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Abstract

In this PhD, we examine how experiences with sexism affect women's social relationships with other women. We assess the role played by tolerance of sexism in the workplace, including perceptions of tolerance of sexism at the peer-, manager-, and policy-level. Chapter 1 provides a review of the literature on devaluated group members' responses to stigma on their relationship with other members of their groups and highlight the role of context on the effect of stigma on interpersonal relationships. Chapter 2 reports secondary analyses of existing data to examine the how tolerance of gender devaluation (sexualised harassment and non-sexualised sexism) moderates the impact of sexism on women's psychological wellbeing. Chapter 3 reports a series of studies with working women, focusing on the effects of perceived peer, leader, and policy tolerance of sexism on women's affiliation with female co-workers. Chapter 4 describes a pilot study and a laboratory experiment where we orthogonally manipulated exposure to sexism and peer tolerance of sexism. Our results show some inconsistencies but overall support the idea that organizational tolerance of gender devaluation plays an important role in women's wellbeing and social responses to sexism. We summarize and integrate the findings across the three empirical chapters and discuss implications of theory and practice in Chapter 5.

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Chapter 1. A Review of Literature

Sexism can be defined as negative attitudes and beliefs that individuals hold about women as a group (Crawford & Unger, 2004). According to Swim and Hyers (2009), sexism is not only an attitude held by individuals, it is also reflected in organisational, institutional, and cultural practises and underpins inequalities between men and women in a range of domains. Regardless of whether sexism comes from specific individuals or from institutions, it has detrimental effects on those who experience it. For example, previous research has shown that such experiences affect women's psychological and physical wellbeing (Barreto & Ellemers, 2013; Harnois & Bastos, 2018). In a daily dairy study, Swim et al. (2001) found that sexist incidents in day to day life lowered psychological comfort, decreased self-esteem, and increased feelings of depression. Other work shows that women who are exposed to gender discrimination at work are more likely to show signs of physical distress, such as stomach ulcers and high blood pressure, as well as of psychological distress, including depression and sleeping disorders, than women who do not report experiences with gender discrimination (Goldenhar et al., 1998).

Although much is already known about how sexism affects women's psychological wellbeing, task performance, and even occupational choices, its impact on interpersonal relationships has so far received relatively little empirical attention. There is some work on how sexism impacts women's perceptions, attitudes, and behaviours towards other women, but the majority of this work conceptualizes women as a social group, not as individuals (Derks, Ellemers et al., 2011; Derks, Van Laar et al., 2011; Faniko et al., 2016; Faniko et al., 2017). That is, the impact of sexism on women's interpersonal relationships has received less empirical attention than the impact of sexism on more group-level indicators of sociality, such as group identification or collective action. Though group-level relationships are important aspects of one's social life, a more complete understanding of the impact of stigma

on social relationships needs to additionally examine interpersonal relationships, conceptualized here as the relationship between individual women, rather than women's relationship with the social group of 'women' as a whole. Different mechanisms have been proposed by researchers studying interpersonal relationships compared to those advanced by research on relationships at the group level (e.g., women's perceptions of other women as a whole). Given that research on the impact of prejudice on social relationships has tended to develop within separate research traditions, often focusing on different types of social relationships and on different mechanisms, this review aims to integrate knowledge from these various perspectives to contribute to developing insights on the impact of sexism on women's relationships with each other. In this chapter, we will first clarify why the focus on social relationships is important and then review current knowledge in this area, ending with an overview of the empirical chapters of this thesis.

1.1. The Importance of Social Relationships

Social relationships are fundamental for individual health and wellbeing (Bowen et al., 2014). Empirical studies show that having high (vs. low) quality social relationships throughout the lifespan links to better emotional and physical health (House et al., 1988). High quality social relationships are specifically related to stronger cardiovascular functioning, improved mental health, and greater life satisfaction (Baumeister & Leary, 1995; House et al. 1988; Holt-Lunstad et al., 2003). By contrast, loneliness and social isolation often cause psychological anxiety and physical ill health (Rook, 2001; Holt-Lunstad et al., 2010). Research has also shown that individuals need more metabolic resources when dealing with threat alone than when they are with close others (Coan & Sbarra, 2015). From this point of view, social relationships might be considered not only as a psychological need, but also as a biological need for survival (Fagundes et al., 2011; Hawkley & Capitanio, 2015).

Along with being a fundamental source for general health and wellbeing, social relationships have an effect on individuals' work life. For example, studies pointed out a positive correlation between having high quality social relationships with work colleagues (peers and managers) and job satisfaction (Dutton & Ragin, 2007; Einersan et al., 2011). Additionally, high quality work relationships are associated with positive emotions (Colbert et al., 2016). In addition to benefiting individuals' work life, social relationships are important for the success of organisations. For instance, social relationships at work enhance work productivity (Dutton & Ragins, 2007; Einersan at al., 2011) and organisational commitment (Hanpachern et al., 1998).

Social relationships are not just important in themselves, but they are also known to be an important resource to cope with negative and stressful experiences (Cohen & Wills, 1985; Frisch et al, 2014; Jetten et al, 2012) and this might be especially the case for women (Taylor et al., 2000). For example, women are more likely than men to report a desire for social affiliation under conditions of stress (Luckow et al., 1998), and specifically express a desire to affiliate with other women to cope with stress (Taylor et al., 2000). More broadly, research shows that informal relationships among people who share an identity at work link to positive outcomes, such as work productivity (Bridge & Baxter, 1992; Myers & Johnson, 2004). This is likely to be particularly the case for members of minority groups, for whom interactions with outgroup members are not always positive (Hays, 1989; Jones, 1991; Yip at al., 2013). This points to the possibility that social relationships might function as an important resource for women to cope with sexism.

In sum, there is by now ample evidence demonstrating the importance of social relationships generally, as well as specifically in the workplace, or specifically for women. The evidence suggests that social relationships are strong determinants of wellbeing, both directly and as an important resource to cope with stressors. However, much of this work

neglects the possibility that social relationships might themselves be negatively affected by stressors. For example, social support might be key when dealing with stressors like cancer, HIV, or domestic violence (Galván et al., 2009; Asante, 2012; Kroenke, 2013), but these illnesses or events can in themselves impair social relationships and, in turn, make social support less available (Thompson et al., 2000; Levendosky et al., 2004). Specifically, with regard to sexism, social relationships can only function as a resource to cope with sexism if women's social relationships are not, in themselves, damaged by exposure to sexism. This is as yet unknown, as little attention has been paid so far to whether or not exposure to sexism can negatively affect social relationships, thereby impairing their ability to function as a positive resource.

1.2. Social Relationships with Ingroup Members

Belonging to a devalued group can affect social relationships in various ways and with various 'others', such as in-group and out-group members, or individuals whose group membership is not salient or readily identifiable. Work on this topic is not as vast as, for example, work on the psychological impact of stigma (see Barreto & Ellemers, 2015 for a review), but there is already some relevant work to examine. Some of this work focuses on the direct aim of this thesis, i.e., how stigma (or experience with prejudice and discrimination) is associated with social behaviour (particularly interpersonal behaviour) towards ingroup members. This work forms the core of my literature review. However, there is also work pertaining to other types of relationships (e.g. relationships with outgroup members) that is relevant to examine, as it can help us move forward in this area.

In this chapter, we review two separate literatures: The first focuses on the impact of stigma on groups and collective identities. This literature draws heavily on the social identity tradition and prioritises the examination of social relationships at the group level. The second body of work we review here focuses on how stigma impacts interpersonal relationships and

tends to draw from the close relationships literature, linking the impact of stigma such as negative affect, low self-esteem to the psychological predictors of high quality interpersonal relationships.

Social psychological understanding of how devalued group members respond to prejudice and discrimination has been strongly influenced by social identity theory (Tajfel & Turner, 1986). This theory proposes that individuals' social identities (which they derive from their social group memberships) are important to their sense of self and, crucially, that the value (or devaluation) attached to those group memberships can be threatening to the individual's identity (Tajfel, 1981). For example, if a group is valued, the membership of this group is desirable and facilitates a positive sense of individual and collective self. However, when a group is devalued or socially stigmatised, the positivity of one's identity is threatened and this, in turn, causes stress to individuals (Miller & Major, 2000; Miller & Kaiser, 2001; Bombay et al., 2014).

Research in the social identity tradition has shown that members of devalued groups can respond to devaluation in a variety of ways (e.g., Branscombe & Ellemers, 1998). For example, when threatened, members of devalued groups often draw to each other and away from members of other groups (Haslam & Reicher, 2006), and the extent to which individuals perceive themselves and their group to be targets of discrimination is positively associated with ingroup identification (Branscombe et al., 1999; Jetten et al., 2001). At the same time, however, research has shown that being targeted by prejudice and discrimination can negatively affect individual's close interpersonal relationships (e.g., with friends, romantic partners and family) (Doyle & Molix, 2014a, 2014b, 2015b). For example, research has demonstrated that stress caused by stigma can impair social relationship functioning even with others who belong to the same social group (e.g., within gay couples) (Doyle & Molix, 2015b). Prior work therefore suggests that individuals can respond to social stigma by

distancing themselves from their stigmatised identity and other ingroup members, but also by doing the exact opposite, i.e., by identifying with the ingroup or drawing together with ingroup members. These two behavioural reactions are what in this thesis we label as 'distancing' versus 'drawing together.'

1.2.1. Distancing versus Drawing Together: Explaining the Taxonomy

In this review, we will therefore use the terms 'distancing' and 'drawing together' to organize existing findings and refer to these different patterns of response to stigmatization. Though it might appear that these two patterns of responses are merely two ends of the same continuum, in reality not all measures are able to reveal both patterns with equal clarity. For example, measures of support for collective action are much better able to reveal intentions to draw together (versus not), since no support for collective action does not necessarily indicate distancing. Alternatively, measures tapping into self-descriptions more easily reveal distancing than would measures of collective action. It therefore makes sense to separate the following review in this way hoping that it will help organize the inconsistencies in existing findings, while still acknowledging that this taxonomy might not suit the available data perfectly.

Early theorizing about the impact of stigma describes the 'self-hatred hypothesis', i.e., the idea that stigmatised people internalise the high status (or dominant) group's stigmatizing view of their group (Allport, 1954; Fanon, 1952). To avoid or address this self-hatred (or self-stigma), individuals would often feel the need to distance themselves from the group. Social identity theory describes this identity management strategy as 'individual mobility,' a strategy that relies on the boundaries between groups being perceived as permeable, or on an individual's ability to pass from one group to another (Ellemers, 1993; Tajfel & Turner, 1979). Individual mobility is described as a behavioural strategy, but there is also recognition that it can constitute a psychological strategy, where individuals are unable to leave the group

altogether (e.g., when group memberships are visible and hard to change) but they do so by psychologically distancing themselves and dis-identifying from the group (Ellemers et al., 1997; Ellemers & Van Laar, 2010). It is important to note that while this strategy can protect from negative affect towards one's personal self, it can be associated with negative affect towards one's ingroup, which is also a form of self-hate (or self-stigma, e.g., Corrigan & Calabrese, 2005).

