paragraphs give a detailed discussion about how women cope with a threatened self-concept and how this coping is related to performing queen bee behavior.

Building a career in organizations that are dominated by males and where males often hold high status positions can be threatening for women's social identity. They are often the ones holding the low status positions in work related settings. In this way, working in an environment, in which males are expected to excel, will threaten the value of women as a group, thereby threatening their social identity. These women can use several coping strategies to cope with group-based identity threat (Ellemers, 2001). Which strategy women pursue to cope with inferior social status depends on whether their coping behavior is focused on improving their individual status or at achieving improvements for the group as a whole. When the focus is on improving the individual status, women will attempt to leave the negatively valued group in order to seek membership in another, more satisfactory group. This strategy has been termed 'individual mobility'. When the focus is on achieving improvements for the whole group, women can use two strategies. They can make their

existing group more positively distinct by redefining the characteristics that contribute to the current group status, a strategy that has been termed ‘social creativity’. In addition they can engage in ‘social competition’ to change the current status of their group. Which of these three strategies is used is very much determined by women’s level of identification with other women (Ellemers, Spears, & Doosje, 1997).

When faced with an unsatisfactory social identity, only individuals who identify strongly with their group will expand their efforts to improve the position of their group as a whole by striving for social creativity or social competition. Low identifiers, who on the other hand see themselves more as individuals instead of group members, will try to evade their association with the negative implications of membership in a low status group. They will attempt to gain access into another group by striving for individual mobility (Doosje, Spears & Koomen, 1995; Ellemers & Van Rijswijk, 1997, Ellemers et al., 1997; Ellemers, 2001, ). In theory, the women who will most likely strive for individual mobility are those who do not identify strongly with other women. So, we expect that women who have been successful in obtaining individual success and behave in a manner consistent with the queen bee syndrome are probably those women who did not feel strong ties with their own group at the beginning of their careers. Furthermore, in line with the findings of Ellemers and colleagues (2004), we expect that low identified successful women will hold more stereotypically negative views of the work commitment of females compared to males.

#### *Negative contextual influences*

In addition to this individual difference variable, we hypothesize that queen bee behavior can be brought about by the context in which women work. The strategy women choose to achieve a positive social identity is not only determined by the level of identification, but also by the context in which women build their careers.

A woman's own career experiences are to a great extent determined by the organizational culture (the context) in which a woman climbs up the organizational ladder. We expect that women will feel a need to distance themselves from other women, when they experience that the organization they work for holds negative stereotypes about women and their typical female qualities. Moreover, when organizations emphasize the importance of typical male qualities, women will adopt more masculine behavior, in order to prove their worth concerning these typical male qualities (Swim, Borgida, Maruyama, & Myers, 1989, as described in Ellemers, 2001). This is related to the findings of Ellemers et al. (2004), where they argued that holding a masculine self-image and adopting masculine behavior was needed for the female faculty to prove to themselves and others that they were unlike other women. In short, we expect that organizations that devalue and stigmatize women will cause women to perform queen bee behavior. It leads these women to endorse gender stereotypic views towards other women, instead of deferring negative stereotypes about the group (Ellemers et al., 2004).

#### *Positive contextual influences*

Ellemers et al. (2004) proclaimed how the context may bring forth queen bee behavior. Conversely, Derks and colleagues (2007b, in press) focused on how the context can reduce queen bee behavior in women experiencing social identity threat. They found a way in which organizations (the context) can help women protect their social identity, thereby maintaining their motivation to climb up the organizational ladder without feeling the necessity to distance themselves from other women. They argue the importance of providing women with an opportunity to affirm their personal identity (personal self-affirmation) or social identity (social self-affirmation) as a key component in the wellbeing, motivation, performance and helping behavior of women.

We expect that emphasizing women's personal identity implies that these women are perceived to be different and better than other women. As a result women will be more inclined to perform queen bee behavior. Helping women to focus on their personal identity, by treating them as unique and different from others, enables women to maintain their motivation to succeed in an organization. However, the side effect is that both highly and low identified women become less concerned with the welfare of other women in the organization, thereby reducing the chance that women will collectively improve their success (Derks et al., in press).

Conversely, helping women to focus on their social identity allows women to improve their personal performance without turning away from other women. This can be achieved by valuing group characteristics that are important for women (e.g., women's acclaimed social skills) and by respecting their gender identity.

Whether women benefit from an organization that offers them positive feedback about their group depends on their level of identification with other women (Derks et al., in press). We expect that providing highly identified women with positive feedback, for example by valuing women's qualities, enables these women to deal with social identity threat. In return they will work for both personal and group status improvement. In this way, a context that respects and values women may prevent queen bee behavior. However, low identified women prefer to be seen as individuals, so we expect that social self-affirmation decreases their willingness to engage in group helping behavior. Moreover, we predict that it will increase low identifiers tendency to engage in individual mobility, which undermines the in-group (Branscombe, Ellemers, Spears, & Doosje, 1999; Ellemers, Spears, & Doosje, 2002; Staines et al., 1974).

Thus, offering ways to protect their social identity to highly identified women allows them to strive for personal and group success within organizations. However, among less

identified women social self-affirmation increases behavior that potentially damages other women. To achieve more widespread social change within organizations, it is crucial that both highly and low identified women remain concerned with the welfare of their group. It is therefore important that organizations provide both highly and low identified women with the positive feedback they need to build up a career, while simultaneously remaining concerned with the welfare of the group. In this research we propose that, by providing women with the possibility of building a mentor relationship with a senior and experienced woman, organizations can make this happen.

### *Mentoring*

Mentoring is a relationship between a more experienced employee (mentor) and a less experienced employee (protégé) to promote the latter's personal and professional development and growth (Anderson, 2005). Mentoring can work on two levels: on a career development and a psychosocial level (Kram, 1985). The career development level includes sponsorship, exposure and visibility, coaching, protection and challenging assignments. The psychosocial level, on the other hand, includes acceptance and conformation, counseling, friendship and role modeling. Kram (1985) reported role modeling as an important part of mentoring. In role modeling, the mentor sets an example by behaving in a manner that gains the respect of the protégé and makes the protégé want to emulate that behavior.

We predict that providing women with the possibility of building a mentor relationship with a senior and experienced woman can bring about a change in both high and low identifiers. We propose that when female mentors or role models show that they have reached the top in an organization without distancing themselves from their gender group, this behavior gains women's respect and possibly makes them wanting to emulate this behavior. Furthermore, we expect that mentors and role models can ensure women that status improvement within an organization and remaining concerned with the welfare of other

women do not cancel each other out. After all, they have seen their mentors or role models perform both behaviors side by side.

### *Conclusion*

Women's own career experiences and the way they relate to their group are crucial determinants of the way successful women view other women around them. These career experiences are to a great extent determined by the organizations in which women try to advance their career. For that reason the present investigation will address two questions. Firstly, which contextual variables cause successful women to start to behave in a manner consistent with the queen bee syndrome? And secondly, which contextual variables can bring about the motivation to remain concerned with the welfare of the group? Our aim is to establish whether successful women will help defer negative stereotypes about the group more readily and work for both personal and group advancement within organizations when they are valued and respected as women within the organization and when they are provided with a female mentor during their career.

### *Overview of study*

In our research, we distributed a questionnaire among women who hold leadership, management or consultancy positions in companies from different sectors. The aim of the questionnaires was to get insight in why some successful women fail to support other women and why other successful women lend a hand to help other women to succeed in their career. We expect that level of gender identification and the context in which women try to climb up the organizational ladder are of main importance in this matter. In order to examine this, we compared the effects of high versus low level of identification, gender discrimination, personal versus social self-affirmation and female mentoring on women's willingness to perform behavior that is aimed at improving their personal status versus the group status within organizations (individual mobility versus collective action). Furthermore, we analyzed

the difference scores between reported male and female employee career commitment and between participants' own career commitment and reported female employee career commitment. In doing this we examined whether women came to hold more or less stereotypical views of the work commitment of female employees under certain circumstances.

In this research, first of all, we propose that women who do not identify strongly with other women will behave in a manner consistent with the queen bee syndrome (Hypothesis 1a). Furthermore, we propose that low identified women are most inclined to hold negative stereotypical views of the work commitment of female employees (Hypothesis 1b).

In addition to the level of gender identification, we hypothesize that queen bee behavior can be brought about by the context in which women work. We propose that organizations that devalue and stigmatize women and that emphasize personal identity will cause women to be less inclined to help other women and will lead women to perform queen bee behavior (Hypothesis 2a). Moreover, we expect that perceiving discrimination and emphasizing women's personal identity will lead women to endorse gender stereotypic views towards other women, instead of deferring negative stereotypes about their group (Hypothesis 2b). While we expect that both high and low identified women will be affected by an organization that discriminates women, we expect low identified women to be more inclined to distance themselves from other women and less inclined to help other women compared to high identified women (Hypothesis 2c).

We furthermore hypothesize that organizations are able to reduce queen bee behavior in women experiencing social identity threat by offering women ways to protect their social identity. We propose that by valuing group characteristics that are important for women (e.g., women's acclaimed social skills) and by respecting women's gender identity, highly identified women are able to strive for personal and group success within organizations

(Hypothesis 3a). However, we expect that among less identified women social self-affirmation will increase behavior that potentially damages other women. We predict that low identifiers will engage in in-group undermining individual mobility when they are treated as group members (Hypothesis 3b).

Also, we propose female mentoring as the way in which organizations can reduce queen bee behavior for both low and high identifiers. We predict that female mentoring will reduce queen bee behavior for both low and high identifiers (Hypothesis 4).

## Method

### *Participants*

Participants were 94 women ( $M_{age} = 43$  years,  $SD = 7.53$ ), who held leadership, management or consultancy positions in six large organizations, which were from different sectors (the public, consultancy and training and development sector). These women were asked to fill out an online questionnaire, which took roughly half an hour of their time. In exchange for their participation, we put up a raffle at the end of the research, in which all participants took part. The six winners received a gift certificate of 50 euros.

