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Gender, gender identification and perceived gender discrimination: An examination of mediating processes in China

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Gender, gender identification and perceived gender discrimination

An examination of mediating processes in China

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Abstract

Purpose – The purpose of this paper is to examine the effects of gender and strength of gender identification on employees' perception of gender discrimination. It also explores whether gender comparison and perceived gender bias against women act as mediators in the above relationships. It aims to advance the understanding of the processes leading to individual's perception of gender discrimination in the Chinese workplace.

Design/methodology/approach – Data were collected from 362 workers via an employee survey in three large companies in China. The human resource staff helped us to distribute a self-administered questionnaire to the employees, and the authors assured them of confidentiality and protected their anonymity. To test the hypotheses, the authors employed structural equation modeling. The authors first conducted confirmatory factor analysis on the measurement model, and then the authors estimated three nested structural models to test the mediating hypotheses.

Findings – The results reveal that gender and strength of gender identification are related to perceived gender discrimination. The authors further found that gender comparison and perceived gender bias against women partially mediated the relationship between gender and perceived gender discrimination, while gender comparison fully mediated the relationship between strength of gender identification and perceived gender discrimination.

Practical implications – The study helps managers understand why and how their subordinates form perceptions of gender discrimination. Given the findings, they should be aware of the importance of gender identity, gender comparison, and gender bias in organizational practices in affecting such perceptions.

Originality/value – This study is the first exploration of the complex relationships among gender, gender identification, gender comparison, perceived gender bias against women, and perceived gender discrimination. It shows the salient role of gender comparison and gender bias against women in shaping employees' perceptions of gender discrimination, apart from the direct effects of gender and strength of gender identification.

Keywords Chinese employees, Gender bias, Gender comparison, Gender identification, Perceived gender discrimination

Paper type Research paper



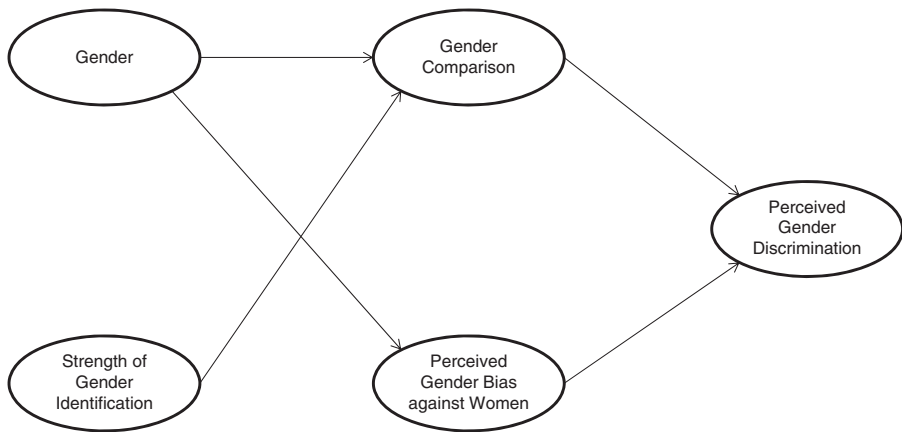
Introduction

Gender discrimination has long been an important issue in organizations. Individuals often report in survey responses that they perceive discrimination based on their gender in the workplace (Ensher *et al.*, 2001; Gutek *et al.*, 1996; Walker and Smith, 2002). Such perceptions are associated with lower feelings of power and prestige on the job, more work conflict (Gutek *et al.*, 1996), low self-esteem, increased depression, and anxiety (Foster, 2000; Kobrynowicz and Branscombe, 1997), perceptions of disempowerment (Foster *et al.*, 2004), low-job satisfaction and organizational commitment, and greater intentions to leave the organization (Foley *et al.*, 2005, 2006). Many countries have laws in place that prohibit discrimination on the basis of gender. China, for example, has a long history of anti-discrimination legislation, with its first constitution in 1954 that provided men and women with equal rights in employment. However, along with the economic reforms and the rapid expansion of the Chinese economy, traditional patriarchal values, and gender stereotypes have resurfaced (Cao and Hu, 2007). In particular, marketization and the profit motive have created incentives for firms to implement some discriminatory policies in employment, including recruitment, promotion, compensation, and retirement regulations. Female employees encounter various obstacles and experience disadvantages that hinder their career advancement (Cooke and Xiao, 2014). There is strong evidence that gender discrimination is a serious problem in the Chinese workplace (Attané, 2012; Peng *et al.*, 2009; Shaffer *et al.*, 2000; Woodhams *et al.*, 2009). Given the paucity of research, it is important to investigate the main factors that affect the perception of gender discrimination among Chinese workers.