Individual mobility is just one way in which members of low status or stigmatized groups can respond to threatened identities. Still according to social identity theory, under some circumstances, stigmatised group members prefer to unite with other in-group members and to act collectively with them instead of leaving the group behind (Tajfel & Turner, 1986; Taylor & McKirnan, 1984). For example, if stigmatised group members believe that they can change the way their in-group is valued by competing with the out-group (i.e., unstable status relationships), or that the group's status is illegitimate, they are more likely to come together with other in-group members than to use social mobility to cope with low group status (or with discrimination) (Branscombe & Ellemers, 1998).

Though the social identity tradition did not deal much with interpersonal relationships, how these strategies might relate to interpersonal relationships becomes clearer by considering the model proposed by Branscombe et al. (2011). Inspired by the social identity framework, these authors divided the strategies individuals use to cope with stigma into two categories: 'Moving away' from and 'moving towards' the ingroup. They explain that 'moving away' strategies are those through which members of devaluated groups distance themselves from their ingroup either by getting closer to outgroup members or by identifying with the outgroup in general (akin to individual mobility). For instance, Weiss and Lang (2012) found that, to avoid facing discrimination based on age, old people often distance themselves from other old people by saying that they are actually younger than they

look. Like individual mobility, what this set of strategies have in common is that they reduce identity threat to the individual self rather than reducing the threat to the ingroup as a whole. On the other hand, 'moving towards' represents drawing together with in-group members. For example, when women in gender segregated workplaces see their negative experiences as a result of being women they report greater identification with other women than when they do not perceive that these negative experiences are due to discrimination against their gender (Redensdorff et al., 2004). Though firmly based in the social identity approach, this classification focuses slightly more directly on how coping with stigma relates to an individual's position not only vis-a-vis their group, but also in relation to individual in-group and out-group members.

This type of taxonomy focused on social responses to stigma can be seen as sharing some characteristics with other taxonomies that are worth considering because they bring additional relevant insights in this context. For example, a classic distinction made by Cannon (1932) was that between 'flight' and 'fight' responses to threat. Flight responses represent distancing oneself from threats, which in situations of stigma could be the group identity itself; though it is certainly not necessarily (only) this—other examples could include disassociating from a same race peer (Neuberg et al., 1994) or leaving the context where stigmatization happened. On the other hand, fight responses consist of addressing the threat directly, attempting to eliminate it. Drawing towards in-group members can be done with the aim of organizing collective action to fight against the threat of devaluation and might therefore be considered a 'fight' response (for example, solidarity with the group; Klein & Azzi, 2001). Of course, stigmatized group members do not necessarily appraise the ingroup as the threat—they might, instead, appraise the person (or people) stigmatizing them as the threat. Also, one cannot assume what qualifies as fighting—drawing to the group is not necessarily followed by any fighting response, as the 'tend and befriend' model also suggests

(Taylor et al., 2000). Despite the limitations to this parallel, this taxonomy helps us become aware of the fight and flight elements resulting from exposure to a stressor (in this case, sexism) that can be associated with drawing together or distancing from the ingroup.

Blascovich and Tomaka (1996), in turn, speak of 'threat' and 'challenge' responses, which also have similarities with the idea of distancing and drawing together responses, respectively (also see Lazarus & Folkman, 1984). According to them, if a stigmatised group member perceives discrimination as a threat, they are less likely to behave productively, such as by performing less well on a task (Schmader et al., 2008; Shapiro & Neuberg, 2007). For example, when women were reminded of their gender (with women stereotypically assumed to be weaker at maths), they performed more poorly on a maths task than when they were not reminded of their gender (Shih et al., 1999; Spencer et al., 1999). One could suggest that threat appraisals are unlikely to be associated with responses that change the status quo (such as collective action). In contrast, appraisals of discrimination as a challenge can be facilitated by ingroup support and can also motivate actions that change the status quo. For example, research has shown that sometimes people re-affirm the value of their group rather than the value of their individual self to cope with a group threat (i.e., group affirmation; Blascovich et al., 2001; Derks et al., 2009, 2011; Sherman et al., 2007). This clarifies that the way the stressor is appraised can modify responses to stress, as well as that social relationships can intervene in this process both as a facilitator of particular responses (a resource) and as an outcome (a coping strategy).

Because our work is focused on understanding the impact of stigma (specifically sexism) on interpersonal behaviour amongst members of the stigmatized group (specifically women), the distinction between drawing together and distancing is followed as a taxonomy for this thesis. It is however useful to keep in mind that there is some overlap with other taxonomies, as well as some key differences between them.

1.2.2. Evidence for Distancing

As described in the previous section, women might respond to sexism by distancing themselves from other women. One source of confusion in this area is that what can broadly qualify as 'distancing' is very diverse and varies in critical ways. For example, researchers studying self-group distancing have examined how experiences of sexism impact how women relate to women as a whole (e.g., how similar they see themselves to the typical woman, Derks, van Laar, et al., 2011; to what extent they identify with other women, Branscombe et al., 1999), the extent to which women use stereotypically feminine versus masculine traits to describe themselves (Derks, Ellemers et al., 2011; Faniko et al., 2016; Faniko et al., 2017), and women's evaluations of their subordinates (Derks, Ellemers et al., 2011; Derks, van Laar et al., 2011; Faniko et al., 2016, 2017). It is also unclear whether existing findings reveal genuine or self-presentational responses. That is, distancing from in-group members can be purely self-presentational, meaning that women might try to present themselves less like women 'for show,' while still privately identifying with women as a social group. It is also possible, however, that women genuinely feel less close to other women after exposure to sexism. In what follows we review evidence for two broad categories of distancing responses: Explicit (direct) self-distancing from other women and distancing from stereotypes.

1.2.2.1. Explicit (Direct) Self-Distancing from Other Women. The most direct evidence of distancing might be argued to be that of a group member walking or sitting away from another ingroup member when stigma is salient. This is similar to what was found by Cohen and Garcia (2005), when they found that members of a racial minority group sat further away from ingroup members during a maths task at which they were stereotypically expected to be inferior. To my knowledge, no research has as yet provided similarly direct evidence in the realm of gender (except van Breen et al., manuscript in preparation). In this

area, studies providing evidence for distancing tend to use less behavioural indicators, which nevertheless still communicate distancing fairly directly, such as reduced gender identification.

Ely (1994) showed that women working in organizations with few senior women (and where presumably women were devalued) displayed more of these behaviours compared to organizations with many women in senior positions. This distancing was specifically indicated by reduced gender identification, perceiving senior women as less legitimate role models, greater perceived competition with female peers, and reporting less support from female peers. A more recent study again examined the role of workplace gender composition and went further by investigating whether gender identification, instead of an indicator of distancing, could actually function as a moderator of distancing behaviour (Kaiser & Spalding, 2015). This is in accordance with previous studies within the social identity tradition that pointed out that low identifiers are less likely to be loyal to their in-group when they experience identity threat than are high identifiers (e.g., Doosje et al., 1995). In this study, Kaiser and Spalding (2015) operationalized distancing as providing more help to male over female subordinates and as explicitly stating a preference for working with a male versus a female subordinate. These authors found gender neutrality in conditions of balanced gender composition, but when women were under-represented, highly identified women favoured women, whereas weakly identified women favoured men.

Gender under-representation is an important form of gender identity threat, but even in environments where women are under-represented there is variation in the extent to which women experience gender-based threat due to, for example, sexual harassment and derogatory remarks, among others. Veldman et al. (2020) used a daily diary study to investigate whether distancing in a male dominated environment (a military academy) was moderated by reported gender identity threat. Distancing was operationalised in this study as

a combination of downplaying one's gender, avoiding contact with and attention to other women (in general), and being unhappy about being a woman in the military. These authors found that on the days when women reported more gender identity threat they were more likely to report distancing from other women than on the days when they reported less gender identity threat.

Bergsieker et al. (2020) went a bit closer to examining actual social behaviour, by investigating men's and women's befriending patterns in Science, Technology, Engineering, and Math (STEM) compared to female dominated fields through friendship requests on social media site (LinkedIn and Facebook). Their experimental studies showed that only women in STEM fields (and not men or women in female dominated fields) avoided sending friendship invitations to other women who were described in stereotypically feminine terms (vs. STEM-stereotypic terms). This was also only the case for women with weaker professional networks, which can be seen to suggest that it is motivated by reputational concerns that better-connected women do not have to the same degree. The authors explain that this is akin to a fear of 'stigma by association' (Neuberg et al., 1994; Pryor et al., 2012), in which women might make themselves vulnerable to gender stereotypes through associating with stereotypically feminine women and might wish to prevent this by avoiding being seen as friends with these stereotypically feminine women. It is, of course, also possible that women with weaker professional networks are just also less socially skilled, or more socially anxious, and therefore more vulnerable to responding to sexism by distancing themselves from other women. Nevertheless, these findings again stress the importance of gender composition of the workplace and add to this the insight that reputational concerns might be key to this effect, in that women might be distancing themselves from other women to present themselves as suitable professionals in their male dominated area of work.

1.2.2.2. Self-Distancing from Stereotypes of Women. Individuals can also try to distance from the in-group (and its members) in a more indirect way, for example by stressing how they, individually, differ from what is deemed to be stereotypical of the ingroup, or how similar they are to what is deemed to be stereotypical of the *out*group. Again, this distancing response can be used as a reaction to prejudice and discrimination. For example, Hindustani workers at a Dutch company in the Netherlands presented themselves as more stereotypically Dutch when they were exposed to ethnic bias than in control conditions (Derks et al., 2015). In the context of gender, women have been found to show distancing 'behaviour' by describing themselves in more masculine than feminine terms to respond to gender related stereotypes or discrimination (Ellemers et al., 2004). In a similar vein, women in managerial positions described themselves with more masculine terms than they described their female subordinates (Deks, Ellemers et al., 2011; Derks, Van Laar et al., 2011; Faniko et al., 2016; Faniko et al., 2017). This specific distancing 'behaviour,' through stereotypical self-descriptions, is also known as 'Queen Bee' behaviour. Also with regard to stereotypical self-descriptions, the literature suggests that there are factors that moderate this effect, specifically gender composition of the workplace and identification with the gender ingroup.

First, as was the case with the indicators of distancing reviewed in the prior section, whether or not women respond to sexism by modifying the gender stereotypicality of their self-descriptions depends on the gender composition of the context. Most research on the Queen Bee phenomenon has been carried out in male dominated work environments. In fact, Derks, et al. (2016) suggest that distancing behaviour occurs particularly amongst women in high positions in male dominated fields and is driven by the underrepresentation of women in higher positions in these fields, together with the pervasiveness of sexism in the workplace. It is, of course, also important to note that in male dominated environments there are fewer women to engage with than in female dominated environments, and this might also affect the

availability of suitable interaction partners. However, much of this work was not conducted with actual behavioural measures, or even with measures directly tapping into the quantity or quality of interpersonal interactions, so this availability issue does not account for most of the effects documented.

Second, consistent with the social identity approach, and as was also the case for the more direct distancing indicators reviewed in the prior section, gender identification moderates the extent to which women respond to sexism by de-emphasising the applicability of gender stereotypes to themselves. Specifically, after experiencing sexism at work, women whose identification with their gender was lower reported more masculine self-descriptions than did women who identified highly with their gender group (Derks, Van Laar et al., 2011; Derks, Ellemers et al., 2011).