### *Procedure*

Prior to the research, we consulted the personnel managers of the six large organizations that took part in this research to decide who qualified for participation in the research. Our criteria for participation were that women must have been active in the work field for over ten years and at the moment of participation they must hold a leadership, management or consultancy position at least at middle management level. The women who were qualified for participation were asked to voluntarily participate in this research.

## *Measures*

All measures were assessed on seven-point Likert-type scales unless otherwise indicated. The variables were divided in three subgroups: individual difference variables, context variables and dependent variables. The control variables that were used in this research were age, level of seniority (1 = very much junior, 2 = junior, 3 = medior, 4 = senior, 5 = very much senior), organizational level (1 = very low level, to 10 = very high level) and leadership (1 = no and 2 = yes).

### *Individual difference variables*

*Gender identification:* In the present research, we measured level of gender identification with women and men at the moment of participation. We also asked the participants to think back to the start of their careers and measured their level of gender identification with women at the start of their careers. Measuring gender identification with women at two moments in time allowed us to assess the change in level of gender identification with women over time. *Previous gender identification with women* was measured with three items (e.g., ‘At the beginning of my career I felt strong connections with other women’,  $\alpha = .91$ ). *Current gender identification with women* was measured with three items (e.g., ‘At this moment I feel strong connections with other women’,  $\alpha = .84$ ). *Current gender identification with men* was measured with three items (e.g., ‘At this moment I feel strong connections with men’,  $\alpha = .77$ ).

### *Context variables*

*Sacrifices made for career improvement:* The sacrifices women made during their career were measured with three items (e.g., ‘I have made sacrifices in my personal life to come this far in my career’,  $\alpha = .83$ ).

*Discrimination:* Discrimination towards women pursuing a career was measured with five items (e.g., ‘During my career I have been discriminated because I am a women’ and ‘During my career I felt that ambitious women were opposed in their careers’,  $\alpha = .86$ ).

*Self-affirmation:* Self-affirmation was measured on two levels, namely personal self-affirmation and social self-affirmation. We compared personal self-affirmation and social self-affirmation to see whether personal self-affirmation would lead to more self-focused behavior and social self-affirmation would lead to more group-focused behavior. *Personal self-affirmation* was measured with three items (e.g., ‘During my career I often felt appreciated as a person’,  $\alpha = .77$ ). *Social self-affirmation* was measured with three items (e.g., ‘During my career I sometimes felt that the qualities of women were not enough appreciated’ [reverse coded],  $\alpha = .80$ ).

*Role model or mentor:* *Male role model or mentor* was measured with two items ( $r = .36$ , ‘During my career there were male role models I could compare myself with’ and ‘During my career I had male mentors who stimulated me in my career’). *Female role model or mentor* was measured with two items ( $r = .67$ , ‘During my career there were female role models I could compare myself with’ and ‘During my career I had female mentors who stimulated me in my career’).

#### *Dependent variables*

*Leadership traits:* Leadership traits were measured with fourteen items which were taken from Scott and Brown (2006) which measures the agency and communality of leadership styles. They utilized the labels agentic and communal to reflect male and female stereotypical characteristics, respectively. In the present research, we measured *agentic leadership traits* with six items (i.e., ‘I am aggressive’, ‘I am determined’, ‘I am dedicated’, ‘I am intelligent’, ‘I am competitive’ and ‘I am charismatic’,  $\alpha = .50$ ). We measured *communal leadership traits* with eight items (i.e., ‘I am helpful’, ‘I am honest’, ‘I am

careful', 'I am sensitive', 'I am understanding', 'I am benevolent', 'I am sympathetic' and 'I am cooperative',  $\alpha = .78$ ).

*Career commitment:* We measured participants' own career commitment and their rating of the career commitment of the average male employee and the average female employee. *Own career commitment* was measured with four items (e.g., 'It is important for me to be successful in my career',  $\alpha = .66$ ). *Male employee career commitment* was measured with four items (e.g., 'The average male employee thinks it is important to be successful in his career',  $\alpha = .77$ ). *Female employee career commitment* was measured with four items (e.g., 'The average female employee thinks it is important to be successful in her career',  $\alpha = .63$ ).

*Collective action:* We measured collective action as an expression of in-group helping behavior. Collective action was measured with four items (e.g., 'I would like to commit myself to the cause of creating equal opportunities for men and women on the labor market' and 'I am not that interested in the position of women in general on the labor market' [reverse coded],  $\alpha = .85$ ).

*Extreme individual mobility:* We measured extreme individual mobility as an expression of whether women were willing to disidentify from their group in order to increase personal status. Extreme individual mobility was measured with three items (e.g., 'I am willing to work for an organization which devalues women, as long as it does not adversely affect me' and 'I would be willing to act in a less feminine way if that would improve my chances within an organization',  $\alpha = .66$ ).

*Mild individual mobility:* We measured mild individual mobility as an expression of whether women would rather work on their own or together as a group to increase their personal status. A high score on this scale means that women would rather work on their own to increase their personal status. Mild individual mobility was measured with three items

(e.g., 'I think that women have the highest chance of gaining equal status to men on the labor market, when they contest these status differences on their own',  $\alpha = .58$ ).

## Results

### *Overview of regression analyses*

The dependent variables were analyzed with hierarchical regression analyses. In step 1, the control variables were standardized and entered. Depending on the hierarchical regression analyses that was performed, the following control variables have been entered: age, level of seniority (1 = very much junior, 2 = junior, 3 = medior, 4 = senior, 5 = very much senior), organizational level (1 = very low level, to 10 = very high level) or leadership (1 = no and 2 = yes). In step 2, each time two independent variables were entered. The individual difference variable *previous gender identification* was standardized and entered together with a standardized context variable. The context variables that were entered were sacrifices made for career improvement, discrimination, personal self-affirmation, social self-affirmation, male role model or mentor and female role model or mentor. In step 3, the interaction between previous gender identification and the context variable was entered. In the case of significant interaction effects these were subsequently investigated by calculating the means for low (-1 SD) and high identifiers (+1 SD), who scored low (-1 SD) or high (+1 SD) on the standardized context variable.

The dependent variables that were analyzed with hierarchical regression analyses were current gender identification with women, current gender identification with men, agentic leadership traits, communal leadership traits, own career commitment, male versus female employee career commitment, male employee versus own career commitment, own versus female employee career commitment, collective action, extreme individual mobility and mild individual mobility.

In the results section, we first reported the main effects of previous gender identification and the main effects of the control variables on each dependent variable individually. Then, for each context variable, the effects of previous gender identification, the context variable and the interaction on each dependent variable individually were reported.

*Main effects of previous gender identification*

*Current gender identification with women:* As expected, the more women identified with women at the start of their career, the more they identified with women at the moment of participation in this research. This was indicated by the significant main effect of previous gender identification with women on current gender identification with women ( $B = .54$ ,  $SE = .12$ ,  $F[2,91] = 20.62$ ,  $p < .001$ , semi-partial  $r^2 = .18$ ).

*Current gender identification with men:* The more women identified with their gender at the start of their career, the less they identified with men at the moment of participation in this research. This was indicated by the marginally significant main effect of previous gender identification with women on current gender identification with men ( $B = -.19$ ,  $SE = .11$ ,  $F[2,91] = 3.07$ ,  $p = .08$ , semi-partial  $r^2 = .03$ ).

*Agentic leadership traits:* Gender identification did not predict agentic leadership traits.

*Communal leadership traits:* There was no significant main effect of gender identification on communal leadership traits.

*Own career commitment:* Gender identification did not affect participants' career commitment.

*Male versus female employee career commitment:* A paired-samples t-test revealed that women reported their male colleagues ( $M = 5.40$ ,  $SD = .84$ ) as more committed to their careers than their female colleagues ( $M = 3.78$ ,  $SD = .76$ ,  $t[93] = 14.41$ ,  $p < .001$ ). This finding suggests that successful women were inclined to hold stereotypical views of the work

commitment of male and female employees. When analyzing the difference score between male and female employee career commitment we did not find a significant main effect of gender identification.

*Male employee versus own career commitment:* A paired-samples t-test revealed that women reported their own career commitment ( $M = 4.85, SD = .97$ ) as lower than their male colleagues' career commitment ( $M = 5.40, SD = .84, t[93] = 4.82, p < .001$ ). Gender identification did not affect the difference score between male employee and participant's career commitment.

*Own versus female employee career commitment:* A paired-samples t-test revealed that women reported their own career commitment ( $M = 4.85, SD = .97$ ) as higher than their female colleagues' career commitment ( $M = 3.78, SD = .76, t[93] = 9.25, p < .001$ ). This finding suggests that successful women perceived themselves as different from other women. Gender identification did not predict the difference score between participant's and female employee career commitment.

*Collective action:* As expected, the higher women's identification with other women at the start of their career, the more they reported a willingness to engage in collective action. This was indicated by the significant main effect of gender identification on willingness to engage in collective action ( $B = .41, SE = .11, F[1,92] = 14.04, p < .001, \text{semi-partial } r^2 = .13$ ). This is in line with the findings of Derks et al. (in press), who demonstrated that women who identified strongly with other women were more willing to strive for better group outcomes.

*Extreme individual mobility:* Gender identification did not affect extreme individual mobility ( $M = 2.76, SD = 1.26$ ).

*Mild individual mobility:* As expected, women who most likely were striving for individual mobility were those who did not identify strongly with other women. More

specifically, we found a significant main effect of gender identification on mild individual mobility ( $B = -.24$ ,  $SE = .12$ ,  $F[2,91] = 4.34$ ,  $p = .04$ , semi-partial  $r^2 = .04$ ), such that the higher women's identification with other women, the less willing women were to work on their own to increase their personal status and the more willing they were to work together as a group to increase their personal and group's status.

#### *Conclusion of previous gender identification*

As proposed, we found a main effect for level of identification. Women who had obtained individual success in an organization and behaved in a manner consistent with the queen bee syndrome were those women who did not identify strongly with their gender group to begin with (Hypothesis 1a). This was indicated by the finding, that low identified women strived for individual mobility instead of collective action.