As revealed in previous research, women perceive more gender-based personal discrimination in the workplace than men (Gutek *et al.*, 1996; Shaffer *et al.*, 2000). A positive association between strength of gender identification and perceived gender discrimination has been well documented (Ellemers, 2002; Foley *et al.*, 2006; Foster, 1999; Hodson and Esses, 2002; Wright and Tropp, 2002). In general, high-gender group identifiers are likely to perceive gender discrimination directed toward them at work (Foley *et al.*, 2006). Based on social identity theory and social comparison theory, we suggest that two different mechanisms may underlie the above relationships. The first is gender comparison, represented by the extent to which an individual compares men and women in the workplace in terms of pay, opportunities, rewards, treatment, worth, and status. The other is perceived gender bias against women, referring to an individual's perception of unfavorable treatment toward female employees in the organization. Men, as well as women, may perceive gender bias against the female employees in an organization (Foley *et al.*, 2006). These two mechanisms are expected to increase an individual's sensitivity to gender inequity and discrimination, and hence illuminate how gender and gender identification are related to perceived gender discrimination.

In the present study, we first evaluate the direct effects of gender and strength of gender identification on individuals' perceptions of gender discrimination. We then explore whether gender comparison and perceived bias against women act as mediators in these relationships. Figure 1 shows our conceptual model. Several hypotheses are developed and tested with a data set collected from 362 employees in three organizations in China. By investigating the mediating mechanisms that link gender and gender identification with perceived gender discrimination, our study attempts to fill a research niche. It further broadens our understanding of the roles that gender identification, gender comparison, and gender bias play in the

Figure 1.
Conceptual model



lives of working women and men in contemporary China. Lastly, the findings of our study will also provide some practical implications to reduce workplace discrimination against women.

Perceived gender discrimination

Perceived discrimination represents an individual's perception that selective and differential treatment is occurring to him/her personally because of the individual's group membership (Mirage, 1994; Sanchez and Brock, 1996). Discrimination places people at a disadvantage solely on the basis of their social category such as gender and race (Taylor *et al.*, 1994). In this study, we conceptualize perceived gender discrimination as an individual's belief that he/she is personally limited or held back in the workplace based on his or her gender. This is different from an individual's actual experience of gender discrimination. As argued by Banerjee (2008), the perceptions of discriminatory treatment could be as important as actual inequality for employees. Foley *et al.* (2002) noted that, when individuals perceive that discrimination exists, they may adjust their work-related attitudes accordingly, regardless of the reality of the situation. Shaffer *et al.* (2000) reported some adverse work-related outcomes (e.g. lower job satisfaction and affective commitment, and higher turnover intentions) were associated with women's perceptions of gender discrimination at work.

Although both men and women can perceive discrimination based on their gender (Cameron, 2001; Gutek *et al.*, 1996), discrimination is a more negative experience for women than it is for men (Foster *et al.*, 2004; Schmitt and Branscombe, 2002; Schmitt *et al.*, 2003). From a social identity perspective, the position of one's in-group in the social structure is an important determinant of perceptions of discrimination (Cameron, 2001; Iyer and Ryan, 2009; Schmitt *et al.*, 2003), and women are often members of the disadvantaged gender group. Evidence shows that women often receive less favorable treatment in their employing organization (Gutek *et al.*, 1996; Miller and Meloy, 2000). Gender often leads to differential and unjustified outcomes in rewards, resources, and opportunities (Schmitt *et al.*, 2003; Williams and O'Reilly, 1998). Such a situation is also found in China where working women experienced various disadvantages compared to men, and they perceived serious discrimination against them in the workplace (Attané, 2012; Ngo, 2002; Peng *et al.*, 2009; Shaffer *et al.*, 2000).