Distance from ingroup members can also be achieved by stressing the difference between the self and other ingroup members particularly in areas where the ingroup is expected to be inferior. For example, early work on the Queen Bee phenomenon showed that senior women under-estimated the work commitment of female subordinates compared to senior men, and compared to the commitment that male and female subordinates reported (Ellemers et al., 2004). Following from this, subsequent studies examined senior women's career commitment compared to how they perceived the career commitment of junior women (Derks, Van Laar, et al., 2011; Derks, Ellemers, et al., 2011; Faniko et al., 2016, 2017). These studies showed that female managers distanced themselves from junior women in organizations by ranking junior women's career commitment as lower than their own, especially when being a woman was not an important part of their identity. Interestingly, senior women estimated the career commitment of other women on the same rank as themselves as similar to their own (Faniko et al., 2016, 2017), demonstrating that when

women are at the same hierarchical level, they do not necessarily distance themselves from each other—they might, instead, draw together.

A more indirect way through which distancing can occur is by stressing within group variability ("we are not all the same"), which dilutes stereotypes and consequently their applicability to the self. For example, Doosje et al. (1995) investigated identification with the ingroup and judgements of in-group variability among members of high and low status groups. They found that members of low status groups reported less similarity amongst in-group members when they identified weakly (vs. strongly) with the ingroup. Identification did not affect perceived ingroup variability among members of high status groups.

Research has also looked at how some of these distancing behaviours are perceived by others. First, there is evidence that distancing behaviours from senior women are hurtful to more junior women. For example, Sterk et al. (2018) investigated how senior women (vs. men) who endorsed masculine self-descriptions (as well as endorsing gender stereotypes and denying discrimination) were perceived by and affected junior women. The results showed that men who endorsed these descriptions and beliefs were perceived as sexist, but women were not. Nevertheless, both men and women who endorsed these descriptions and beliefs elicited more negative affect in participants to whom they had given negative feedback than men and women who did not endorse these beliefs. This suggests that (senior) women's distancing behaviours can be particularly negative because these behaviours negatively affect subordinates, but are not always easily recognised as problematic (see also Barreto & Ellemers, 2005a, 2005b).

Second, there is evidence that stigmatized group members are right in worrying about the reputational damage that can emerge from associating with other ingroup members. Indeed, Shapiro et al. (2011) showed white participants pictures of a black man who was either portrayed with a white friend or with a black friend. White participants stated a social

preference for the black person portrayed with the white friend relative to the black person portrayed with the black friend. However, this has not been examined in the realm of gender.

   1.2.2.3. Conclusion. In sum, the studies reviewed in this section show that women can distance themselves from other women by directly downplaying their gender identity, by emphasizing how they differ from stereotypes of women, or by drawing attention to how diverse women are. This is done primarily as a response to discrimination, if the context is predominantly male, and if women identify weakly with their gender. These studies also suggest that reputational concerns can underlie this behaviour and that these concerns might be justified. Finally, there is some evidence that this behaviour is damaging to other women. Though none of this research has examined actual relationships, or even actual behaviour, it does suggest that women's relationships to their identities as women, or to other women as a group, can be damaged by sexism.

1.2.3. Evidence for Drawing together

   The preceding review highlights evidence of self-group distancing but also makes clear that self-group distancing does not always happen. Indeed, research has documented numerous examples of women not derogating other women, or even expressing solidarity towards other women. In addition, while the prior section summarized some evidence of women responding to gender bias by derogating women, there is also evidence that women actively reject gender bias, even when this is very subtle (de Lemus et al., 2013; Van Breen et al., 2018). In fact, women can respond to discrimination by engaging in precisely the opposite behaviour—i.e., by getting close to other women and, potentially, drawing together as a group. For instance, there is some evidence that group members can respond to intergroup conflict (vs. no conflict) by evaluating the in-group more positively, identifying with the in-group more strongly, and making more contributions to the group, often at personal cost (Blake et al., 1964; Bornstein, 2003; Brewer, 2001; Barreto & Ellemers, 2000;

Quwerkerk et al., 2000). This is the kind of response that we consider here under the label of 'drawing together.' The next sections summarise evidence for drawing together as a response to discrimination, focusing on indicators that are relevant to the understanding of social relationships: In-group identification and supporting women.

      1.2.3.1. Ingroup Identification. Identification with in-group members is an example of an outcome that is more clearly able to demonstrate drawing together than distancing responses because low identification (or decrease in identification) does not necessarily indicate dis-identification (see Becker & Tausch, 2014 for the distinction between low identification and dis-identification). According to Becker and Tausch (2014), identification represents a positive motivational state that anticipates positive behavioural intentions towards the ingroup, while dis-identification represents a negative motivational state that anticipates negative behavioural intentions towards the ingroup. Measures of identification include items that are indicative of how the person relates to the group as a whole, be it cognitively ("I identify with, or am similar to") or more affectively ("I feel solidarity with"; e.g., Leach et al., 2008). However, measures of dis-identification include items that are indicative of how the person feel detachment, dissatisfaction, and dissimilarity of ingroup from the self (e.g. "I feel a distance between myself and this group", "I regret that I belong to this group", "I am completely different from other members of this group"; e.g., Becker & Tausch, 2014). In addition, dis-identification and low identification have different outcomes. For example, dis-identification has been shown to result in disengagement (Jasinskaja et al., 2009) and distancing from the ingroup (Verkuyten & Yildiz, 2007). Instead, group identification in response to discrimination is likely to facilitate group coordination and efficacy, and thereby enable collective responses that challenge the status quo (Van Zomeren, 2013; Wright et al., 1990). Therefore, understanding effects of stigma on group identification

is very relevant to the understanding of how women draw together with other women in their social relationships at the group level.

Work on the 'rejection-identification model' suggests that when members of devalued groups perceive group-based discrimination they can identify more strongly with the devalued ingroup, and that this protects their wellbeing (Branscombe et al., 1999). Branscombe et al. (1999) specifically examined whether attributions to racial prejudice affected racial group identification in African American participants. They indeed found that the more racial minorities attributed their negative experiences to racial prejudice, the more strongly they identified with the members of their own racial minority groups (see Jetten et al., 2001 for experimental evidence among people with body piercing). It has been suggested that this might happen because attributions to discrimination create stress that is perceived as shared by all ingroup members and this sense of shared experience enhances group identification (Haslam & Reicher, 2006).

1.2.3.2. Supporting Women. Stigmatised group members might choose to challenge, instead of accepting, stereotypes about their group, or to challenge the social hierarchy that disadvantages them (Steele et al., 2002; Keller, 2007; Leach & Livingston, 2015). For example, after being exposed to gender bias, women have been found to express enhanced willingness to work for the advancement of their female subordinates and to show more support for initiatives targeting equal opportunities for men and women at work (Derks, Van Laar, et al., 2011). However, this effect was only found for women who strongly identified with their gender, not for low identifiers.

Other research showed that, regardless of levels of gender identification, women managers responded to sexism by endorsing gender quotas at the managerial level, but not at the level of their subordinates (Faniko et al., 2016; 2017). One can argue that this show of solidarity with managerial women was partly self-interested, since participants were

themselves managerial women--this could also explain why this effect was not moderated by gender identification.

Women's support for other women is enhanced by perceived collective deprivation, but group disadvantage is sometimes erroneously perceived as personal deprivation. Recognition of group deprivation is essential for collective action (Ellemers, 2002; Smith & Ortiz, 2002; Wright & Tropp, 2002). If devalued group members are aware that they face group-based discrimination they experience anger, which in turn motivates them to join collective action (Van Zomeren et al., 2004). However, devalued group members are not always aware of group-level deprivation. For example, sexism can take very subtle forms that are difficult to recognise, which impairs collective responses to sexism (Ellemers & Barreto, 2009). Research has shown that women are more likely to claim that unequal gender treatment is illegitimate when they are disadvantaged both personally and as a group (Stroebe et al., 2009).

Work on self-affirmation has also shown that people can respond to personal threats by affirming their personal sense of self (Steele, 1988). In a similar vein, but at the collective level, researchers have found that affirming valued aspects of the ingroup's identity reduces the negative impact of group failure (Derks et al., 2006). For example, Derks et al., (2009) demonstrated that for high identifiers with their gender, women who are provided group affirmation are more likely to work for the group than women who are provided self-affirmation. In a similar vein, for women who strongly identify with their gender, group affirmation turns identity threat to challenge and leads women to work for their group (Derks et al., 2011). In addition, researchers have also examined women's support for other women's agentic responses to sexism (such as protest, or the confrontation of perpetrators) and found that these are generally positive, especially if the female perceivers perceive sexism to be

pervasive (Garcia et al., 2010; Kahn et al., 2016) and are low on benevolent sexism (Kahn et al., 2021).

1.2.3.3. Conclusion. This section summarizes evidence for 'drawing together' in response to discrimination, be it by strengthening gender identification, by expressing support for other women, or by showing willingness to support actions in favour of gender equality. Gender identification has also been shown to moderate some of these effects, but not very consistently.

1.2.4. Inconsistencies and Gaps in Research on the Impact of Sexism on Women's Relationships

The above review highlights evidence for both distancing and drawing together in response to sexism. Though the evidence seems, at first, contradictory (some studies show that women come together in the face of sexism, some studies show the opposite), it is important to note that, as already pointed out, some measures are better able to reveal distancing/drawing together than others, limiting the extent to which results can be replicated across studies. Importantly, there are likely to be factors that moderate the link between exposure to sexism and women's social relationships. Indeed, studies have found that gender identification moderates whether or not women distance themselves from other women in sexist environments (Derks, Van Laar, et al., 2011; Derks, Ellemers, et al., 2011; Faniko et al., 2016, 2017). Other factors might play a similar role—one of them will be explored later on in this chapter (i.e., environmental tolerance of sexism).

An important gap in this area is that it rarely focuses on actual behaviour—as we have seen above, most studies measure self-descriptions, impressions of others, or behavioural intentions, but not actual behaviour. Another important gap is that past work in this area tends to mainly focus on relationships between the individual and the collective—that is, most studies involve women rating other 'female colleagues' as a whole or providing impressions

about women's career commitment (e.g., Ely, 1994; Ellmers et al., 2004; Derks, Van Laar, 2011; Derks, Ellemers, 2011). In this sense, this literature treats women as interchangeable individuals with whom one might or not wish to interact. While this has led us to learn a great deal about how sexism impacts women's leaning towards other women, as a whole, we still know very little about how it might affect women's social behaviour, or their ability to develop and maintain well-functioning interpersonal relationships.

Research examining different forms of prejudice has already provided some evidence for the impact of stigma on interpersonal relationships. For example, social stigma against sexual minorities has been found to have deleterious effects on the quality and functioning of social relationships among friends, family members, and friends (Doyle & Molix, 2014a, 2014b, 2015b). While a focus on group-level relationships logically implies a focus on group-level mechanisms (as has been done so far in most research on the social consequences of sexism), research focusing on interpersonal relationships incorporates psychological variables such as self-image, affect, and social appraisals. That is, to examine the impact of stigma on interpersonal relationships (rather than group-level relationships) one needs to account for how stigma cognitively and affectively impacts the individual and how this, in turn, affects interpersonal relationships. To do so, we need to consider both the impact of stigma on psychological states and the psychology of interpersonal relationships.