Furthermore, our findings suggest that successful women were inclined to hold stereotypical views of the work commitment of male and female employees. More specifically, we analyzed the difference scores between male and female employee career commitment and between participant and female employee career commitment. It appeared that women reported themselves and male employees as more committed towards their career than female employees. This is in line with the findings of Ellemers et al. (2004), who showed that female professors were more inclined to think that female PhD-students were less career oriented than male PhD-students. This finding suggests that successful women perceived themselves as different from other women.

#### *Main effects of the control variables*

*Current gender identification with women:* The higher the level women were situated on in an organization, the higher women's current gender identification with women. This was indicated by the significant main effect of organizational level on current gender identification with women ( $B = .26$ ,  $SE = .13$ ,  $F[1,92] = 3.99$ ,  $p = .05$ , semi-partial  $r^2 = .04$ ).

*Current gender identification with men:* The higher the level women were situated on in an organization, the lower women's current gender identification with men. This was indicated by the significant main effect of organizational level on current gender identification with men ( $B = -.26, SE = .11, F[1,92] = 5.42, p = .02, \text{semi-partial } r^2 = .06$ ). When we take this finding together with the above mentioned finding of current gender identification with women, we may conclude that women who were situated on a high level in an organization felt a strong identification with other women and less identification with men.

*Agentic leadership traits:* Women reported possessing the agentic leadership traits (e.g., 'I am aggressive', 'I am determined') to a higher extent when they actually held a leadership position than when they did not. This was indicated by the significant main effect of leadership on agentic leadership traits ( $B = .21, SE = .06, F[1,92] = 11.82, p < .001, \text{semi-partial } r^2 = .12$ ).

*Communal leadership traits:* Women reported possessing the communal leadership traits (e.g., 'I am helpful', 'I am honest') to a higher extent when they actually held a leadership position than when they did not. This was indicated by the significant main effect of leadership on communal leadership traits ( $B = .16, SE = .07, F[1,92] = 5.67, p = .02, \text{semi-partial } r^2 = .06$ ). Overall, when you compare the results of agentic leadership traits with communal leadership traits, both were affected by the control variable leadership, such that women reported possessing both types of leadership traits to a higher extent when they actually held a leadership position than when they did not.

*Own career commitment:* Holding a leadership position coincided with high commitment towards one's career. More specifically, we found a significant main effect of leadership on own career commitment ( $B = .19, SE = .10, F[1,92] = 3.88, p = .05, \text{semi-partial } r^2 = .04$ ), such that the reported career commitment of women was higher when they actually held a leadership position than when they did not.

*Male versus female employee career commitment:* Analyzing the difference score between male and female employee career commitment revealed that women reported male employees as more committed towards their careers than female employees. Our results revealed that, the higher the level women were situated on in the organization, the more women reported male employees as more committed to their careers than female employees. This was indicated by the significant main effect of organizational level on male commitment versus female employee career commitment ( $B = .25$ ,  $SE = .11$ ,  $F[1,92] = 5.00$ ,  $p = .03$ , semi-partial  $r^2 = .05$ ).

*Male employee versus own career commitment:* A difference score between male employee and participant's career commitment indicated that women reported their own career commitment as lower than their male colleagues' career commitment. Our results revealed that, the older generation of successful women reported a larger difference in the commitment of male employees in comparison to their own career commitment. This was indicated by the significant main effect of age on male employee versus own career commitment ( $B = .27$ ,  $SE = .11$ ,  $F[1,92] = 6.52$ ,  $p = .01$ , semi-partial  $r^2 = .07$ ).

*Own versus female employee career commitment:* As mentioned earlier, women reported their own career commitment as higher than their female colleagues' career commitment. Our results revealed that, the older generation of successful women reported a smaller difference in their own career commitment in comparison to female employee career commitment. This was indicated by the significant main effect of age on own versus female employee career commitment ( $B = -.29$ ,  $SE = .11$ ,  $F[1,92] = 6.77$ ,  $p = .01$ , semi-partial  $r^2 = .07$ ).

*Collective action:* None of the control variables affected the willingness to engage in collective action.

*Extreme individual mobility:* The higher women's level of seniority in the organization, the lower their willingness to disidentify from their group in order to increase their personal status. This was indicated by the marginally significant effect of level of seniority on extreme individual mobility ( $B = -.21$ ,  $SE = .13$ ,  $F[1,92] = 2.74$ ,  $p = .10$ , semi-partial  $r^2 = .03$ ).

*Mild individual mobility:* The higher women's level of seniority in the organization, the more willing women were to work together as a group to increase their personal and group status instead of working on their own to increase their personal status. This was indicated by the significant main effect of level of seniority on mild individual mobility ( $B = -.33$ ,  $SE = .12$ ,  $F[1,92] = 8.00$ ,  $p = .01$ , semi-partial  $r^2 = .08$ ).

#### *Conclusion of the control variables*

We examined the effects of our control variables age, level of seniority, organizational level and leadership on our dependent variables. These effects revealed some interesting results.

For leadership we found that women holding a leadership position were highly committed towards their careers.

We found that level of seniority is positively related to the in-group helping behavior of successful women.

Age caused for a positive effect, namely that the older generation of successful women reported a smaller difference in their own career commitment in comparison to female employee career commitment. This is in contrast with the finding of Ellemers et al. (2004), who found that the older generation of female academics were more likely to emphasize the ways in which they are different from other women.

The findings concerning seniority and age support our prediction that female mentors are a fitting ‘instrument’ for reducing queen bee behavior. That is, it is the group of senior and older women who need to mentor the less senior and younger women.

Furthermore, our results revealed that not age, but organizational level determined whether successful women hold stereotypical expectations of women. That is, the higher the level women were situated on in the organization, the more women reported male employees as more committed to their careers than female employees. We may conclude from this that women who made it to a high organizational level within an organization will probably not serve as agents of social change.

This is an unfortunate finding, compared to the findings concerning seniority and age. A mentor that is situated on a high organizational level is in a good position to support talented women during their career path. According to this finding however, women in these positions will not be highly inclined to do so.

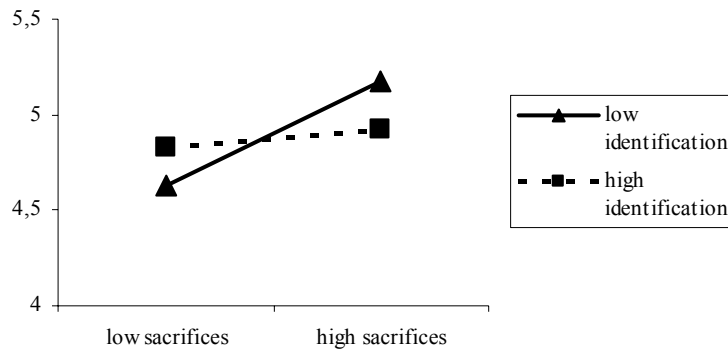
#### *Sacrifices made for career improvement*

*Current gender identification with women:* Apart from the aforementioned significant gender identification effect, we found no significant effect of sacrifices and there was no interaction effect on current gender identification with women.

*Current gender identification with men:* The only significant main effect we found on current gender identification with men was for gender identification.

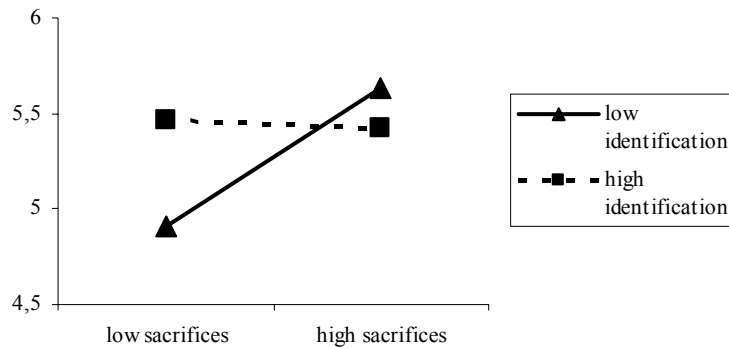
*Agentic leadership traits:* Making large sacrifices to improve one’s career led to a more masculine leadership style for low identifiers. More specifically, we found a significant interaction effect between gender identification and sacrifices ( $B = -.12$ ,  $SE = .06$ ,  $F[4,89] = 4.58$ ,  $p = .04$ , semi-partial  $r^2 = .04$ ). That is, as can be seen in Figure 1.1, high identifiers indicated possessing the agentic leadership traits to the same extent, regardless of the sacrifices they made to improve their career. However, low identifiers indicated possessing

the agentic leadership traits to a higher extent when they reported making large sacrifices than small sacrifices.



**Figure 1.1** - *The effect of making small and large sacrifices on possessing agentic leadership traits for participants with low (-1 SD) and high group identification (+1 SD).*

*Communal leadership traits:* Making large sacrifices to improve one's career led to a more feminine leadership style for low identifiers. More specifically, we found a significant interaction effect between gender identification and sacrifices ( $B = -.20$ ,  $SE = .06$ ,  $F[4,89] = 12.30$ ,  $p < .001$ , semi-partial  $r^2 = .11$ ). As can be seen in Figure 1.2, high identifiers indicated possessing the communal leadership traits to the same extent, regardless of the sacrifices they made to improve their career. However, low identifiers indicated possessing the communal leadership traits to a higher extent when they reported making large sacrifices than when they reported making small sacrifices. Overall, when comparing the results of agentic leadership traits with the results of communal leadership traits, low identifiers indicated possessing both types of leadership traits to a higher extent when they reported making large sacrifices than when they reported making small sacrifices.



**Figure 1.2** - *The effect of making small and large sacrifices on possessing communal leadership traits for participants with low (-1 SD) and high group identification (+1 SD).*

*Own career commitment:* We found no significant effect of sacrifices and there was no interaction effect on own career commitment.

*Male versus female employee career commitment:* There were no significant effects on male versus female employee career commitment.

*Male employee versus own career commitment:* We found no significant effect of sacrifices and there was no interaction effect on male employee versus own career commitment.

*Own versus female employee career commitment:* There was no significant effect of sacrifices and we found no interaction effect on own versus female employee career commitment.