Gender identity

Tajfel (1974, p. 69) defined social identity as “that part of an individual’s self-concept which derives from his knowledge of his membership in a social group (or groups) together with the emotional significance attached to that membership.” Social identity theory posits that people tend to classify themselves and others into various social categories (Tajfel and Turner, 1986). Social identification refers to the process by which we define ourselves in terms and categories that we share with other people (Deaux, 2001), and through this process, an identity is formed (Stets and Burke, 2000).

Traditional notions of gender identity generally refer to an early awareness of oneself as male or female (Deaux and Stewart, 2001). More recently, the notion of gender as a social/collective identity (or gender-derived social identity) has emerged (Cameron and Lalonde, 2001; Deaux, 2001; Foley *et al.*, 2006). Individuals may differ in the extent to which they identify with a group to which they belong (McCoy and Major, 2003; Tajfel and Turner, 1979), including their gender group. The strength of gender identification refers to the extent to which individuals acknowledge that they identify with other members of their gender group and that their gender is an important reflection of who they are.

A growing body of research shows that individual’s identification has important implications for his or her attitudes and behaviors (Deaux, 2001; Schmitt *et al.*, 2003). In particular, a positive relationship between gender identification and perceived gender discrimination has been found (e.g. Branscombe *et al.*, 1999; Ellemers, 2002; Foley *et al.*, 2006; Foster, 1999; Hodson and Esses, 2002; Tropp and Wright, 1999). According to Schmitt *et al.* (2003), perceptions of discrimination require recognizing that social categories and the group-based nature of social outcomes matter. Tajfel (1974) pointed out that group membership acquires most of its meaning in comparison with other groups. It follows that social comparisons would play a crucial role in linking gender identification with perceptions of gender discrimination.

Gender comparison

Hogg (2000) suggested that there has been a lack of systematic study by social identity theorists of social comparison processes, even though social comparisons underpin social identity phenomena. Social comparison theory postulates that individuals have a drive to evaluate their own opinions and abilities, and then compare themselves with similar others in order to obtain self-information (Festinger, 1954). In the present study, we conceptualize gender comparison as comparisons made by individuals with out-group (i.e. cross-sex) others by asking respondents how frequently they compare men and women in the workplace. Arguably, the outcomes of gender comparison would have a significant impact on the formation of individual’s perceptions and attitudes. Previous research indicated that cross-sex comparison information influences employees’ perceived performance, pay entitlement, and pay satisfaction (Bylsma and Major, 1994).

Major *et al.* (2002) pointed out that gender discrimination can be viewed as a group-based phenomenon, and in order to perceive discrimination, a social comparison has to be made. Through gender comparison, individuals obtain important information and construct their reality regarding the relative treatment of men and women received in their employing organization. Besides, they become more aware of the relative status and position of the gender groups in the workplace. As long as individuals attribute the systematic disadvantages to their membership of the gender group, it would trigger their perceptions of gender discrimination.

Hypotheses development

It is well established in the literature that women perceive gender discrimination in the workplace (Branscombe, 1998; Schmitt *et al.*, 2002). As compared to men, women reported significantly more past experience with gender discrimination, greater in-group disadvantage, and more attributions to gender discrimination across contexts (Schmitt *et al.*, 2002; Shaffer *et al.*, 2000). Considerable and overt discrimination against women is evident in China, despite the existence of long standing anti-discrimination legislation. For example, in a study of recruitment advertisements, Woodhams *et al.* (2009) reported that Chinese employers frequently discriminate, directly and indirectly, on gender grounds. Shaffer *et al.* (2000) also found that gender is often used as a criterion for job-related decisions in China, and women generally suffered from various disadvantages at work. In addition, Peng *et al.* (2009) noted that female employees in Beijing perceive more gender discrimination and are assigned to less challenging tasks than their male colleagues. In China, women have reported unfair dismissal due to pregnancy, absence of promotions due to gender, and a lower salary than men for doing the same job (Attané, 2012; Ngo, 2002). Under such circumstances, Chinese women are likely to perceive the presence of gender discrimination in the workplace. We thus develop the following hypothesis:

H1. Women perceive more gender discrimination than men do.