1.3. The Psychological Impact of Stigma and Its Role in Interpersonal Interactions

Research has shown that having an identity that is stigmatized by others impacts an individual's psychological mind-frame in a range of ways. Some of these psychological states have been shown to be important predictors of poor relationship functioning (Murray et al., 2000, 2006; Wood et al., 2009); for example, it is known that experiences with deprivation and discrimination elicit anger (for a review see Barreto & Ellemers, 2013) and in turn anger has been found to decrease trust in others (Dunn & Schweitzer, 2005). That is, considering

the psychological effects of stigma provides important information about the mind-frame from which a stigmatized group member anticipates or enters social interactions. In this section, we review some of the psychological effects of stigma that are relevant to the understanding of interpersonal relationships.

So, what are these psychological effects? Blatant instances of sexism are often associated with anger and frustration (for a review see Barreto & Ellemers, 2013) and can make stigmatized group members disinclined to interact with outgroup members on future occasions (Tropp, 2003). Research has also consistently demonstrated that women who report experiencing sexism also report increased anxiety and depression (Landrine et al., 1995; Kobrynowicz & Branscombe, 1997; Klonoff et al., 2000; Swim et al., 2001; Barreto & Ellemers, 2005a), lowered self-confidence and personal self-esteem (Swim et al., 2001; Schmitt et al., 2002; Major et al., 2013), and greater rejection sensitivity (London et al., 2012). Although members of stigmatized groups can at times cope with prejudice in ways that protect them from these negative psychological effects (Croker & Major, 1989), this is not always the case. Importantly, these psychological states strongly influence interpersonal relationships.

In a nutshell, the psychological mind-set created by anxiety, low personal self-esteem, and rejection sensitivity is usually associated with poor relationship functioning (Murray et al., 2000, 2006; Erol & Orth, 2013, 2016; Harris & Orth, 2020). Indeed, personal self-esteem is one of the strongest indicators of healthy interpersonal relationship functioning. Some work has shown that people seek connections with others to a similar extent irrespective of having low or high personal self-esteem (Anthony et al., 2007). However, personal self-esteem affects the expectations people bring to social interactions and how interactions unfold. Specifically, individuals with low personal self-esteem tend to associate interpersonal interactions with the risk of rejection, whereas individuals with high personal self-esteem

think of social interactions as opportunities to be liked (Stinson et al., 2014). Research also shows that individuals with low personal self-esteem tend to be more socially anxious, introverted, and shy (Leary & MacDonald, 2003). They are also less likely to be in stable and satisfying relationships than individuals with high personal self-esteem (Wood et al., 2009).

One explanation for the negative effect of low self-esteem on social relationships is proposed by the risk regulation model (Murray et al., 1996, 2000, 2006), postulating that threats to self or the relationship trigger the instinct to distance (or draw closer). It is only when people are secure in their partners' regard and affection that they can draw to them when experiencing threat, but they will distance in order to avoid risking further rejection when they are not confident of their partner's regard. In addition, people with low self-esteem tend to have a hard time perceiving high regard from their partner.

The effects of personal self-esteem can be triggered, or aggravated by specific relational difficulties. For example, Murray et al. (2002) found that individuals with low, but not high, personal self-esteem reported reduced closeness to their partners when they faced relational difficulties. Other research (Dehart et al., 2004) revealed that people with low self-esteem liked their partners' and best friends' name letters only when their relationships with these people were currently going well. However, those with high self-esteem liked their partner's and best friend's name letters regardless of how their relationships were going. Basically, low and high self-esteem people look similar in relationships until they experience/perceive threat.

Going back to the realm of stigma, low personal self-esteem has not only been documented as a possible (though not an inevitable, Croker & Major, 1989) outcome of stigma, but it has also been studied as a predictor of the effects of stigma. In a series of studies, for example, Cihangir et al. (2010) found that low (vs. high) personal self-esteem made women more psychologically vulnerable to the negative effects of subtle sexism,

though it did not affect psychological responses to blatant sexism. The authors argued that subtle sexism increases self-focus and self-doubt, which is particularly problematic when self-esteem is low, not when it is high. All in all, previous literature tells us that stigma is detrimental for self-esteem and self-esteem (and related constructs) is critical to interpersonal relationships.

Rejection sensitivity was described as anxious expectations of rejections in social relationships by Downey and Feldman (1996). With regard to rejection sensitivity, there is also plenty of evidence that it impairs interpersonal relationships (Downey & Feldman, 1996; Downey et al., 1998), as well as that those who are socially stigmatized become vigilant to signs of rejection (Kaiser et al., 2006; Inzlicht et al., 2008), less able to detect signs of acceptance (Richman et al., 2015), and sensitive to rejection based on their devalued group membership (Mendoza-Denton et al., 2002; Pinel, 1999). For example, Mendoza-Denton et al. (2002) suggested that black students in a white dominated university anxiously expected race-based rejection due to the previous experiences of rejection based on their devalued group membership. The anxious expectation of rejection, in turn, has been found to be detrimental for relationships (Ayduk et al., 2001; Downey & Feldman, 1996). For example, Downey and Feldman have demonstrated (1996) that rejection sensitivity induces anxiety; for this reason, people readily perceive and overact rejection in others ambiguous behaviour. In addition, these people and their partners reported dissatisfaction with their relationships.

Research has already begun to show that experiencing prejudice and discrimination can negatively affect interpersonal relationships, including those with friends and family (Doyle & Molix, 2014a, 2014b, 2015b) and with strangers (Zhang et al., 2018). This line of work, which has predominantly focused on sexual or racial minorities, has shown that experiences with discrimination negatively affect self-reported romantic relationship quality—and that this is partially mediated by self-image (Doyle & Molix, 2014a). In a

similar vein, stigma affects social relationships for racial minorities through emotional dysregulation (Doyle & Molix, 2015a).

It has also been shown that some factors moderate the link between stigmatizing experiences and relationship functioning. For example, the negative effect of stigma on romantic relationship quality was found to be negative for short-term relationships, but positive for long-term relationships (Doyle & Molix, 2014b). In addition, Doyle and Molix (2015a) showed that, for sexual minorities who resided in states with greater levels of structural stigma (North American states without policies that protected sexual minorities' rights), experiences with discrimination were more strongly related to friendship strain and loneliness than for those who lived in states with lesser level of structural stigma (states that had policies protecting sexual minorities' rights). This work therefore shows that there are structural or environmental conditions under which the link between stigmatizing experiences and relationship functioning can be ameliorated, if not reversed.

In sum, in this section we have reviewed evidence showing that stigmatizing experiences can lead to psychological states that are associated with poorer interpersonal relationship functioning. However, there are circumstances under which this negative effect does not emerge, or is even reversed. In this thesis, we suggest that organizational tolerance of sexism is one of these moderating conditions.

1.4. The Role of Organizational Tolerance of Sexism

In this thesis, we suggest that the organisational climate—specifically the extent to which the organization is (in)tolerant of sexism—is likely to play a role in the relationship between sexism and women's social relationships in the workplace. Organisational climates include practises, procedures, and norms about behaviours expected from employees in the workplace (Schein, 2010; Ostroff et al., 2003; Zohar & Hoffman, 2012). Research has shown that organizational climates that are intolerant of sexism tend to be associated with less

gender discrimination, including sexual harassment, than organizational climates that are tolerant of sexism (Parker et al., 2002; Willness et al., 2007). However, even in egalitarian climates, sexism can still emerge, even if outside of the perpetrators' (or even the victims') conscious awareness (Crosby, 2004)—some even suggest that the existence of these egalitarian policies can actually hinder the detection of sexism (Brady at al., 2015). In contrast to this focus on how organisational climate affects the perpetration and detection of sexism, we argue that when sexism does occur, the organisational climate can affect how people interpret those experiences.

When organisational tolerance of sexism is high, women might think that sexism is pervasive in their workplace. In turn, research shows that sexism that is perceived to be pervasive has more detrimental effects on women's psychological wellbeing (which can in turn affect social relationships) than sexism perceived to be rare (Schmitt & Branscombe, 2002; Stroebe et al., 2011).

In addition, when sexism occurs in an organisation where the climate is tolerant of sexism, this suggests that the sexist experience is typical, structural, and accepted by others. That is, the organisational climate provides an indication of how others might feel about sexism. Therefore, a woman who experiences sexism, and knows that the organisational climate is not tolerant of sexism, might feel more comfortable addressing that experience, because she is assured of the organisation's support. For example, organisational climate of gender inequality was found positively associated with women's intentions to withdraw from working for the organisation (King et al., 2010).

In sum, organisational climate might be a moderator of the relationship between experiences of sexism and women's responses. When the organisational climate is perceived to be tolerant of sexism, experiences of sexism might lead women to distance themselves

from others. By contrast, when the organisational climate is perceived to be intolerant of sexism, experiences of sexism are more likely to lead women to draw together.

2.4.1. **Organizational Tolerance at Different Levels.** It is possible, and perhaps important, to distinguish organizational climates at different levels of the organization. The particular focus of the research reported in this thesis is on organizational tolerance of sexism, which refers therefore specifically to the lack of practices, procedures, and norms about the inappropriateness of sexism. Aside from the broad policy-level climate, organisational climates are also communicated in interpersonal relationships (Paustian-Underdahl et al., 2017), for instance between managers and their subordinates, and between peers or co-workers (Madlock & Booth-Butterfileds, 2012). That is, an organisational climate can be conceptualized at three different levels: Peer, manager, and policy. Below we discuss each of these levels in turn.

Starting with policies, research shows that the presence of organizational diversity policies targeting the promotion of diversity and reduction of inequalities facilitates positive interpersonal interactions between members of different social groups (Holoien & Shelton, 2012; Plaut et al., 2009). This might be, at least in part, because these diversity policies might create a safe working environment for members of stigmatized groups. For instance, Ruggs and colleagues (Ruggs et al., 2015) suggest that formal diversity policies reassure members of stigmatized groups that there is fair treatment in the organization. These policies also offer legal protection against discrimination, which might help victims of discrimination to engage with their co-workers more often, since legal procedures are then expected to reduce interpersonal discrimination and create a safe relational environment.

Organizational level policies also affect individuals' perception of discrimination. For example, previous research demonstrates that individuals perceive less discrimination when there is an organizational diversity policy in their work environment than when there isn't

such a policy (Button, 2001; Ragins & Cornwell, 2001; Barron, 2009). However, having an organizational policy that protects socially devalued identities and promotes the value of diversity doesn't mean that the working environment is definitely perceived to be intolerant of discrimination. Sometimes organizational level policies are not effective, or they are not endorsed at lower levels in the organization, such as by managers or within work teams (Hebl et al., 2002; Brady et al., 2015). In fact, when it comes to social relationships in the workplace, the interpersonal level (peers and managers) is more proximal, and might therefore be more powerful in shaping the effects of stigma compared to the policy level.