*Collective action:* Apart from the significant main effect of gender identification already discussed, there were no other significant effects on the willingness to engage in collective action.

*Extreme individual mobility:* We found no significant effect of sacrifices and there was no interaction effect on the willingness to engage in extreme individual mobility.

*Mild individual mobility:* Apart from the significant main effect of gender identification already mentioned, there was no significant effect of sacrifices and there was no interaction effect on mild individual mobility.

#### *Conclusion sacrifices*

The number of sacrifices women made did not really impact upon one of the dependent variables. As far as our results for sacrifices go, we only found an effect of the amount of sacrifices women made on possessing agentic and communal leadership traits for low identifiers. That is, making large sacrifices to improve their career caused low identifiers to report possessing both agentic and communal leadership styles to a stronger extent.

#### *Discrimination*

*Current gender identification with women:* Apart from the previous discussed significant gender identification effect, we found no significant effect of discrimination and there was no interaction effect on current gender identification with women.

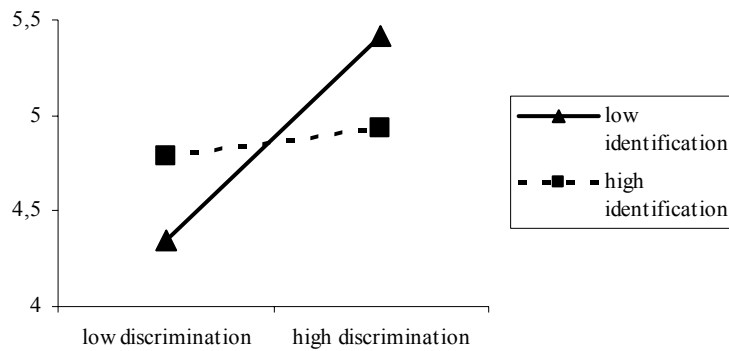
*Current gender identification with men:* Besides the gender identification effect already mentioned, there was also a marginally significant main effect for discrimination on current gender identification with men ( $B = .20$ ,  $SE = .11$ ,  $F[3,90] = 3.46$ ,  $p = .07$ , semi-partial  $r^2 = .03$ ), such that women's current gender identification with men was higher when they perceived discrimination towards women pursuing a career in the organizations they worked for. The interaction effect was not statistically reliable.

*Agentic leadership traits:* Women reported possessing the agentic leadership traits to a higher extent when they perceived discrimination towards women in the organizations they worked for. This was indicated by the significant main effect of discrimination on agentic leadership traits ( $B = .23$ ,  $SE = .06$ ,  $F[3,90] = 15.43$ ,  $p < .001$ , semi-partial  $r^2 = .13$ ). The above mentioned finding of current gender identification with men together with the finding of agentic leadership traits are in line with a finding by Ellemers (1993), who found that

women who survived in a male-dominated work environment described themselves in more masculine terms. We found no interaction effect on agentic leadership traits.

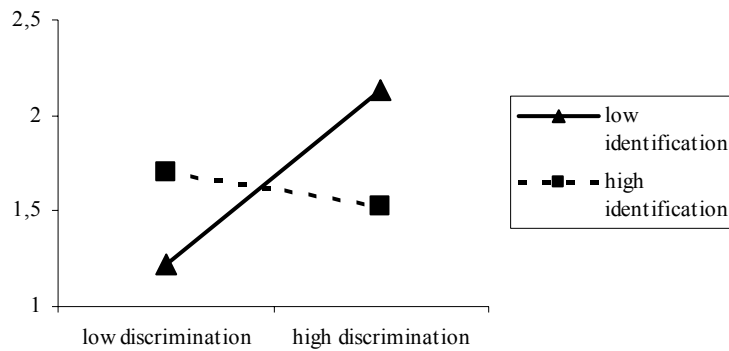
*Communal leadership traits:* Women reported possessing the communal leadership traits to a higher extent when they perceived gender discrimination during their careers. This was indicated by the significant main effect of discrimination on communal leadership traits ( $B = .15$ ,  $SE = .07$ ,  $F[3,90] = 5.35$ ,  $p = .02$ , semi-partial  $r^2 = .05$ ). There was no interaction effect on communal leadership traits. Overall, when you compare the results of agentic leadership traits with the results of communal leadership traits, women indicated possessing both types of leadership traits to a higher extent when they felt discriminated.

*Own career commitment:* Although there was no significant main effect of gender identification on own career commitment, we found an interaction effect between gender identification and discrimination ( $B = -.23$ ,  $SE = .09$ ,  $F[4,89] = 6.24$ ,  $p = .01$ , semi-partial  $r^2 = .06$ ). As can be seen in Figure 3.1, high identifiers showed similar commitment towards their career, regardless of whether they had perceived discrimination in the organizations they worked for. Low identifiers reported higher career commitment when they had experienced discrimination, than when they had not experienced discrimination. Moreover, whereas low discrimination led to higher career commitment amongst high identifiers than amongst low identifiers, high discrimination led to higher career commitment amongst low identifiers than amongst high identifiers.



**Figure 3.1** - *The effect of low and high discrimination on own career commitment for participants with low (-1 SD) and high group identification (+1 SD).*

*Male versus female employee career commitment:* As mentioned before, analyzing the difference score between male and female employee career commitment revealed that women reported male employees as more committed to their careers than female employees. The interaction effect between gender identification and discrimination towards women was statistically reliable ( $B = -.27$ ,  $SE = .11$ ,  $F[4,89] = 6.33$ ,  $p = .01$ , semi-partial  $r^2 = .06$ ). More specifically, as can be seen in Figure 3.2, high identifiers reported male employees to be somewhat more committed to their careers than female employees, regardless of whether they had perceived discrimination. Low identifiers reported male employees as more committed to their careers than female employees when they perceived discrimination. However, their reported difference in commitment of male employees in comparison to female employees became smaller after they had experienced less gender discrimination. Moreover, highly identified women reported a smaller difference in the commitment of male employees in comparison to female employees after they perceived discrimination, whereas low identified women reported a larger difference in the commitment of male employees in comparison to female employees in an organization that discriminated women,

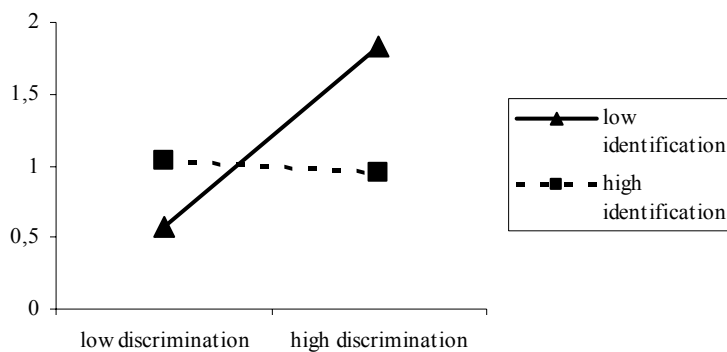


**Figure 3.2** - The effect of low and high discrimination on male versus female employee career commitment for participants with low ( $-1$  SD) and high group identification ( $+1$  SD).

*Male employee versus own career commitment:* We found no significant effect of discrimination and there was no interaction effect on male employee versus own career commitment.

*Own versus female employee career commitment:* In general, women reported their own career commitment as higher than their female colleagues' career commitment. Moreover, the interaction effect was significant between gender identification and discrimination towards women ( $B = -.33$ ,  $SE = .11$ ,  $F[4,89] = 9.74$ ,  $p < .001$ , semi-partial  $r^2 = .08$ ). Figure 3.3 shows that, high identifiers reported female employees to be somewhat less committed to their careers than they themselves were, regardless of whether they had perceived discrimination. Low identifiers reported female employees as less committed to their careers than they were themselves when they had perceived discrimination. However, their reported difference in commitment of female employees in comparison to their own career commitment became smaller after they had perceived less gender discrimination. Moreover, highly identified women reported a smaller difference in their own commitment in comparison to female employees' commitment after being discriminated, whereas low identified women reported a larger difference in their own commitment in comparison to

female employees' commitment after being discriminated. In accordance to our expectations, low identified women who perceived discrimination towards women felt a need to distance themselves from other women and as a result they reported themselves as more committed than other women.



**Figure 3.3** - The effect of low and high discrimination on own versus female employee career commitment for participants with low (-1 SD) and high group identification (+1 SD).

*Collective action:* Discrimination affected the willingness to engage in collective action ( $B = .27$ ,  $SE = .11$ ,  $F[2,91] = 5.84$ ,  $p = .02$ , semi-partial  $r^2 = .05$ ), in a way that women reported a higher willingness to engage in collective action when they had experienced discrimination. There was no significant interaction effect on the willingness to engage in collective action.

*Extreme individual mobility:* In accordance to our expectations, discrimination predicted the willingness to engage in extreme individual mobility ( $B = .41$ ,  $SE = .12$ ,  $F[3,90] = 10.72$ ,  $p < .001$ , semi-partial  $r^2 = .10$ ), in a way that women reported a higher willingness to disidentify from their group in order to increase their personal status when they experienced gender discrimination. So, contexts that devalued and stigmatized women led women to try to evade their association with the negative implications of membership in a low status group

(women), while they attempted to gain access into another group by striving for extreme individual mobility.

*Mild individual mobility:* Mild individual mobility was not predicted by discrimination towards women.

#### *Conclusion of discrimination*

In general, we may conclude that organizations that devalued and stigmatized women caused women to come into action. That is, both extreme individual mobility and collective action were heightened after women had perceived gender discrimination. Thus, on the one hand we found that being discriminated caused women to perform queen bee behavior, which is in line with Hypothesis 2a. However, on the other hand, the heightened willingness to engage in collective action was not in line with the prediction that women would be less inclined to help other women after being discriminated. Furthermore, we found evidence for Hypothesis 2b: perceiving discrimination led low identified women to endorse gender stereotypic views towards other women. That is, low identified women reported males as more committed towards their careers than females and they reported themselves as more committed towards their careers than females. This latter finding, is also in line with Hypothesis 2c. Our results showed that especially low identified women were more inclined to distance themselves from other women and less inclined to help other women compared to highly identified women after perceiving gender discrimination. Apart from the above mentioned negative effects of gender discrimination, there was also a positive effect of discrimination for low identifiers. Namely, when low identifiers perceived gender discrimination, their career commitment became larger.