Identification with a group can have a strong impact on an individual's affect and behavior (Ashforth and Mael, 1989; Jenkins, 2004). Social identity theory predicts that perceived gender discrimination would be positively impacted by strength of identification with one's gender group (Branscombe *et al.*, 1999; Hodson and Esses, 2002; Schmitt *et al.*, 2002; Tropp and Wright, 1999). As revealed in previous research, gender identification is positively related to perceived gender discrimination (Cameron, 2001; Foley *et al.*, 2006). An awareness of group-level (both identity and material) interests should make instances of group-based discrimination more relevant to the individual, even if he/she is not directly affected by it (Iyer and Ryan, 2009).

Both women and men can identify with their gender group, and in turn, both can perceive gender discrimination based on their gender identification. For women, as members of a disadvantaged gender group, the perception of gender discrimination is consistent with the maintenance of a positive group identity (Tajfel and Turner, 1979). According to social identity theory, women's interest in issues that concern the social category of women, as well as women's sensitivity to the evaluations and treatment of women should increase as a function of women's identification with their gender in-group (Becker and Wagner, 2009). Moreover, men may also be motivated to perceive gender discrimination on a personal level even though they are members of an advantaged social category, because an acknowledgement of privilege undermines the legitimacy of their dominant position (Branscombe, 1998; Kobrynowicz and Branscombe, 1997). Men who strongly identify with their gender group may be aware of their own privilege and of gender differences in the organization, and be more likely to perceive gender discrimination, as compared to men who do not have a strong gender identity. Based on the above argument, we put forward the following hypothesis:

H2. Strength of gender identification is positively related to perceived gender discrimination.

Individuals' perceptions of gender discrimination could be a result of social comparison processes. Beliefs and attitudes about inequality do not arise in a social vacuum, and

are shaped by the perceptions and interpretations of the social structure (Schmitt *et al.*, 2003; Foley *et al.*, 2005). To make a judgment that one is personally a victim of discrimination typically involves comparing one's own inputs and outcomes with those of others (Major *et al.*, 2002). Since the targets of comparison are often fellow in-group members, people are not always aware that they have been unfairly treated (Major, 1994). Although women often compare themselves to their female co-workers, we propose that women also make cross-gender comparisons frequently. This is particular the situation in China where gender equality at work has been claimed as a national policy for decades (Ngo, 2002). As discussed earlier, through the process of gender comparison, women can obtain salient information about the relative treatment of men and women, as well as the status and position of the gender groups in their organization. This helps them to evaluate and make sense of their employment conditions. On the other hand, as an advantaged group in the organization, men may not feel the need to compare men and women as much as women.

In general, men are thought to construct and maintain independent self-construals, whereas women are thought to construct interdependent self-construals (Cross and Madson, 1997). For those with an interdependent self-construal, their behavior is shaped and directed by responsiveness to the needs and wishes of close others. Additionally, they have a greater sensitivity to the situations that influence their own and others' behavior, and may be more in tuned with the suffering of the targets of aggression. Evidence indicates that women tend to describe themselves in terms of relatedness to others, suggesting that they may make more comparisons between the gender groups than men (Cross and Madson, 1997).

In the present study, we argue that the effect of gender on perceived gender discrimination can be explained by the construct of gender comparison. Specifically, given their orientation and needs, women tend to make frequent gender comparisons at work. With more information about differential treatments and outcomes between the gender groups, it is likely that women, as the disadvantaged group, perceive more personal gender discrimination in the workplace compared to men. Hence, we propose the following mediating hypothesis:

H3a. The relationship between gender and perceived gender discrimination is mediated by gender comparison.

According to social identity theory, people who are highly identified define themselves in terms of their group membership, whereas those who are weakly identified do not (Kaiser *et al.*, 2009; Tajfel and Turner, 1986). When a social category (such as gender) contributes to defining the self, there is an increased need for information about their own and other groups. This drive for information follows from a desire for positive self-esteem, distinctiveness, and a desire to evaluate the category positively (Tajfel and Turner, 1979). As such, a high level of social identification is associated with a strong drive for information, which then leads to social comparisons with other categories on relevant value dimensions (Banerjee, 2008; Tajfel and Turner, 1979).