Although, to my knowledge, research has as yet to directly examine how managers' tolerance of sexism affects women's engagement with other women, previous studies show that managers' attitudes and behaviours influence tolerance of discrimination in the workplace (Salin, 2003; Bulutlar & Oz, 2009; Samnani, 2012). That is, managers' beliefs and actions regarding diversity play an important role in shaping how the organisational climate is perceived when it comes to tolerance of discrimination (Edelman, 2005; Martinez et al., 2013). In addition, managers can play a role in buffering the negative effect of unfair behaviour on members of disadvantaged groups (Beehr et al., 1990; Ely, 1994; Ragins & Scandura, 1994).

Finally, organizational climates are very strongly influenced by the attitudes and behaviours of peers, or co-workers, including when it comes to beliefs about the tolerance of sexism (Hebl et al., 2008). Indeed, prior work has shown that peer support is very important for employee wellbeing (Van Dick & Haslam, 2012), reducing stress (Frone, 2000), increasing self-esteem (Moradi & Funderburk, 2006), and increasing job satisfaction and commitment (Ragins et al., 2007). Peers' beliefs about sexism can also shape women's perceptions of how tolerant their workplace is of sexism. For instance, research shows that women in male dominated domains perceive the organisational climate as more inequitable

than women working in other domains (King et al., 2010). There is also evidence that support from peers is associated with less feelings of isolation among victims of workplace bullying (Zapf et al., 1996). As such, it is possible that peer intolerance of sexism is an important moderator of the effects of sexism on women's social relationships.

1.5. Overview of the Research Reported in This Thesis

The preceding review has shown that sexism can affect women's relationships with other women in contrasting ways—by leading women to distance themselves from other women, or by leading women to seek closeness with other women. Research in this area has not yet focused on actual social behaviour, or on social relationships at the interpersonal level. Research on other types of stigma has examined its effect on interpersonal relationships and clarified that, also with regard to interpersonal relationships, stigma can both draw people closer, or further apart. It has also clarified that key psychological states (such as lowered personal self-image) mediate this relationship, while structural factors can moderate it. However, this has not yet been tested with regard to the effects of sexism, or to interpersonal relationships with ingroup members.

This thesis seeks to go beyond past research in the following ways. First, we aim to focus specifically on the effects of sexism on women's interpersonal relationships with other women. We predict that women are less likely to engage with other women in their workplace when they are exposed to sexism than when they are not. However, we also expect that this is likely to depend on whether or not the organisational climate is (in)tolerant of sexism.

In the research reported in Chapter 2 we begin to examine this by analysing pre-existing data to investigate the link between reported exposure to sexism (encompassing sexualised and non-sexualised types of sexism), reported tolerance of sexism at work, and psychological wellbeing (depression, anxiety, hostility, and personal self-esteem). While this

does not allow us to examine social relationships, it provides the opportunity to examine how sexism might interact with perceived (in)tolerance of sexism to predict the psychological states that are important predictors of relationship functioning.

In Chapter 3 we report three studies that aim to clarify how experiencing sexism at work affects women's social relationships with other women. We also aim to assess the role played by tolerance of sexism in the workplace, including perceptions of tolerance of sexism at the peers-, managers-, and policy-level. These studies were carried out among working women and include purely correlational, as well as experimentally manipulated factors.

Chapter 4 reports one study investigating women's willingness to engage with other women and men, as a function of exposure to sexism and peer intolerance of sexism, in a laboratory setting. This provides us with the opportunity to get closer to actual behaviour, as well as to manipulate the key predictors. In this study, we also examined relationships with different types of targets and psychological wellbeing.

Chapter 5 offers an overall discussion of the findings of this thesis and reflects on their implications for theory and practice.

Chapter 2. Wellbeing Outcomes of Gender Devaluation: The Role of Environmental Tolerance of Gender Devaluation

Gender-based devaluation can take multiple forms, ranging from more overt to more subtle, and including or excluding sexualized experiences (like sexual harassment). Previous studies have shown that experiences with gender devaluation of various types have adverse effects on the person experiencing them, both in terms of psychological wellbeing and of physical health (McIntosh et al., 1994; Crull, 1982; Woodzicka & LaFrance, 2005; Swim et al., 2001; for a review see Barreto & Ellemers, 2015). Our first step in this PhD project was to examine whether tolerance of gender devaluation in the work environment moderated its effects on psychological wellbeing for women. Our first step was to focus on how the experience of gender devaluation interacts with environmental tolerance of it to influence women's psychological wellbeing, specifically on indicators of negative affect (depression, anxiety, and anger) and self-esteem (personal and collective self-esteem).

2.1. Effects of Gender Devaluation on Wellbeing

The main objective of this thesis, as we mentioned in the previous chapter, is to investigate whether experiences with gender devaluation affect the social relationships of women with other women and how environmental (in)tolerance of it modifies this relationship. Indicators of wellbeing such as depression, anxiety, anger, and low self-esteem are known to be both negative effects of gender devaluation (Swim et al., 2001; Landrine et al., 1995) and predictors of the quality of social relationships (Murray et al., 2000, 2006; Srivastava & Beer, 2005; Erol & Orth, 2013, 2016; Harris & Orth, 2020). Therefore, before examining how gender devaluation affects the social relationships of women, we looked at the impact of gender devaluation and environmental (in)tolerance of it on women's psychological wellbeing.

In this chapter, we examined the effects of experiences of sexualized (henceforth designated as sexual harassment) and non-sexualized (henceforth designated as sexism) gender devaluation. There are different ways in which these forms of gender devaluation have been classified in the literature, with some conceiving of both sexualized and non-sexualized gender devaluation as forms of sexual harassment (Fitzgerald, Shullman et al., 1988; Fitzgerald, Weitzman et al., 1988; Fitzgerald, Drasgow et al., 1997; Fitzgerald, Swan et al., 1997; Berdahl, 2007), and others considering sexual harassment to include only the more sexualized forms of gender devaluation (Glick & Fiske, 1996, 2001; Fiske & Glick, 1995; Pryor, 1987). Whatever the perspective, there is no doubt that both are forms of gender-based devaluation. In this thesis, we follow Fitzgerald's conceptualization of sexual harassment as unwanted sex-related conduct evaluated as inappropriate by the receiver, and threatening to their well-being (e.g., Fitzgerald, Drasgow et al., 1997; Fitzgerald, Swan et al., 1997), but adopt Glick & Fiske's (1996) nomenclature, reserving the label 'sexual harassment' to sexualized treatment. In addition, although some authors (e.g., Bowes-Sperry & Tata, 1999), taking a legal point of view, classify sexual harassment as sex-related activities in the workplace, irrespective of whether or not they cause distress, we follow the psychological approach of Fitzgerald and colleagues (Fitzgerald et al.,1995; Fitzgerald et al.,1999). This implies the consideration of whether or not the sexualized treatment is unwanted (specifically, inappropriate sexual attention, sexual coercion, or overt sexual verbal and non-verbal behaviors) or causes discomfort.

Perceived experiences of gender devaluation have been associated with increased depression and anxiety (Landrine et al., 1995; Klonoff et al., 2000; Swim et al., 2001; Schmitt et al., 2014; Sojo et al., 2016; for a review see Barreto & Ellemers, 2015), among other negative influences on affect. These affective responses to gender devaluation might, in turn, impact on their social relationships with other women. Increased anxiety, for example,

is associated with decreased social contact (Bolger & Eckenrode, 1991). However, sometimes women respond to sexism with anger (Barreto & Ellemers, 2005a; Salomon et al., 2015; for a review, Barreto & Ellemers, 2013), which instead can motivate them to draw towards other women in pursuit of social support and even collective action (Ellemers & Barreto, 2009; Becker & Wright, 2011; Lemonaki et al., 2015). In sum, the specific affective response displayed by women in response to gender devaluation might make them ready to display particular social behaviors.

In a similar vein, experiences with gender devaluation—and particularly experiences with sexual harassment—have been shown to decrease personal self-esteem (Swim et al., 2001; Glomb et al., 1999; Harned & Fitzgerald, 2002; for a review see Barreto & Ellemers, 2015), which in turn has (separately) been demonstrated to be an important predictor of positive behavior in interpersonal relationships (Murray et al., 2002; DeHart et al., 2004; Wood et al., 2009). For example, individuals with low self-esteem have been shown to be less willing than people with high self-esteem to take part in social interactions with others, in part because those with low self-esteem perceive social interactions to involve a higher risk of rejection than do those with high self-esteem (Stinson et al., 2014). In other words, personal self-esteem is an important variable to examine in this context since it can both be impaired by different forms of sexism and predict women's behavior in social relationships.

While personal self-esteem corresponds to the value attached to personal identities, collective self-esteem corresponds to the value attached, by self and others, to one's social identities (Crocker & Luhtanen, 1990; Luhtanen & Crocker, 1991; Long & Spears, 1997; De Cremer & Oosterwegel, 1999). In many ways, the effects of personal and collective self-esteem vary. For example, research has shown that collective self-esteem predicts ingroup bias to a greater extent than personal self-esteem (Crocker & Luhtanen, 1992; Long et al., 1994; Rubin & Hewstone, 1998), which makes sense from the social identity perspective,

according to which ingroup bias is a group process that should be predicted by group level cognition and affect (Brewer, 1979; Abrams & Hogg, 1990; Seta & Seta, 1992). Despite these differences, like with personal self-esteem, experiences of gender devaluation have also been reported to decrease collective self-esteem (Fischer & Holz, 2007; Leonardelli & Tormala, 2003). In addition, collective self-esteem has also been shown to play a buffering role, reducing the negative impact of gender devaluation. For example, for women with lower levels of private collective self-esteem, experiences of gender devaluation increased depression and anxiety, but as private collective self-esteem increased, the impact of discrimination on these forms of distress was attenuated (Corning, 2002). It is also possible that collective self-esteem is a relevant precursor of women's behavior towards each other, given that it directly speaks to women's relationship to their gender group. Given what is already known and what is yet to be understood, we also explore the impact of experiences with sexism and with sexual harassment on the three of the components of collective self-esteem, i.e., private (being pleased to be a member), public (believing that others value women), and identity (seeing being a woman as a significant part of their identity) collective self-esteem.

2.2. The Role of Organizational Tolerance of Gender Devaluation

The research reported in this chapter also seeks to take initial steps in the investigation of the role that organizational (in)tolerance of gender devaluation might play in the link between experiences of gender devaluation and women's psychological wellbeing. Organizational climates refer to rules, practices, protocols, and expectations about the conduct required by employees in the workplace (Schein, 2010; Ostroff et al., 2003; Zohar & Hoffman, 2012). Organizational tolerance of gender devaluation including sexism and sexual harassment can be described as the lack of rules, practices, protocols, and expectations on the part of staff about the inappropriateness of gender devaluation at work.

One study found that a sexist (non-sexualized) climate was marked by the derogatory views of peers and the organization towards women (Parker & Griffin, 2002; Settles et al., 2006). In turn, Williams et al. (1999), in their studies of sexual harassment within the military, suggested that there are three aspects of organizational climate that need to be considered in this respect: Organizational policies (formal written general rules), organizational procedures (formal and informal guidance about implementation), and organizational practices (actual actions about sexual harassment). Therefore, organizational tolerance of gender devaluation can be linked to organizational policies, procedures, and or practices that inhibit experiences of sexism and sexual harassment in organizations.