### *Personal self-affirmation*

*Current gender identification with women:* Apart from the previous discussed significant gender identification effect, there were no other significant effects on current gender identification with women.

*Current gender identification with men:* Apart from the gender identification effect already mentioned, there was no significant effect of personal self-affirmation and there was no interaction effect on current gender identification with men.

*Agentic leadership traits:* Women reported possessing the agentic leadership traits to a lower extent when they experienced that they were valued as an individual. This was indicated by the marginally significant main effect of personal self-affirmation on agentic leadership traits ( $B = -.11$ ,  $SE = .06$ ,  $F[3,90] = 3.11$ ,  $p = .08$ , semi-partial  $r^2 = .03$ ). There was no interaction effect on agentic leadership traits.

*Communal leadership traits:* There were no significant effects on communal leadership traits.

*Own career commitment:* There was a significant interaction effect between gender identification and personal self-affirmation ( $B = .29$ ,  $SE = .09$ ,  $F[4,89] = 9.53$ ,  $p < .001$ , semi-partial  $r^2 = .09$ ). Figure 4.1 shows that, high identifiers reported higher commitment towards their career after personal self-affirmation and low identifiers reported lower commitment towards their career when their personal self had been affirmed. Moreover, whereas low personal self-affirmation leads to higher commitment amongst low identifiers than high identifiers, high personal self-affirmation leads to higher commitment amongst high identifiers than low identifiers. This finding is inconsistent with the findings of Derks et al. (in press) and with our expectations. We expected that offering women positive individual feedback would have enabled them to maintain their motivation to succeed in an organization.

Although high identifiers did benefit from positive individual feedback, low identifiers surprisingly did not. There was no interaction effect on own career commitment.



**Figure 4.1** - *The effect of low and high personal self-affirmation on own career commitment for participants with low (-1 SD) and high group identification (+1 SD).*

*Male versus female employee career commitment:* In general women reported their male colleagues as more committed to their careers than their female colleagues. Our results revealed that women’s reported difference between male employee career commitment in comparison to female employee career commitment became smaller after experiencing positive individual feedback. This was indicated by the significant main effect of personal self-affirmation on reported male versus female employee career commitment ( $B = -.22$ ,  $SE = .11$ ,  $F[3,90] = 3.82$ ,  $p = .05$ , semi-partial  $r^2 = .04$ ). This was not in line with our expectations. The interaction effect was not statistically reliable.

*Male employee versus own career commitment:* In general, women reported their own career commitment as lower than their male colleagues’ career commitment. The interaction effect between gender identification and personal self-affirmation was significant ( $B = .20$ ,  $SE = .11$ ,  $F[4,89] = 3.00$ ,  $p = .09$ , semi-partial  $r^2 = .03$ ). As can be seen in Figure 4.2, low identifiers reported male employees as a little bit more committed to their careers than they themselves were, regardless of whether their personal self had been affirmed or not. High

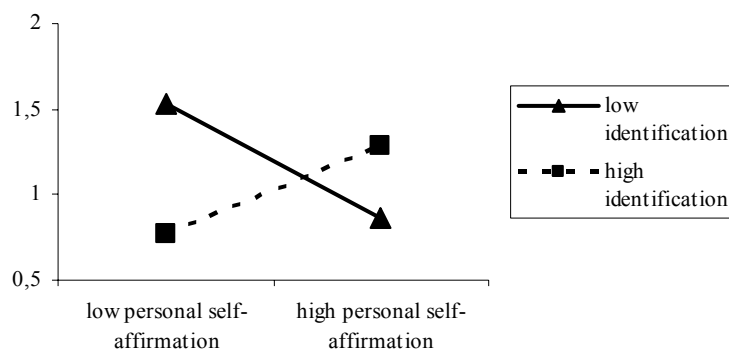
identifiers reported male employees as more committed to their careers than they themselves were when their personal self had not been affirmed. However, their reported difference in commitment of male employees in comparison to their own career commitment became smaller after their personal self had been affirmed by the organization. Moreover, whereas high identifiers reported a smaller difference in the commitment of male employees in comparison to their own career commitment in an organization that offered personal self-affirmation, low identifiers reported a larger difference in the commitment of male employees in comparison to their own career commitment in an organization that offered personal self-affirmation.



**Figure 4.2** - *The effect of low and high personal self-affirmation on male employee versus own career commitment for participants with low (-1 SD) and high group identification (+1 SD).*

*Own versus female employee career commitment:* The calculated difference score between own and female employee career commitment showed that women reported their own career commitment as higher than their female colleagues' career commitment. Moreover, there was a significant interaction effect between gender identification and personal self-affirmation ( $B = .31$ ,  $SE = .11$ ,  $F[4,89] = 8.06$ ,  $p < .001$ , semi-partial  $r^2 = .08$ , see Figure 4.3). High identifiers reported female employees as somewhat less committed to their

careers than they themselves were when their personal self had been affirmed. However, their reported difference in commitment of female employees in comparison to their own career commitment was smaller when their personal self had not been affirmed by the organization. In comparison, low identifiers reported female employees as less committed to their careers than they themselves were when their personal self had not been affirmed. Their reported difference in commitment of female employees in comparison to their own career commitment became smaller after their personal self had been affirmed. Moreover, whereas low identified women reported a smaller difference in their own commitment in comparison to female employees' commitment after positive individual feedback, highly identified women reported a larger difference in their own commitment in comparison to female employees' commitment after positive individual feedback.



**Figure 4.3** - *The effect of low and high personal self-affirmation on own versus female employee career commitment for participants with low (-1 SD) and high group identification (+1 SD).*

*Collective action:* Besides the gender identification effect already mentioned, there was also a significant main effect for personal self-affirmation on the willingness to engage in collective action ( $B = -.23$ ,  $SE = .11$ ,  $F[2,91] = 4.75$ ,  $p = .03$ , semi-partial  $r^2 = .04$ ). Women reported a lower willingness to engage in collective action when their personal self had been

affirmed by the organization. This finding was in line with our predictions. There was no significant interaction effect on the willingness to engage in collective action.

*Extreme individual mobility:* There were no significant effects on extreme individual mobility.

*Mild individual mobility:* Apart from the previous discussed significant gender identification effect, there were no significant effects on mild individual mobility.

#### *Conclusion of personal self-affirmation*

Personal self-affirmation was predicted to lead to a decreased willingness to engage in behavior that improves collective status and to an increased willingness to perform queen bee behavior (Hypothesis 2a). Moreover, we expected that emphasizing women's personal identity would cause women to endorse gender stereotypic views towards other women, instead of deferring negative stereotypes about their group (Hypothesis 2b). Apart from the finding that positive individual feedback decreased women's willingness to engage in collective action, our findings were not in line with our predictions.

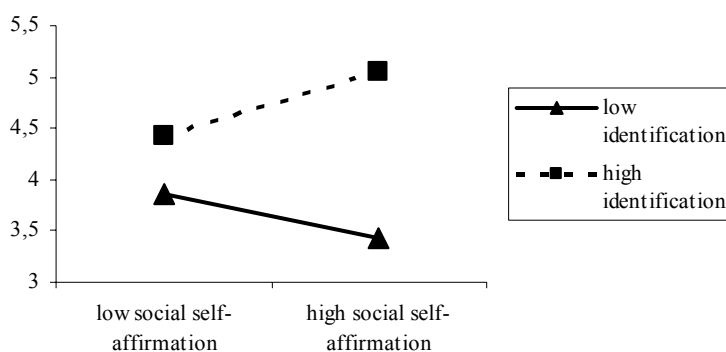
We thought that emphasizing women's personal identity would imply that these women were perceived to be different and better than other women. We also expected that this would lead women to perform queen bee behavior. However, our results showed that women's perceived difference between male and female career commitment became smaller after positive individual feedback from the organization. Furthermore, emphasizing women's personal identity caused low identified women to report a smaller difference in own versus female career commitment. These are both indications of a reduction in queen bee behavior.

We found an indication of an increase in queen bee behavior. Highly identified women reported a larger difference in own versus female career commitment after receiving positive individual feedback. However, the increase in reported difference is not that large. We think that the small rise in difference is due to the fact that offering highly identified women

positive individual feedback enabled them to become more positive about themselves. This resulted in a higher motivation to pursue a career.

### *Social self-affirmation*

*Current gender identification with women:* Apart from the significant gender identification effect already mentioned, we found a significant interaction effect between gender identification and social self-affirmation ( $B = .26$ ,  $SE = .12$ ,  $F[4,89] = 4.91$ ,  $p = .03$ , semi-partial  $r^2 = .04$ ). Figure 5.1 shows that, whereas low identifiers' current identification with women was lower after their social self had been affirmed, high identifiers' current identification with women was higher after social self-affirmation. Overall, high identifiers current identification with women was higher than low identifiers current identification with women. This is in line with our predictions. Offering social self-affirmation benefited highly identified women. As a result they identify even more with their group when they feel respected as women. However, low identifiers will suffer from an organization that offers them respect towards their female qualities. Low identified women prefer to be seen as individuals. As a result they identified even less with other women after social self-affirmation.



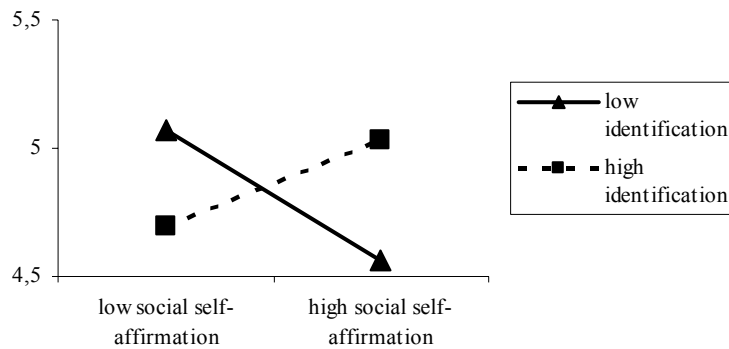
**Figure 5.1** - *The effect of low and high social self-affirmation on current gender identification with women for participants with low (-1 SD) and high group identification (+1 SD).*

*Current gender identification with men:* Apart from the gender identification effect already mentioned, there were no other significant effects on current gender identification with men.