Based on social identity theory, we posit that individuals with a high level of gender identification tend to make frequent comparison between men and women regarding opportunities, rewards, and treatment in the workplace. By doing so, they can better define their gender group and also determine its status and position relative to the cross-gender group. In gathering the relevant information, individuals would be aware of the subtle differences between men and women in the organization, and they would have greater sensitivity to inequity and discrimination perceived, as a result of making

gender comparisons. As suggested by Harris *et al.* (2004), those who identify with their gender group tend to be more sensitive to inequalities between the genders; and they are likely to attribute the unfavorable outcomes to discrimination against them. It follows that gender comparison would play a mediating role in the linkage between gender identification and the perceptions of gender discrimination. Therefore, we develop the following hypothesis:

H3b. The relationship between strength of gender identification and perceived gender discrimination is mediated by gender comparison.

At work, women are usually disadvantaged and receive less favorable treatment (Foley *et al.*, 2006; Gutek *et al.*, 1996). Gender often leads to differential and unjustified outcomes in rewards, resources, and opportunities (Schmitt *et al.*, 2003; Williams and O'Reilly, 1998). Crosby (1982) suggested that working women recognize areas of collective disadvantage in the workplace. The concept of gender bias against women describes the situation where women as a group are treated unfairly in their employing organization (Foley *et al.*, 2006; Major *et al.*, 2002). It is represented by perceptions of disadvantage of women in terms of hiring, pay raises, training opportunities, promotion, and performance evaluations. Past research indicated that working women perceive a higher level of gender bias against them compared to their male co-workers (Foley *et al.*, 2006; Shaffer *et al.*, 2000).

Foley *et al.* (2006) found a positive relationship between perceived gender bias against women and perceived gender discrimination, and this relationship is stronger for women than for men. They suggested that perceived gender bias at the group level may provide important information for individuals to confirm or disconfirm the discriminatory treatment they received at the personal level. Hence, it serves as a situational cue that increases the likelihood of personally perceiving discrimination based on group membership (Foley *et al.*, 2006). Schmitt *et al.* (2003) also make a similar point that when information about work outcomes is aggregated by gender group, discrimination against women is more easily detected by individuals (Schmitt *et al.*, 2003).

In this study, we expect that women perceive higher levels of gender bias against women as a group than men do, given the differential treatments and rewards often received by the two gender groups in the workplace. Additionally, gender bias against women could serve as a mediating variable that explains why gender is related to perceptions of gender discrimination. Based on the above reasoning, the following hypothesis is proposed:

H4. The relationship between gender and perceived gender discrimination is mediated by gender bias against women. Women perceive more gender bias and subsequently perceive more gender discrimination.

Method

Data and sample

Our data were collected in 2009 via an employee survey in three large companies in China. The companies are engaged in manufacturing of multimedia electronics, energy, and telecommunication. With the permission of senior management, we surveyed 210 employees from each company, most of whom were technical, marketing, or administrative staff. The human resource staff distributed a self-administered questionnaire to the employees. On the cover page of the questionnaire, we explained the purpose of the study and assured respondents of

confidentiality. We further protected the respondents' anonymity by having them return the completed questionnaire in a sealed envelope. A total of 362 questionnaires were finally returned, representing a response rate of 57.5 percent. 179 of the respondents (49.4 percent) were male and 182 (50.3 percent) were female; 72.1 percent were married. The average organizational tenure was 9.48 years ($SD = 7.01$). The distribution of respondents among the three companies was 133 (36.7 percent), 124 (34.3 percent), and 105 (29 percent).

Measures

The original scales were developed in English. We used back translation where the original English version was translated into Chinese and then translated back into English. Respondents used a six-point Likert-type scale (1 = "strongly disagree," 6 = "strongly agree") to respond to the items in the following measures, except for gender.

Gender. Gender is a dummy variable that coded 1 if the respondent is female and coded 0 if the respondent is male.

Strength of gender identification. Three items adopted from Foley *et al.* (2006) were used to measure this construct. Two items were: "I identify with other members of my gender group" and "My gender group is an important reflection of who I am." The α coefficient of the scale was 0.63 in this study.

Gender comparison. We developed a new scale that consisted of three items to measure the extent to which the respondent making gender comparisons at work. The three items are: "I am used to making comparisons between male and female colleagues in terms of pay and opportunities at work," "I am concerned about the differences in rewards and treatments between male and female colleagues in my organization," and "I tend to evaluate the relative worth and status of male and female groups by comparing what they received from the organization." This scale had a satisfactory α coefficient of 0.88.