Fitzgerald et al. (1994) stated that perceived organizational tolerance of sexual harassment is associated with beliefs about the prevalence of sexual harassment, with expectations of how it might look like when it happens, and about its consequences for targets and harassers. That is, when employees consider that their organization is tolerant of sexism or sexual harassment, they tend to perceive that these are more frequently encountered in the organization, that they take fairly blatant forms, and that they are particularly damaging for targets. In addition, organizations perceived as tolerant of gender devaluation are not expected to take complaints about sexism or sexual harassment seriously, or to take effective action against them (Hulin et al., 1996; Cortina et al., 2002; McCabe & Hardman, 2005). As a consequence, the perception that an organization is tolerant of gender devaluation is associated with the idea that complaining is risky and unlikely to deliver satisfactory outcomes.

Organizational tolerance of sexual harassment has been considered among the organizational antecedents of perceptions of sexual harassment (O'Leary-Kelly et al., 2009). Indeed, Willness et al. (2007) concluded in their meta-analytic study that there is a strong correlation between organizational tolerance of sexual harassment and the prevalence of

sexual harassment incidents at work. Likewise, authors often refer to an organization's tolerance of sexism to describe the prevalence of sexism in organizations (Reid & Clayton, 1992; Wessels & Ryan, 2012) as if they are interchangeable concepts. However, this is not precise and it is important to clarify the distinction between these two concepts. Indeed, though overt sexism might be less prevalent when it is not tolerated in organizations, it can still happen in subtle forms, which are harder to regulate through organizational norms, or outside the conscious awareness of perpetrators (and even of victims). Moreover, conveying that harassment is tolerated in an organization can increase the actual prevalence of harassment, but it can also decrease the probability of collecting accurate evidence of its occurrence, or of disclosing harassment when it occurs (Bell et al., 2002; Gruber, 1998; Gruber & Smith, 1995), decreasing (or even inverting) the relationship between levels of tolerance and actual reports. Organizational tolerance of sexism refers most directly to how an organization has responded to complaints about sexist incidents in the past, or is likely to respond to these in the future. As such, it is a set of corrective guidelines or practices and it misses the majority of incidents that are not reflected in complaints. By contrast, experiences with sexism consist of experiences with gender-based devaluation that target individuals or groups and may or may not be reflected in complaints. In sum, these are not only very different concepts, but they can in fact be considered as orthogonal, with sexist events emerging both in organizations that are tolerant and in organizations that are intolerant of sexism.

2.3. How Organizational Tolerance of Gender Devaluation might Affect Wellbeing Outcomes of Gender Devaluation

Research has shown that organizational tolerance of sexual harassment has detrimental direct effects on the wellbeing of female employees, such as increasing anxiety and depression (Fitzgerald, Drasgow et al., 1997; Glomb et al., 1997). For example, Glomb et

al. (1997) proposed that organizational tolerance of sexual harassment could give rise to anxiety among women who are either actual or potential targets of harassment, since they do not perceive their work environment to protect them from sexual harassment. Although this is important, our main focus in this research is on the moderating role of organizational tolerance of gender devaluation on psychological wellbeing—that is, our main focus is not on the direct effect of environmental tolerance on women's wellbeing, but on its indirect effect, as moderator of the link between exposure to gender devaluation and wellbeing.

One of the ways through which organizational tolerance could impact the consequences of gender devaluation targets experience might be that organizations that are perceived to be *in*tolerant of harassment are those that tend to make clear what qualifies as harassment. This, in turn, is likely to help targets identify what happens to them as harassment and to recruit the support of those around them. For example, McCabe and Hardman (2005) found that employees who believe that their organization is more tolerant of sexism or of sexual harassment are less likely than those who believe that their organisation is less tolerant of gender devaluation to label actions as gender devaluation.

Recognising and labelling gender devaluation might, in turn, be important to protect women's wellbeing. Fitzgerald and Ormerod (1993) stated that, for instance, women often respond to sexual harassment with self-blame, which is a predictor of poor psychological wellbeing (Else-Quest et al., 2009). Similarly, Blodorn et al. (2016) have shown that perceived discrimination raises self-blame among targets from racial minority groups and self-blame, in fact, lowers personal self-esteem and increases depression and anxiety. Therefore, it is possible to expect that organisations that are tolerant of sexism might have indirect negative effects on women's wellbeing, in part because women in those environments do not have support to label and challenge sexism. On the other hand, we believe that when sexism is not tolerated in an organisation (therefore, facilitating labelling),

women are more likely to attribute their negative experiences to gender discrimination. Attribution to discrimination has been shown to be a self-protective strategy to cope with discrimination (Crocker & Major, 1989). Specifically, attributing negative experiences to discrimination rather than self-blame buffers the negative effects of discrimination on self-esteem (Major, Quinton et al., 2003; Major, Kaiser et al., 2003).

2.4. The Current Study

In the current study, we examine whether expereinces of gender devaluation (sexism and sexual harassment) has direct detrimental effects on wellbeing indicators among women (higher depression, anxiety, anger, and lower self-esteem). More importantly, we also examine whether perceived tolerance of gender devaluation moderates the relationship between experiences with gender devaluation and wellbeing including negative affect (depression, anxiety, and anger) and self-esteem (personal self-esteem, public CSE, private CSE, and identity CSE).

2.5. Study 1

This study consists of secondary analysis of a data set collected in 2015-16 by undergraduate students working under the supervision of Dr Safi Darden and in collaboration with Prof Manuela Barreto, both of whom are supervisors of this PhD dissertation. The data were collected to compare the effects of non-sexualised sexism and sexual harassment in the workplace. Importantly for our purposes, the data includes reported exposure to gender devaluation, indicators of wellbeing (depression, anxiety, anger, self-esteem), and self-reported tolerance of gender devaluation at work. With this secondary data analysis, we were able to take initial steps towards understanding the role of organizational tolerance of sexism. Specifically, we focused on examining whether (perceived) organizational tolerance of sexism/sexual harassment moderates the effect of gender devaluation on wellbeing (with a

focus on indicators of wellbeing that are also intimately connected to behaviour in social relationships). We hypothesised that:

1. Experiences with gender devaluation (sexism or sexual harassment) are likely to be associated with higher levels of self-reported depression, anger, and anxiety and lower personal self-esteem.

2. Perceived tolerance of gender devaluation in the workplace is likely to moderate the relationship between perceived experience of gender devaluation and wellbeing (negative affect and personal self-esteem). When perceived tolerance of gender devaluation in the workplace is greater, experience of gender devaluation is likely to be positively associated with negative affect and negatively associated with personal self-esteem. When tolerance is lower, experiences of gender devaluation are likely to have weaker association with negative affect and personal self-esteem.

For exploratory purposes, we also included collective self-esteem measures: Private, public, and identity collective self-esteem.

2.5.1. Method

2.5.1.1. Design

The data we used for these secondary analyses stemmed from a study that had two conditions: In one condition, participants completed a (sexualised) sexual harassment scale before responding to the dependent measures. In the second condition, participants responded to a (non-sexualised) sexism scale. Participants were randomly assigned to one of these two conditions. To examine our hypotheses, we collapsed across these two conditions and examined how experiences with gender devaluation (of one kind or another) interacted with organizational tolerance of gender devaluation to affect wellbeing.

2.5.1.2. Participants

All participants in this study were women in employment, resident in the UK, who completed the study online. The number of participants who clicked on the questionnaire link was 198. However, 28 of these participants were excluded because they did not complete the questions that served to measure experiences with gender devaluation. An additional 37 participants were excluded because, even though they responded to the questions that served to measure experiences with gender devaluation, they did not respond to any of the dependent variables. After these exclusions, 133 participants remained in the sample: Of these, 69 participants answered a questionnaire with sexual harassment items and 64 participants answered a questionnaire with sexism items. Sensitivity analysis showed that, given $\alpha=.05$ and a power of $1-\beta=.80$, the sample of N=133 is able to detect medium effect size of interaction between experiences of gender devaluation and organisational tolerance of it on personal self-esteem ($f=.24$).

Thirty-nine participants were between the ages of 18-24 (28%), 33 were between 25 and 34 (24%), 24 were between 35 and 44 (18%), 16 were between 45 and 54 (12%), and 11 (8%) were over 55 (11 participants did not report their age). That is, 59% of the participants were under 35 years of age and 8% were above 55 years old. While 63 (49.7%) participants indicated that they worked with a male supervisor, 53 (40.6%) indicated their supervisor was female, and 17 (9.8%) did not report the gender of their supervisor. In terms of the gender ratio of their workgroup, 27 (21%) participants reported that their workgroup had 20% women or less, and 21 (16%) participants reported that it had 80% or more women. Of the remaining participants, 57 (42%) indicated that women were between 21-80% of their workgroup (9 did not supply information about the gender ratio of their workgroup).

2.5.1.3. Materials

2.5.1.3.1. Gender devaluation. Participants who were assigned to complete questions about sexual harassment were asked to complete the 13 items of the Sexual Experiences

Questionnaire (SEQ; Berdahl & Moore, 2006). Examples are: "During the past six months, have you been in a situation where anyone at work tried to draw you into a discussion of sexual matters?", "During the past six months, have you been in a situation where anyone at work forced themselves on you sexually?" (α=.88, see Appendix A for the complete scale). Participants who were assigned to complete questions about experiences with non-sexualised sexism completed 11 items that were developed by the research team on the basis of prior work illustrating how sexism is experienced—specifically, Swim et al.'s daily diary study (2001), Klonoff and Landrine's schedule of sexist events (1995), and the SEQ (Berdahl & Moore, 2006). Examples are: "During the last six months, have you been in a situation where anyone at work did not take what you said seriously because you are a woman?", "During the last 6 months, have you been in a situation where anyone at work assumed you had inferior ability (e.g., in maths or science) because you are a woman?" (α=.88, see Appendix A for complete scale).

In both situations, participants were asked to think about the preceding six months and to indicate how often they had encountered each experience in the workplace on a scale from 0 (never) to 4 (most of the time). In addition, and in line with the recommendation of Berdhal and Moore (2006) and the definition of sexual harassment as unwanted sexualized treatment (e.g., Fitzgerald, Swan et al., 1997), for each event that participants indicated having experienced at least once, participants also indicated how negatively or positively they evaluated the experience on a scale from 0 (very negative) to 4 (very positive). Positive and neutral experiences were recoded as 0, to reflect the conceptualization of sexual harassment as an unwanted or negative experience (Fitzgerald, Swan et al., 1997). Scores on this measure were computed by multiplying frequency and evaluation. Therefore, experiences that never occurred and experiences rated as positive or neutral received a score of 0.

It is also important to state that participants were asked to write about one of these experiences in free response text after completing experiences of gender devaluation items and before completing affect scales.

2.5.1.3.2. Psychological wellbeing. Participants were directed to reflect on the described experiences and completed three affect subscales tapping into depression, anxiety, and anger (taken from Major, Kaiser et al., 2003). Participants responded to all items on a five point Likert-type scale from 1 (not at all) to 5 (extremely). Depression was assessed with 15 items: Discouraged, fine (reverse coded), blue, worthless, proud (reverse coded), embarrassed, like a failure, disappointed in myself, pleased with myself (reverse coded), humiliated, ashamed, inferior to others, sad, depressed, and mortified. These items formed an internally consistent scale (α=.90) and were averaged for further analysis. Anger was measured with five items: Angry, mad, scornful, irritable, and hostile. These items formed a reliable scale (α=.91) and were averaged for further analysis. To measure anxiety, we used four items: Fearful, worried, calm (reverse coded), and secure (reverse coded). These items were reasonably internally consistent (α=.68) and were averaged for further analyses.