*Agentic leadership traits:* Women reported possessing the agentic leadership traits to a lower extent when their social self had been affirmed. This was indicated by the significant main effect of social self-affirmation on agentic leadership traits ( $B = -.13$ ,  $SE = .06$ ,  $F[3,90] = 4.28$ ,  $p = .04$ , semi-partial  $r^2 = .01$ ). There was no interaction effect on agentic leadership traits.

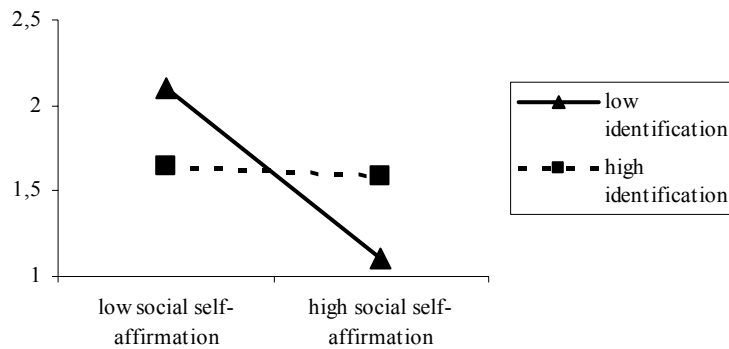
*Communal leadership traits:* There were no significant effects on communal leadership traits. The fact that social self-affirmation did affect agentic leadership traits, but did not affect communal leadership traits, indicated that women became less masculine overall after they were provided with positive feedback about their group.

*Own career commitment:* We found a significant interaction effect between gender identification and social self-affirmation ( $B = .21$ ,  $SE = .10$ ,  $F[4,89] = 4.42$ ,  $p = .04$ , semi-partial  $r^2 = .04$ ). More specifically, as can be seen in Figure 5.2, high identifiers reported higher commitment towards their career after social self-affirmation and low identifiers reported lower commitment towards their career when their social self had been affirmed. Moreover, whereas low social self-affirmation led to higher commitment amongst low identifiers than high identifiers, high social self-affirmation led to higher commitment amongst high identifiers than low identifiers. So, high identifiers benefited from social self-affirmation and low identifiers suffered.



**Figure 5.2** - *The effect of low and high social self-affirmation on own career commitment for participants with low (-1 SD) and high group identification (+1 SD).*

*Male versus female employee career commitment:* In general women reported their male colleagues as more committed to their careers than their female colleagues. Moreover, the interaction effect between gender identification and social self-affirmation was statistically reliable ( $B = .23$ ,  $SE = .11$ ,  $F[4,89] = 4.62$ ,  $p = .03$ , semi-partial  $r^2 = .04$ ). As can be seen in Figure 5.3, high identifiers reported male employees as somewhat more committed to their careers than female employees, regardless of whether their social self had been affirmed or not. Low identifiers reported male employees as more committed to their careers than female employees when their social self had not been affirmed. However, their reported difference in commitment of male employees in comparison to female employees became smaller after their social self had been affirmed by the organization. That is, low identifiers compared to high identifiers reported a smaller difference in the commitment of male employees in comparison to female employees in an organization that offered social self-affirmation. Thus, unexpectedly, communicating respect for women's qualities resulted in a positive effect for low identified women.



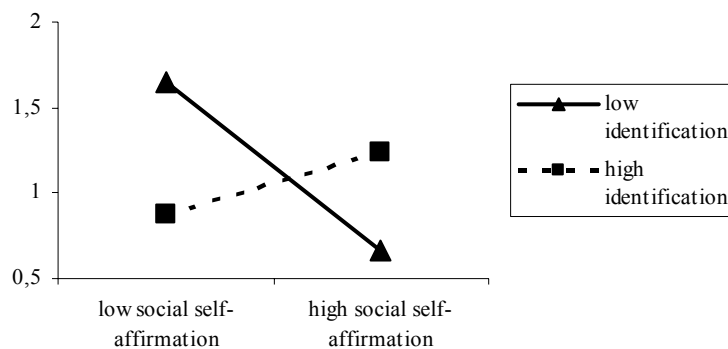
**Figure 5.3** - *The effect of low and high social self-affirmation on male versus female employee career commitment for participants with low (-1 SD) and high group identification (+1 SD).*

*Male employee versus own career commitment:* We found no significant effects on male employee versus own career commitment.

*Own versus female employee career commitment:* As discussed, women reported their own career commitment as higher than their female colleagues' career commitment.

Moreover, there was a significant interaction effect between gender identification and social self-affirmation ( $B = .34$ ,  $SE = .11$ ,  $F[4,89] = 9.29$ ,  $p < .001$ , semi-partial  $r^2 = .09$ ). Figure 5.4 shows that high identifiers reported female employees as somewhat less committed to their careers than they themselves were when their social self had been affirmed. Yet, their reported difference in commitment of female employees in comparison to their own career commitment was smaller when their social self had not been affirmed by the organization. In comparison, low identifiers reported female employees as less committed to their careers than they themselves were when their social self had not been affirmed. However, their reported difference in commitment of female employees in comparison to their own career commitment became smaller after their social self had been affirmed by the organization. Moreover, whereas low identified women reported a smaller difference in their own

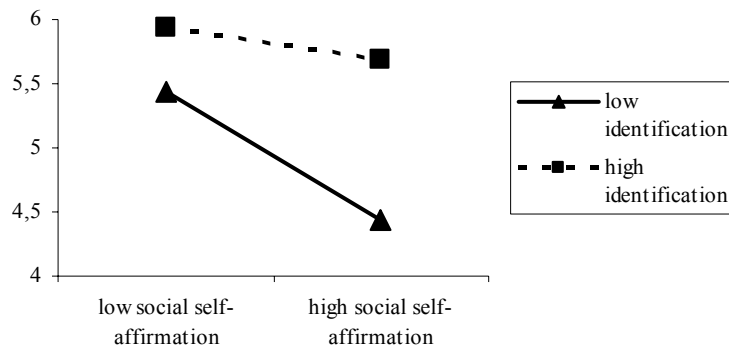
commitment in comparison to female employees' commitment when their social self had been affirmed, highly identified women reported a larger difference in their own commitment in comparison to female employees' commitment when their social self had been affirmed. These findings showed the same unexpected results for low identifiers as the above mentioned finding of male versus female employee career commitment.



**Figure 5.4** - *The effect of low and high social self-affirmation on own versus female employee career commitment for participants with low (-1 SD) and high group identification (+1 SD).*

*Collective action:* Apart from the gender identification effect already mentioned, there was a marginally significant interaction effect between gender identification and social self-affirmation ( $B = .18$ ,  $SE = .10$ ,  $F[3,90] = 3.10$ ,  $p = .08$ , semi-partial  $r^2 = .03$ ). More specifically, as can be seen in Figure 5.5, high identifiers demonstrated high willingness to engage in collective action, regardless of whether their social self had been affirmed or not. Low identifiers willingness to engage in collective action decreased after high social self-affirmation. That is, low identifiers willingness to engage in collective action dropped when their social self had been affirmed by the organizations they worked for. Overall, high identifiers willingness to engage in collective action was higher than the willingness of low

identifiers. This is in line with our predictions.



**Figure 5.5** - The effect of low and high social self-affirmation on collective action for participants with low (-1 SD) and high group identification (+1 SD).

*Extreme individual mobility:* There was no significant effect of social self-affirmation and there was no interaction effect on the willingness to engage in extreme individual mobility.

*Mild individual mobility:* Apart from the gender identification effect, we also found that social self-affirmation affected mild individual mobility ( $B = .28$ ,  $SE = .11$ ,  $F[3,90] = 6.15$ ,  $p = .02$ , semi-partial  $r^2 = .06$ ). The more the social self had been affirmed by the organizations women worked for, the higher women's willingness to work on their own to increase their personal status instead of together as a group. According to this finding it seems that women had chosen the self above the group, but this is not the case. Combined with the before mentioned finding of collective action, we can see that working for the self and the group goes side by side.

#### *Conclusion of social self-affirmation*

In sum, providing highly identified women with an opportunity to affirm their social identity increased their motivation to improve their personal outcomes as well as their willingness to engage in behavior that improved the position of the group as a whole

(Hypothesis 3a). However, treating low identified women as group members increased their tendency to perform queen bee behavior, because it posed a categorization threat to them (Hypothesis 3b). Rather unexpectedly, social self-affirmation did produce some positive effects for low identifiers. They reported a smaller difference between male and female career commitment and they reported a smaller difference between own and female commitment.

#### *Male role model or mentor*

*Current gender identification with women:* Apart from the gender identification effect already mentioned, there were no significant effects on current gender identification with women.

*Current gender identification with men:* Apart from the gender identification effect already mentioned, there were no significant effects on current gender identification with men.

*Agentic leadership traits:* Women reported possessing the agentic leadership traits to a higher extent when they had had a male role model or mentor during their career. This was indicated by the significant main effect of male role model and/or mentor on agentic leadership traits ( $B = .15$ ,  $SE = .06$ ,  $F[3,90] = 6.04$ ,  $p = .02$ , semi-partial  $r^2 = .06$ ). So having had a male mentor or role model during their career, caused women to take up a more masculine leadership style. There was no interaction effect on agentic leadership traits.

*Communal leadership traits:* There were no significant effects on communal leadership traits.

*Own career commitment:* Women reported more commitment towards their careers when they had had a male role model or mentor during their career. This was indicated by the significant main effect of male role model and/or mentor on women's career commitment ( $B = .28$ ,  $SE = .10$ ,  $F[3,90] = 8.35$ ,  $p < .001$ , semi-partial  $r^2 = .08$ ). So, having had a male role

model or mentor improved women's performance motivation within the organization. There was no interaction effect on own career commitment.