Perceived gender bias against women. This variable was measured by a five-item scale that asked respondents about their perceptions of bias against women in the workplace. The following two items were drawn from a scale developed by Gutek *et al.* (1996): "Men are promoted faster than women in the organization," and "My organization prefers to hire men." Three other items were included: "Men are more likely than women to obtain training opportunities in the organization," "Men are more likely than women to receive a generous pay raise in the organization," and "Men are more likely than women to receive favorable performance evaluations in the organization." This scale had an α coefficient of 0.91.

Perceived gender discrimination. This variable was measured with four items selected from Sanchez and Brock's (1996) original ten-item scale. Sample items include: "At work, I sometimes feel that my gender is a limitation," and "My gender has a negative influence on my career advancement." In this study, the coefficient α for the scale was 0.87.

Analytical strategy

Structural equation modeling (SEM) was employed to test our hypotheses using LISREL 8.71. We first assessed the model fit of the measurement model by means of confirmatory factor analysis (CFA), and then we evaluated the fit of the hypothesized structural model. Overall model fit was examined by various fit indices including root mean square error of approximation (RMSEA), comparative fit index (CFI), incremental

fit index (IFI), and Tucker-Lewis index (TLI). To tackle the limitation of SEM that a large sample size is needed in estimating models that carry too many observed indicators, we reduced the number of observed indicators in each construct to three following the procedures suggested by Brooke *et al.* (1988).

To test the mediation hypotheses, we estimated three nested structural models as suggested by Kelloway (1998): first, a fully mediated model; second, a partially mediated model derived from the fully mediated model by adding two additional direct effect paths from the independent variables to the outcome variable; and finally, a non-mediated model which is the partially mediated model with the paths from the mediators to the outcome variable removed. We then evaluated the respective model fit of these three nested models, and employed the χ^2 difference tests to determine the best model among them.

Results

The results of the CFA on the measurement model reveal that a four-factor model (i.e. strength of gender identification, gender comparison, perceived gender bias against women, and perceived gender discrimination) achieved a good model fit in terms of all the fit indices, with χ^2 (48) = 124.83, RMSEA = 0.06, CFI = 0.98, IFI = 0.98, and TLI = 0.97. To confirm that the respondents can distinguish these four constructs, we compared this four-factor model with a one-factor model with all items loaded on one factor. A significant χ^2 difference ($\Delta\chi^2$ (6) = 1144.26, $p < 0.001$) was obtained, indicating the distinctiveness of the constructs used in this study.

Table I presents the descriptive statistics as well as the correlations among the study variables. The results of the various structural models are presented in Table II. The fit indices of the non-mediated model (Model 3) are as follows: χ^2 (60) = 429.28; RMSEA = 0.13; CFI = 0.92; IFI = 0.92; TLI = 0.89. The estimated structural paths from gender and strength of gender identification to perceived gender discrimination were found to be significant ($\gamma = 0.31$ and 0.23 , respectively, $p < 0.01$), thus satisfying the first condition of mediation and providing support for *H1* and *H2*. As compared with Model 3, the fully mediated model (Model 1) fit the data better with χ^2 (60) = 291.93 and

Table I.
Descriptive
statistics and
correlations among
study variables

Variables	Mean	SD	1	2	3	4	5
1. Gender (1 = female)	0.50	0.50					
2. Strength of gender identification	4.22	1.08	0.01	(0.63)			
3. Perceived gender bias against women	3.53	1.47	0.26**	0.17**	(0.91)		
4. Gender comparison	2.60	1.33	0.12*	0.20**	0.46**	(0.88)	
5. Perceived gender discrimination	2.49	1.27	0.19**	0.15**	0.57**	0.44**	(0.87)

Notes: The number of respondents ranges from 349 to 392. * $p < 0.05$; ** $p < 0.01$

Table II.
Results of SEM for
alternative models

Models	χ^2 (df)	$\Delta\chi^2$ (Δ df)	RMSEA	CFI	IFI	TLI
Model 1: fully mediated model	291.93 (60)**		0.095	0.95	0.95	0.93
Model 2: partially mediated model	284.77 (58)**	7.16 (2)*	0.095	0.95	0.95	0.93
Model 3: non-mediated model	429.28 (60)**		0.13	0.92	0.92	0.89