We also assessed personal and collective self-esteem. For all items, participants were asked to report how they felt at the moment on a five point Likert-type scale from 1 (strongly disagree) to 5 (strongly agree). Personal self-esteem was assessed with the 10 item scale by Rosenberg (1965), including items such as: "I feel that I am a person of worth, at least on an equal plane with others" and "I feel I do not have much to be proud of" (reversed). The items formed an internally consistent scale (α=.89) and were averaged for further analyses (see Appendix A for complete scale). Collective self-esteem was assessed with two items from three subscales of the Collective Self-Esteem scale by Luhtanen and Crocker (1992). Two items assessed Private Collective Self-Esteem: "I feel inadequate because I am a woman" (reverse) and "I feel good about being a woman." These 2 items had acceptable internal

consistency (r=.33, N=126, p<.01) and were averaged for further analyses. Two items assessed Public Collective Self-Esteem: "I feel that most people consider women to be ineffective" (reversed) and "I feel that women are generally respected by others." Together these items had acceptable internal consistency (r=.36, N=126, p<.001), so they were averaged for analyses. Two final items assessed Identification (Identity Collective Self-esteem): "I feel that being a woman is an important part of who I am" and "I feel that being a woman is an important part of my self-image." These items had strong internal consistency (r=.72, N=125, p<.001), and were averaged for analyses.

2.5.1.3.3. Perceived Tolerance of Gender Devaluation in the Workplace. Four items assessed to what extent participants perceived that there was tolerance of sexual harassment at their workplace. Two items were used by Bingham and Scherer (1993) to measure perceived work climate regarding sexual harassment and two were developed for the purposes of this study to measure the same for non-sexualized sexism: "Sexual harassment is clearly discouraged by my supervisors and co-workers (including sexual innuendo and materials, reversed)," "People at my work ignore sexual harassment when it happens", "There are formal procedures to address sexually harassing behaviour at my workplace" (reversed), and "When women are sexually harassed in my workplace this is addressed" (reversed). There were additionally created four parallel items to assess intolerance of sexism, i.e., "Unequal treatment of men and women is clearly discouraged in my workplace (including stereotypical comments or jokes, reversed)," "People at my work ignore the unequal treatment of women when it happens", "There are formal procedures to address the unequal treatment of women at my workplace" (reversed), and "When women are treated unequally in my workplace this is corrected" (reversed). Together, these eight items formed an internally consistent scale (α=.87) and were averaged for further analyses.

2.5.1.4. Analyses

2.5.1.4.1. Missing values. Missing data after the exclusions described above ranged from low (5.3%) for private and for public CSE to high (19.5%) for depression. Missing value rates per measure are displayed in Table 2.1.

Table 2.1.

Missing values for each measure analysed in Study 1.

	Observed data			
	M	**SD**	**EM**	**Percentage of Missing Values**
Depression	2.08	.65	2.08	19.5%
Anger	1.90	1.05	1.91	16.5%
Anxiety	2.70	.75	2.69	16.5%
PSE	4.06	.69	4.05	8.3%
Private CSE	4.18	.86	3.54	5.3%
Public CSE	3.53	.89	4.05	5.3%
ID CSE	4.07	.93	4.05	6%
Perceived Tolerance of Sexism in the workplace	3.54	.87	3.54	7.5%

Note. M = means of valid responses, SD = standard deviation, EM = Estimated Means.

To examine whether or not the missing data followed a specific pattern, we ran Little's (1988) MCAR test in SPSS (see also Acock, 2005; Bennett, 2001). The results indicated that the data was not MCAR (missing completely at random), $\chi^2 = 223.79$, $p<.05$, but rather MAR (missing at random), meaning that the propensity of missing data is not systematically related to unobserved values, but related to observed values in the dataset (Allison, 2001; Baraldi & Enders, 2010; Schlomers et al., 2010). One of the appropriate ways to treat missing values with a MAR dataset is to apply multiple imputation (MI) to the data (Baraldi & Enders, 2010; Schlomers et al., 2010). Regarding the missing values of the dependent variables, first we performed MI by generating 5 imputed datasets through SPSS, including all independent as well as covariates in the model. These imputed data were then analysed (with separate analyses conducted and point estimates generated with each of the 5 separate imputed datasets) and final coefficients were obtained through pooling of the individual point estimates. The results without MI were approximately identical to results based on the MI data set, so we reported the findings for the data with MI.

2.5.2. Results

.   Means, standard deviations, and correlations for Study 1 were provided in Table 2.2. Experience of gender devaluation is positively associated with organisational tolerance of gender devaluation and negatively associated with personal self-esteem and private collective self-esteem. Organisational tolerance of gender devaluation is positively associated with anger and negatively associated with personal self-esteem, private and public collective self-esteem.

We subsequently investigated whether the association between experience of gender devaluation and wellbeing depended on perceived tolerance of gender devaluation in the workplace (see Figure 2.1.). To test this, we used the original data, without MI, to centre predictors. After centring the predictor variables, we again applied multiple imputation to our data. We tested a series of hierarchical linear regression models entering centred gender devaluation in the first step, perceived tolerance of gender devaluation in the second step, and the interaction between the two in the third step.

Figure 2.1.
The moderation of the relationship between sexism and wellbeing by tolerance of sexism.
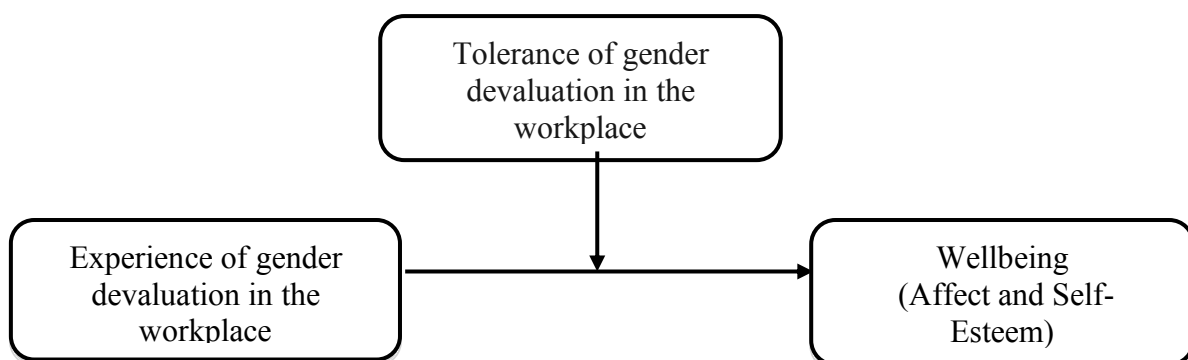
Table 2.2.

Means, standard deviations, and Pearson correlations for Study 1.

	M	SD	1	2	3	4	5	6	7	8
1.Experience of gender devaluation	.87	.84	-							
2.Tolerance of gender devaluation	2.46	.87	.26**	-						
3.Depression	2.08	.65	.05	.17	-					
4.Anxiety	2.69	.75	.14	.12	.67**	-				
5.Anger	1.90	1.04	.12	.23*	.72**	.60**	-			
6.PSE	4.06	.69	-.19*	-.39**	-.41**	-.31**	-.22**	-		
7.Private CSE	4.18	.86	-.19*	-.49**	-.42**	-.33**	-.33**	.67**	-	
8.Public CSE	3.53	.89	-.14	-.38**	-.43**	-.32**	-.44**	.36**	.47**	-
9.Identity CSE	4.07	.92	-.17	-.39**	-.15	-.12	-.12	.41**	.50**	.15

Notes. M stands for means and SD stands for standard deviations. ** denotes a significant coefficient at p<.01, * denotes p<.05. PSE is abbreviation of personal self-esteem. CSE is abbreviation of collective self-esteem.

Results were presented in Table 2.3. The analysis did not reveal any significant main effects of perceived experience of gender devaluation and perceived tolerance of gender devaluation for any of the wellbeing indicators. The interaction effect of perceived experience of gender devaluation and perceived tolerance of gender devaluation was not significant for depression and anxiety. However, the interaction effect on anger was significant. As displayed in Figure 2.2, experiencing gender devaluation in the workplace was significantly and positively related to anger at higher levels of tolerance of gender devaluation, $b=1.21$, $SE=.12$, $t_{(132)}= 3.33$, $p<.001$, 95% CI [.00, .46]. However, there was not a significant association between perceived experience of gender devaluation and anger at lower levels of perceived tolerance of gender devaluation, $b=.37$, $SE=.12$, $t_{(132)}= 1.24$, $p=.09$, 95% CI [-.46, .00].

For personal self-esteem (see Table 2.3), the analyses revealed a significant main effect of perceived tolerance of gender devaluation and, as with anger, a significant interaction between perceived experience of gender devaluation and perceived tolerance of gender devaluation. As plotted in Figure 2.3, for participants who perceived more tolerance of sexism in the workplace, the more participants reported experiencing gender devaluation, the lower their personal self-esteem, $b=-.13$, $SE=.09$, $t_{(132)}= -6.42$, $p<.001$, 95% CI [-.50. -.15]. By contrast for participants who reported less tolerance of gender devaluation in the workplace, the experience of it did not significantly predict personal self-esteem, $b=.30$, $SE=.09$, $t_{(132)}= 1.64$, $p=.11$, 95% CI [-.11, .72].

There were no significant interaction effects for collective self-esteem, but perceived tolerance of gender devaluation significantly and negatively predicted public, private, and identity collective self-esteem.

Table 2.3.

Hierarchical linear regression analyses predicting wellbeing from experience of gender devaluation, perceived tolerance of gender devaluation and their interaction.

Dependent variable	Term	*b*	SE	*t*	*p*	95% CI
Depression	Experience of gender devaluation	.01	.08	.07	.95	[-.16, .17]
	Tolerance of gender devaluation	.13	.08	1.64	.10	[-.03, .28]
	Interaction	-.10	.07	-1.39	.17	[-.25, .04]
Anxiety	Experience of gender devaluation	.10	.09	1.10	.27	[-.08, .29]
	Tolerance of gender devaluation	.08	.09	.89	.38	[-.10, .26]
	Interaction	-.14	.08	-1.67	.09	[-.30, .03]]
Anger	Experience of gender devaluation	.09	.12	.67	.50	[.17, .34]
	Tolerance of gender devaluation	.23	.12	1.90	.06	[-.01, .48]
	Interaction	-.37	.11	-3.38	.001	[-.59, .15]
PSE	Experience of gender devaluation	-.03	.07	-.06	.95	[-.93, .87]
	Tolerance of gender devaluation	-.28	.08	-3.95	<.001	[-1.16, .59]
	Interaction	1.05	.08	2.57	.01	[.24, 1.87]
Private CSE	Experience of gender devaluation	-.07	.09	-.77	.44	[-.23, .10]
	Tolerance of gender devaluation	-.47	.08	-5.60	<.001	[-.63, -.30]
	Interaction	-.06	.07	-.79	.42	[-.22, .09]
Public CSE	Experience of gender devaluation	-.05	.10	-.50	.62	[-.24, .14
	Tolerance of gender devaluation	-.37	.09	-4.04	<.001	[-.55, -.19]
	Interaction	.12	.09	1.36	.18	[-.05, .29]
ID CSE	Experience of gender devaluation	-.09	.10	-.89	.38	[-.28, .11]
	Tolerance of gender devaluation	-.39	.09	-4.11	<.001	[-.58, -.20]
	Interaction	-.06	.09	-.67	.50	[-.24, .12]

Figure 2.2.