*Male versus female employee career commitment:* There were no significant effects on male versus female employee career commitment.

*Male employee versus own career commitment:* There was no significant effect of male role model or mentor and there was no interaction effect on male employee versus own career commitment.

*Own versus female employee career commitment:* There were no significant effects on own versus female employee career commitment.

*Collective action:* Apart from the gender identification effect already discussed, there were no other significant effects on the willingness to engage in collective action.

*Extreme individual mobility:* The willingness to engage in extreme individual mobility was not predicted by male role model or mentor and the interaction effect was not reliable.

*Mild individual mobility:* Apart from the previous discussed significant gender identification effect, there were no other significant effects on mild individual mobility.

#### *Conclusion of male role model or mentor*

Having had a male role model or mentor during their career resulted in two significant effects for successful women. Their career commitment was heightened and they described themselves in more masculine leadership terms.

#### *Female role model or mentor*

*Current gender identification with women:* Apart from the gender identification effect already mentioned, there was a significant effect of female role model and/or mentor on current gender identification with women ( $B = .28$ ,  $SE = .12$ ,  $F[3,90] = 5.88$ ,  $p = .03$ , semi-partial  $r^2 = .03$ ). Women's current gender identification with women was higher when they had had a female role model or a female mentor during their careers. Thus, when women were

provided with one-to-one support by a female mentor or when they had a female role model during their career, their identification with women in general was heightened. There was no interaction effect on current identification with women, which indicates that a female mentor is really beneficial for both low and high identifiers.

*Current gender identification with men:* Apart from the previous discussed significant gender identification effect on current gender identification with men, there were no other significant effects.

*Agentic leadership traits:* Agentic leadership traits were not predicted by female role model or mentor and there was no interaction effect on agentic leadership traits.

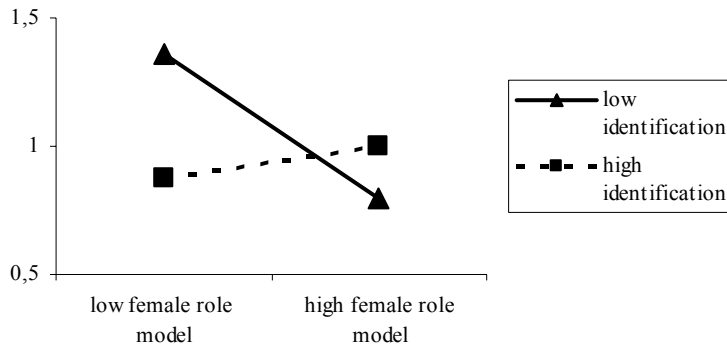
*Communal leadership traits:* There were no significant effects on communal leadership traits. In contrast with having had a male role model or mentor, which caused women to describe themselves in more masculine leadership traits, having had a female role model or mentor did not cause women to describe themselves in more feminine leadership traits.

*Own career commitment:* There was no significant effect of female role model or mentor and there was no interaction effect on own career commitment. In contrast with having had a male role model or mentor, which caused women to become more committed towards pursuing a career, having had a female role model or mentor did not showed such an effect.

*Male versus female employee career commitment:* There were no significant effects on male versus female employee career commitment.

*Male employee versus own career commitment:* Male employee versus own career commitment was not predicted by female role model or mentor and the interaction effect was not statistically reliable.

*Own versus female employee career commitment:* In general, women reported their own career commitment as higher than their female colleagues' career commitment. Moreover, the interaction between gender identification and female role model and/or mentor during their career was significant ( $B = -.21$ ,  $SE = .11$ ,  $F[4,89] = 3.45$ ,  $p = .07$ , semi-partial  $r^2 = .04$ ). As can be seen in Figure 6.1, high identifiers reported female employees as somewhat less committed to their careers than they themselves were, regardless of whether they had had a female role model or a female mentor during their career. Low identifiers reported female employees as less committed to their careers than they themselves were when they had not had a female role model or a female mentor during their career. However, their reported difference in commitment of female employees in comparison to their own career commitment became smaller after they had had a female role model or a female mentor during their career. Moreover, whereas low identified women reported a smaller difference in their own career commitment in comparison to female employees' career commitment when they had had a female role model or a female mentor during their career. Yet, highly identified women reported a somewhat larger difference in their own career commitment in comparison to female employees' career commitment when they had had a female role model or a female mentor during their career.



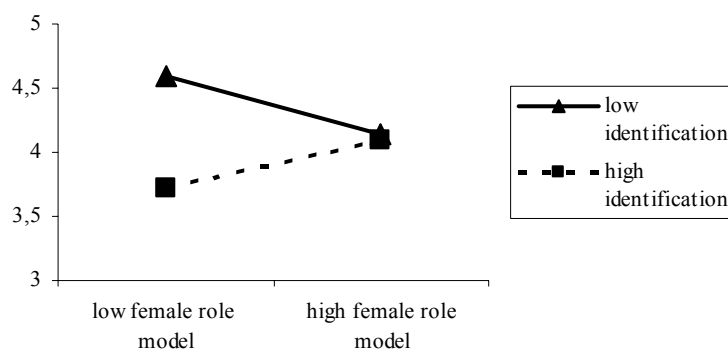
**Figure 6.1** - The effect of having a female role model or mentor (low versus high) on own versus female employee career commitment for participants with low (-1 SD) and high group identification (+1 SD).

*Collective action:* Apart from the gender identification effect already mentioned, there were no other effects on the willingness to engage in collective action.

*Extreme individual mobility:* Women reported a lower willingness to disidentify from their group in order to increase personal status when they had had a female role model or a female mentor during their career. This was indicated by the significant main effect of female role model and/or mentor on extreme individual mobility ( $B = -.23$ ,  $SE = .13$ ,  $F[3,90] = 3.07$ ,  $p = .08$ , semi-partial  $r^2 = .03$ ). Thus, women benefited from having a female role model or female mentor during their career. It helped them to gain confidence that moving forward in an organization without disidentifying from your group is possible. There was no significant interaction effect on the willingness to engage in extreme individual mobility.

*Mild individual mobility:* Apart from the gender identification effect already mentioned, we found a significant interaction effect between gender identification and female role model and/or mentor during their career ( $B = .23$ ,  $SE = .11$ ,  $F[4,89] = 4.06$ ,  $p = .05$ , semi-partial  $r^2 = .04$ ). More specifically, as can be seen in Figure 6.2, high identifiers demonstrated higher willingness to work individually to increase their personal status when they had had a

female role model or a female mentor during their career. Low identifiers willingness to work individually to increase their personal status decreased when they had had a female role model or a female mentor during their career. This indicates that the presence of a female role model or mentor during the career of low identifiers made them more willing to work as a group to increase their personal status. The presence of a female role model or mentor during the career of high identifiers made them more willing to work on their own to increase their personal status, but without losing their willingness to work for their group. Thus, when women were provided with one-to-one support by a female mentor or when they had a female role model this resulted for both high and low identified women in a willingness to improve both personal status and group status within the organization.



**Figure 6.2** - *The effect of having a female role model or mentor (low versus high) on individual mobility for participants with low (-1 SD) and high group identification (+1 SD).*

#### *Conclusion of female role model or mentor*

As hypothesized, female mentoring reduced queen bee behavior for both low and high identifiers (Hypothesis 4). More specifically, both low and high identifiers benefited from having an inspiring female role model or female mentor, in a way that it created positive group awareness for both. Low identified women perceived that being a woman does not necessarily stand in your way to become successful in your career. Highly identified women

perceived that being a woman is appreciated. Overall, having had a female role model or mentor heightened women's identification with other women, it lowered their willingness to engage in extreme individual mobility, they perceived women as more committed towards their career and they started to work for personal and group success within the organization.

## Discussion

The goal of this study was to demonstrate the presence of the queen bee effect in organizations in the Netherlands and to get insight in the personal and contextual factors that can bring about queen bee behavior in organizations. More specifically, we questioned why on the one hand some successful women fail to support other women and sometimes even work against them and why on the other hand other successful women lend a hand to help other women succeed in their careers. Different hypotheses were introduced to explain why successful women, situated in high positions, sometimes pull up the ladder behind them. In general, we expected that whether women failed to support other women or helped other women to succeed is determined by individual differences between women (e.g., level of group identification) and by the organizations in which women climbed up the ladder (e.g., whether women were discriminated or not, treated as individuals or group members and provided with a female mentor or not).

Our research showed that the level of group identification is in fact the key factor that determines queen bee behavior. The lower women are identified with other women, the more they are inclined to perform queen bee behavior. The extent to which women performed queen bee behavior was furthermore determined by three variables: the experience of discrimination, the experience of respect for their social identity and the extent to which they had a female mentor. In the following sections we will explain how exactly these variables were interlinked.

### *Individual difference variables*

The main criterion for queen bee behavior lay in the individual differences between women. In this research, these differences were explored by investigating women's level of identification with other women at the start of their careers. Our research showed that it is safe to say that queen bee behavior does exist. In comparison to highly identified women, low identified women strived mostly for personal success only. Moreover, they reported other women as being less committed than they themselves and males were.

In accordance with our expectations, we found that women who behaved in a manner consistent with the queen bee syndrome were those women who did not identify strongly with their gender group to begin with. More specifically, our results showed that low identified women improved their personal status within organizations by striving for personal success (individual mobility), without striving for status improvement of women in general (collective action). Thus, compared to high identifiers, low identifiers who perceived themselves as individuals instead of group members, worked for their personal success, thereby feeling less obligation to make the climb any easier for other women by lending them a hand.

Furthermore, our findings showed that when low identified women became successful in their careers, they came to hold more stereotypical views of other women. Low identified women reported female employees as less committed towards their careers than they reported themselves and male employees. Regardless of whether or not these low identified women were accurate, these perceptions could be very harmful to the career opportunities of women who also want to climb up the organizational ladder. That is, often these negative evaluations are not recognized as a form of gender discrimination by organizations. Sadly, this legitimizes the inferior standing of other, less successful women. This can stand in the way of social change.