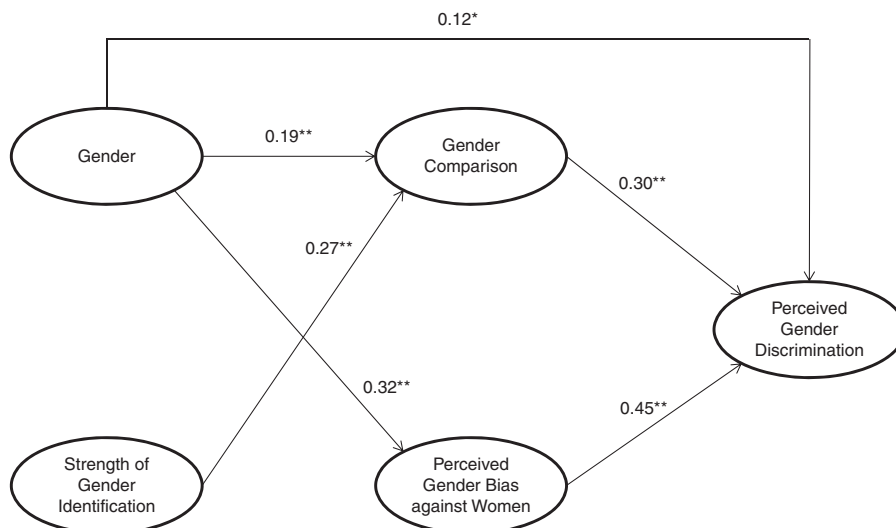
Notes: * $p < 0.05$; ** $p < 0.01$

RMSEA = 0.095; CFI = 0.95; IFI = 0.95; TLI = 0.93. The estimated structural paths from gender to the two mediators (i.e. gender comparison and perceived gender bias against women), from strength of gender identification to gender comparison, and from the two mediators to perceived gender discrimination were all significant. Compared with the fully mediated model, the partially mediated model (Model 2) had a similar model fit: $\chi^2(58) = 284.77$; RMSEA = 0.095; CFI = 0.95; IFI = 0.95; TLI = 0.94. However, we found that there was significant χ^2 difference between the fully mediated model and the partially mediated model ($\Delta\chi^2 = 7.16$; $\Delta df = 2$, $p < 0.05$). Based on this significant difference, we can conclude that the partially mediated model is a better model. The path coefficients in this model showed that the direct path from gender to perceived gender discrimination was significant ($\gamma = 0.12$, $p < 0.05$), while the direct path from strength of gender identification to perceived gender discrimination was not significant ($\gamma = 0.07$, ns). In other words, gender comparison and perceived gender bias against women partially mediated the relationship between gender and perceived gender discrimination, and gender comparison fully mediated the relationship between strength of gender identification and perceived gender discrimination.

Figure 2 depicts all the significant path coefficients estimated in the partially mediated model. Gender was positively related to gender comparison ($\gamma = 0.19$, $p < 0.01$) and perceived gender bias against women ($\gamma = 0.32$, $p < 0.01$); strength of gender identification was positively related to gender comparison ($\gamma = 0.27$, $p < 0.01$); and gender comparison and perceived gender bias against women were positively related to perceived gender discrimination ($\beta = 0.30$ and $\beta = 0.45$, respectively, $p < 0.01$). Taken together, the SEM results partially supported *H3a* and *H4*, and provided full support for *H3b*.

Discussion

Informed by social identity theory and social comparison theory, we developed a model to investigate the relationships among gender, gender identification, and perceived



Notes: * $p < 0.05$; ** $p < 0.01$

Figure 2.
Final model with
path coefficients

gender discrimination. We also evaluated the constructs of gender comparison and gender bias against women as possible mediators in these relationships. Our results indicated that, as expected, gender, and strength of gender identification were positively associated with the employees' perceptions of gender discrimination. In addition, the relationship between gender and perceived gender discrimination was partially mediated by both gender comparison and gender bias against women. Consistent with our prediction, we also found that the relationship between strength of gender identification and perceived gender discrimination was fully mediated by gender comparison.

Theoretical contributions

In this study, we expected individuals with a high level of gender identification to compare the two gender groups in terms of rewards, opportunities, treatment, and status, and subsequently they would perceive more gender discrimination in the workplace. It has been contended that social identity is rooted in the principle of comparison (Forsyth, 2000), and social identities are maintained primarily by intergroup comparison (Ashforth and Mael, 1989). Our study provided empirical support for such a contention and demonstrated the mediating role of gender comparison in linking gender identification to perceptions of gender discrimination. Given the new finding, we believe that we have made an important contribution by developing and evaluating the role of gender comparison.

Furthermore, the present study also provided new insights into the understanding of gender discrimination as perceived by individuals. It is a well-known fact that women suffer from various disadvantages and unfavorable treatment in the workplace. This problem is particularly serious in contemporary China. We found that women perceived more gender discrimination partly because they make gender comparisons and partly because they perceived systematic bias against women as a group in their organizations. These two factors are likely to provide more information about gender differences at work and trigger women's sensitivity to the unfair treatment and outcomes they receive. However, as shown in our study, both factors had a partial mediating (but not a full mediating) effect between gender and perceived gender discrimination, suggesting that gender still had a direct impact on individual's perception of gender discrimination. More research is called for to investigate how gender affects individual's perception of gender discrimination in the Chinese workplace.

Practical implications

Some practical implications of our study should be noted. Managers may not understand why or how their subordinates form perceptions of gender discrimination. For example, not all female employees in an organization perceive discrimination, and some male employees perceive discrimination. Managers should be aware that social identification may be an important factor in predisposing employees toward certain perceptions, attitudes, and behaviors. Besides, managers should also recognize that employees often make gender comparisons of pay, status, and other organizational rewards with or without objective data. Individuals may lack important and accurate social comparison information regarding the relative treatment of women and men; without this information it is difficult to estimate the extent to which gender has played a role in organizational outcomes (Schmitt *et al.*, 2003). Nonetheless, gender comparisons are frequently made by individuals, and these comparisons can help explain why an

employee's gender identification is related to their perceptions of gender discrimination in the workplace. For that reason, managers should be held accountable for producing unbiased organizational practices and eliminating unfair employment policies. Moreover, Chinese organizations should fulfill the responsibilities to their employees by complying with anti-discriminatory legislation. It is worth noting that women are playing an increasingly important role in the Chinese economy, thus organizations may lose out if their managers fail to acknowledge, reward, and encourage the contributions of their female employees. Since women are an important part of the workforce in China (e.g. women play facilitating roles in work groups which enhances group performance), human resource managers should avoid gender discrimination in recruitment and other HR functions (Zhang and Hou, 2012). They should also ensure men and women have equal opportunities in career advancement in the organization.

Limitations

Several limitations of our study should be acknowledged. One methodological limitation is the cross-sectional nature of the research design. Since gender identification is a process in which social structure, norms, and other contextual factors play major roles (Deaux and Stewart, 2001), it could be that gender comparisons shape an individual's gender identification in the workplace. As such, causality may be an issue in our model. Using longitudinal designs in future research studies would allow for testing causality. Second, since our data collection exclusively relied on self-reports, the results may be contaminated by common method bias. Some researchers, however, argued that in cases like ours where the variables of interest are attitudinal or perceptual, it is still appropriate to use self-reported data (Maurer and Tarulli, 1994; Spector, 1994). Another limitation involves the generalizability of our findings. As our data set was drawn from technical, marketing, and administrative staff in three large enterprises, our sample may not be representative of the general working population in China who work for smaller firms and in less senior positions.

Conclusion

To conclude, our study is the first exploration of the complex relationships among gender identification, gender comparison, perceived gender bias against women, and perceived gender discrimination. Our findings reveal the salient role of gender comparison and gender bias against women in shaping individual perceptions of gender discrimination. By identifying these two factors as mediators in our conceptual model, our study adds to our understanding of how gender and gender identity influence employees' perceptions of gender discrimination. Hence, future studies of perceived discrimination at the individual level (e.g. gender, ethnic, and sexual orientation discrimination) that are based on social identity theory should incorporate measures of group comparison and perceived bias at the group level in their conceptual frameworks. Given that we have limited knowledge about workplace discrimination in China, more research on its antecedents, processes, and outcomes should be conducted in the future.

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