### *Contextual influences*

The organizations in which women wanted to build a successful career influenced the level of identification with other women and therefore also the extent to which women performed queen bee behavior. We will firstly discuss the negative contextual influences (gender discrimination) and secondly the positive contextual influences (social identity protection and female mentoring).

### *Negative contextual influences*

We investigated the impact of gender discrimination within organizations in order to gain a deeper understanding of the circumstances under which women came to hold stereotypical expectations of women and started to perform queen bee behavior. In this thesis we advanced the theoretical argument that people's own career experiences (which to a great extent are determined by the organizational context), career efforts and the way they relate to their group are crucial determinants of the way people view others around them. In line with this, we found evidence in this research that queen bee behavior can be brought about by the context. Low identifiers, who experienced that the organization they worked for held negative stereotypes about women and typical female qualities, felt a need to distance themselves from other women. As a result they started to stereotype other women and perform queen bee behavior.

In accordance with our expectations, we found that perceiving discrimination towards women did not really affect high identifiers. High identifiers remained loyal to their group and they strived for collective action. However, experiencing discrimination did affect low identifiers in a strong way. They overcame this discrimination by evading association with their gender group. They did this by striving for personal status improvement and also they became more committed towards their careers.

Moreover, in order to be successful, low identified women wanted to show that they were unlike other women. Our results showed that low identified women reported a stronger identification with men after being discriminated for being a woman. Thus, low identified women overcame the negative evaluations of women by perceiving themselves as non-prototypical women. This was supported by another finding of this research. Low identified women reported a larger difference in the commitment of themselves and male employees in comparison to female employees in an organization that discriminated women.

*Positive contextual influences: Social identity protection*

To bring about change and to make women more willing to work for their own and group success within organizations, women should no longer feel the need to distance themselves from their gender group in order to become successful. We expected that this could be achieved when organizations explicitly communicated respect and value for group characteristics that are important to women (e.g., women's acclaimed social skills) and when they respected women's social identity. This means that organizations have the power to reduce the existence of queen bee behavior within their organizations. By using this so called social identity protection women would remain positive towards their group. More specifically, we expected that high identified women would benefit from social identity protection and low identifiers would suffer from it.

Our research showed that, offering social identity protection enabled highly identified women to deal with social identity threat. Moreover, our results revealed that it improved their performance motivation within organizations, it increased their concern for the devalued group status of women and thereby their willingness to work collectively towards the improvement of women's success. Thus, highly identified women remain concerned with the status of other women and perform less queen bee behavior when they feel that their social identity is protected and respected by the organization they work for.

Conversely, our results showed that low identified women did not benefit from an organization that provided them with respect towards their female qualities, because they preferred to be seen as individuals. Communicating respect towards their female qualities implied that they were seen as group members, which threatened their personal identity. As a result they started to behave in a manner consistent with the queen bee syndrome. More specifically, we found that low identifiers' willingness to work for own personal success increased and their willingness to work for group success dropped when the focus within organizations had been on valuing female qualities.

*Positive contextual influences: Mentoring*

One of the most interesting findings of this investigation was the positive impact that a female role model and/or mentor had on women's willingness to work for personal and group success within the organizations. Our results revealed that it were the female role models and mentors who on the one hand inspired highly identified women to take on a challenge and work for personal success. On the other hand they reassured low identified women that they did not have to disidentify from the group in order to become successful. Moreover, our findings demonstrated that the presence of a female role model or mentor during their careers made low identified women more willing to work as a group to increase their personal and group status. Also, it made highly identified women more willing to work individually to increase their personal status. This last finding may seem somewhat incompatible with previous findings that highly identified women overall have chosen collective action above individual mobility. It is therefore important to also mention that highly identified women's willingness to work individually to increase personal status did not exceed their willingness to strive for better group outcomes or that it cannibalized on this willingness. Being provided with the one-to-one support of a female mentor ensured women

that personal status improvement and group status improvement of women can be pursued side by side.

### *Practical implications*

We think that organizations have the power to set in motion a flywheel by offering social identity protection and mentor relationships. When talented women are provided with social identity protection and a mentor, they will work for personal status improvement, they will remain concerned with the welfare of the group, they are less likely to undermine collective action within their group and they are more likely to serve as role models for other members of their group themselves once they have reached the top. This is good news. The even better news is that this works for both highly and low identified women.

Our investigation showed that offering women opportunities to protect their personal and social identity might be the most effective way to social equality at the top. In order for women to be in the position to strive for better personal and group outcomes, they must perceive the organization they work for as valuing and respecting them individually and as women. By acknowledging and valuing the positive characteristics of women, highly identified women are able to remain identified with their gender group. Low identified women, however, are more likely to benefit from a female mentor.

The results of this research revealed that having had a female role model or mentor affected the degree to which women were willing to work for personal and group success within organizations. As explained before, mentoring can work on two levels: on a career development and a psychosocial level. The career development level includes sponsorship, exposure and visibility, coaching, protection and challenging assignments. The psychosocial level, on the other hand, includes acceptance and conformation, counseling, friendship and role modeling (Kram, 1985). Because mentoring works on an individual level, it can provide women who are heading for the top with custom-made support. Our research also showed that

having had a male role model or mentor had positive effects on the work commitment of women. Therefore, we recommend organizations to provide women with the possibility of building a mentor relationship with a senior and experienced woman during their career to help them advance to higher levels in the organization. In this research female mentors have shown to give women the confidence to keep on going until they reach their top, without disidentifying from their gender group. Female mentors ensure that improvement of personal status of women and the concern for the welfare of other women exist side by side.

In short, organizations must provide women with social identity protection and mentoring. For this approach to be successful, two issues must be taken into account.

Firstly, a sole focus on individual mobility will improve women's individual status within the organization, but it will not result in the expected improvement of the status of women in general. At present however, organizations often present individual mobility as the ultimate solution to equal opportunities for members of low status groups, such as women. As shown in this research, this will not have the desired effect. Therefore it is important to make organizations aware of these consequences. The importance of offering women social identity protection (e.g., by valuing positive characteristics of their group) and a female mentor as a key component in the wellbeing, motivation and helping behavior of members of low status groups must be explained in organizations.

Secondly, actions to be taken by the organization to dissolve gender imbalance must not be implemented and presented to their employees as a way to improve gender balance within organizations. Because if organizations propagate gender-balancing initiatives, such as social identity protection or mentoring, as a way to solve the gender imbalance within the organization, it will not create value for low identifiers. It must be presented to low identifiers as an investment in their careers designed to achieve career improvement for both men and women within the organization.

### *Unexpected findings*

Interestingly, although our results of social identity protection replicated the findings of Derks et al. (2007b, in press), our investigations distinguished in the effects that personal self-affirmation brought forward. In line with earlier findings of Derks et al. (2007b, in press), we expected that for both low and highly identified women offering positive feedback about themselves would decrease their willingness to improve the status of other women and increase their tendencies to perform queen bee behavior. This was expected, because offering individual feedback will steer women away from concerning about the welfare of their group.

Our findings showed that, women's willingness to engage in collective action dropped when they were appreciated as individuals. Surprisingly, it also made low identified women view other women in a more gentle way. Differences in the reported career commitment of other women in comparison to their own and male employee career commitment were smaller after receiving individual feedback. Furthermore, we found that offering positive individual feedback enabled highly identified women to focus on self-improvement. But, they also maintained their concern with the welfare of other women in the organization. Taken together, our findings indicated that women's willingness to perform queen bee behavior became smaller after they received individual feedback from the organizations they worked for.

A possible explanation for this outcome is that investigating queen bee behavior in an experimental setting (Derks et al., 2007b, in press) is different from a real world setting. In an experimental setting, participants were placed into two separate conditions. In one condition participants were offered individual feedback and in the other condition they were offered social identity protection. Because in the conditioned experiments personal and social identity protection did not go side by side (i.e. were not given at the same time to the same person), possibly some negative effects were found for individual feedback on the welfare of women. We propose that in the real world, like our organizations, clues that potentially protect

personal as well as social identity co-exist. Therefore, we found positive effects for both personal and social identity protection.

#### *Limitations and suggestions for future research*

One limitation of this research is that it is based on data retrieved from online questionnaires that were filled out at one moment in time. In the questionnaire, however, we asked participants to think about their gender identification at the start of their careers and at the moment of filling in the questionnaire. Measuring gender identification with women at two moments in time allowed us to assess the change in level of gender identification with women over time. In other words, we asked women to think back at the start of their career, instead of actually measuring their gender identification at the start of their career. Therefore we can not be sure how reliable these data are. An idea for future research is to design a longitudinal study, which observes women from the start of their career until a certain point in time when they are holding a high position in an organization. In this way, one can really get insight in all the factors that are possibly underlying the imbalance of women at the top.

Another idea for future research is to design a mentoring program within organizations to get insight in the different effects of a mentoring relationship. Following women during their careers while they are situated in a mentoring program will give insight in the factors needed to help women to develop their career path, hopefully all the way to the top.

#### *Conclusion*

In this research we were able to demonstrate the existence of queen bee behavior in organizations in the Netherlands. We demonstrated that queen bee behavior is jointly determined by individual differences between women and by the organizations in which they climb up the ladder. The results showed that when low identified women perceived that the organization they worked for held negative stereotypes about women, they felt a need to

distance themselves from other women. As a result they started to stereotype other women and perform queen bee behavior. We established that among highly identified women, social identity protection and valuing typical female characteristics enabled these women to deal with social identity threat. As a result they worked for personal and group status improvement.

This research highlights the important benefits of providing women with mentor relationships. That is, female mentors ensured both highly and low identified women that personal status improvement and status improvement of women in general can be pursued side by side. Thus, female mentoring, besides playing a key role in getting women the sponsorship and visibility they need for career advancement, helps to prevent queen bee behavior. The power to reduce queen bee behavior therefore lies within the grasp of organizations. To make the road to the top passable for all women, organizations should reduce gender discrimination and they must provide women with social identity protection, with respect for their female qualities and with female mentoring relationships. In that way women can and will collectively fight social inequality at the top.

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