How perceived organisational tolerance of gender devaluation (M) moderates the relationship between experience of gender devaluation (X) and anger (Y) in Study 1.
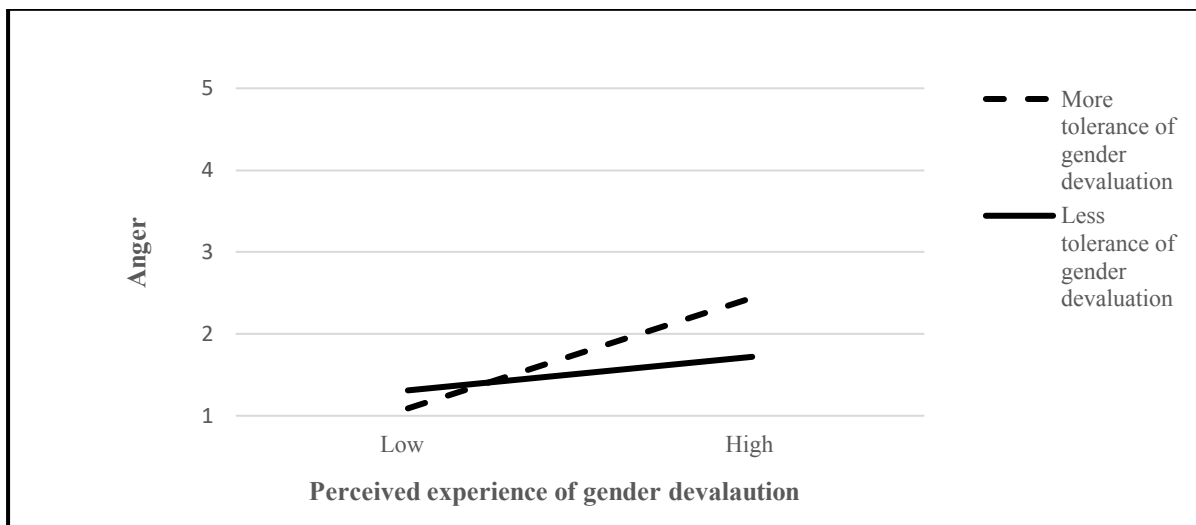
Figure 2.3.

How perceived organisational tolerance of gender devaluation (M) moderates the relationship between experience of gender devaluation (X) and PSE (Y) in Study 1.
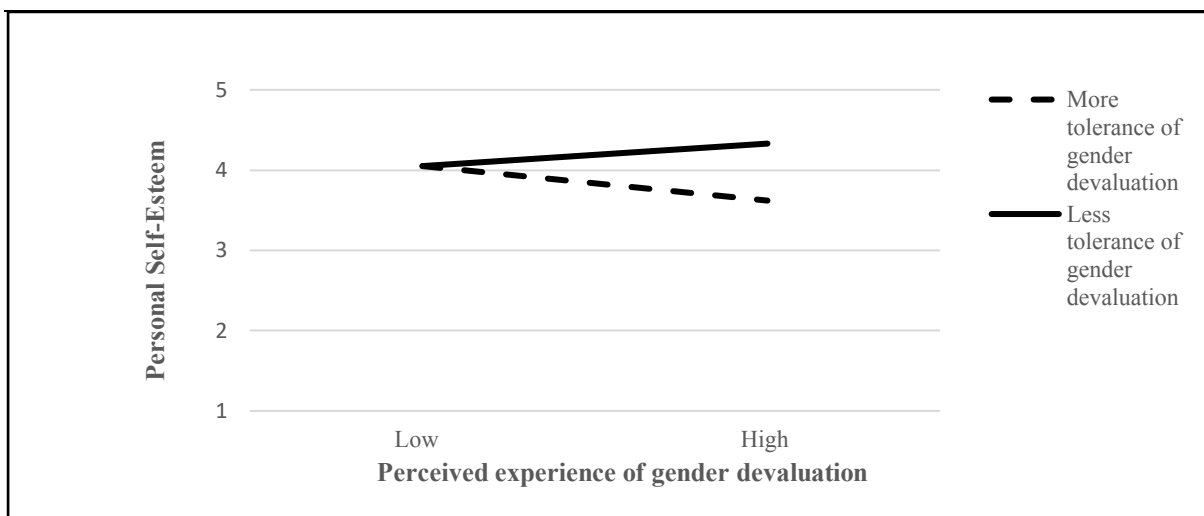
Finally, we explored whether the two types of gender devaluation assessed in this study (non-sexualised sexism and sexual harassment) had different effects on the dependent variables. The results are presented in Table 2.4. Anger was differentially affected by non-sexualised sexism and sexual harassment. Participants in the (non-sexualised) sexism

condition reported significantly greater anger than those in the sexual harassment condition.

Type of gender devaluation had no other main effect on the dependent variables.

Table 2.4.

Independent samples t-tests comparing means for experience of sexual harassment vs sexism on wellbeing measures and tolerance of gender devaluation.

	Sexual Harassment	Non-sexualised Sexism					
	M (SE)	**M (SE)**	**t**	**df**	**p**	**95% CI**	**d**
Affect							
depression	2.00 (.08)	2.12 (.08)	-.95	100	.34	[-.37, .13]	.18
anger	1.61 (.11)	2.21 (.16)	-2.97**	74	.004	[-1.01, -.20]	.06
anxiety	2.55 (.10)	2.77 (.10)	-1.56	176	.12	[-.49, .06]	.03
Self-esteem							
PSE	4.07 (.09)	4.03 (.08)	.32	540	.75	[-.21, .29]	.05
Private CSE	4.12 (.11)	4.25 (.09)	-.88	5908	.38	[-.43, .16]	.16
Public CSE	3.56 (.10)	3.50 (.12)	.38	3608	.70	[-.24, .36]	.07
ID CSE	4.05 (.12)	4.08 (.12)	-.14	153	.87	[-.37, .32]	.02
Perceived Tolerance							
Tolerance of gender devaluation	2.42 (.12)	2.52 (11)	-.66	2756	.51	[-.10, .16]	.11

*Note.**=p≤01. Standard Errors appear in parentheses next to means*

2.5.3. Discussion

In this research, we analysed an existing dataset in novel ways to begin examining the interplay between experiences with gender devaluation and perceived tolerance of gender devaluation in the workplace. Our results support the idea that gender devaluation has a negative association with women's wellbeing, irrespective of whether or not it is sexualised; for example, experiences with gender devaluation were negatively associated with personal self-esteem and private collective self-esteem.

In addition, our results showed that perceived tolerance of gender devaluation in the workplace can be negatively related to women's wellbeing. That is, we found that perceived tolerance of gender devaluation was negatively associated with personal self-esteem and positively with anger, replicating prior research in this area. New to our research, we found

that experiences with gender devaluation were negatively associated with personal self-esteem and positively associated with anger when the workplace was perceived as tolerant of gender devaluation, but not when it was perceived as *in*tolerant of gender devaluation. That is, as expected, we found some evidence that organizational tolerance of gender devaluation modified the link between sexism and women's wellbeing, compared to organizations perceived not to tolerate gender devaluation. Though it is important to acknowledge that these effects did not extend to the other indicators included in this study, we are reassured by the fact that no findings contradicted our hypotheses--we either found patterns supportive of our hypotheses, or null effects.

These results are consistent with existing work showing the negative effects of gender devaluation (Barreto et al., 2009; Swim et al., 2001) and organisational tolerance of gender devaluation (Fitzgerald et al., 1997; Glomb et al., 1997) on psychological wellbeing. In addition, in the current study we show that greater intolerance of gender devaluation in the workplace might modify this negative effect, and perhaps even promote positive affect among women who encounter gender discrimination.

Though this secondary data analysis does not enable us to examine directly how tolerance of gender devaluation might affect women's social relationships, it provides an important first step. The wellbeing variables included in this study are very important for social relationships. Particularly personal self-esteem has been known as one of the strongest indicator of interpersonal relationship functioning (Murray et al., 2000, 2006; Wood et al., 2009; Harris & Orth, 2020). For example, people with low personal self-esteem reported more reduced closeness to their partner when they faced relational difficulties compared to people with high personal self-esteem (Murray et al., 2002). Other affect outcomes such as depression, anxiety, anger are also determinant for positive social relationships. Anger, for example, has been found to decrease trust in others (Dunn & Schweitzer, 2005), but it is also

known as an approaching/engaging emotion (for a review, Carver & Harmon-Jones, 2009). Therefore, it is important that this study gave us an insight how organisational tolerance of gender devaluation might affect the indicators of social relationships.

To examine how experiences of gender devaluation and tolerance of gender devaluation affect women's social relationships, we designed a series of correlational and quasi-experimental studies focusing on independently manipulating exposure to gender devaluation with a specific focused on non-sexualised sexism, organizational tolerance of gender devaluation, and indicators of social relationships. These are reported in the next chapters. In addition, in the next chapters, organisational tolerance of gender devaluation was investigated at three levels: Peer-, manager-, policy-level tolerance of sexism.

Chapter 3. Distancing or Drawing Together: Sexism and Organisational Tolerance of

Sexism Impact Women's Social Relationships at Work[1]

Research shows that women often face sexism in the workplace (Davison & Burke, 2000; Swim et al., 2001; Stamarski & Son Hing, 2015). Sexism can be defined as unequal evaluations and treatment of men and women based on their sex (Swim & Hyers, 2009) and includes a range of daily hassles and negative life events (Klonoff & Landrine, 1995). Sexism affects women negatively in different ways, such as by leading to unfair payment (Peterson & Morgan, 1995) and lack of leadership opportunities (Eagly & Carli, 2007; Barreto et al., 2009). Moreover, disadvantage in the workplace causes stress and generally negatively affects women's psychological wellbeing (Schmader et al., 2008; Borrel et al., 2010; Barreto & Ellemers, 2013). For instance, women's reports of personal experiences with discrimination are positively correlated with self-reported depression (Kobrynowicz & Branscombe, 1997) and inversely correlated with personal self-esteem (Schmitt et al., 2002). However, not much is known about the impact of discrimination on interpersonal relationships within the group that is targeted by discrimination. Prior research in this area does provide some indications, but these are largely inconsistent. This chapter aims to advance understanding of how sexism affects women's interpersonal relationships with other women by taking into account the role of tolerance of sexism in the organisational environment.

3.1. The Importance of Social Relationships at Work

The quality of one's social relationships is an important aspect of individual wellbeing (Baumeister & Leary, 1995; Ryff & Singer, 2000). In the workplace, workers with high

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quality work relationships with their peers and managers report more positive emotions (Colbert et al., 2016) and greater job satisfaction (Dutton & Ragins, 2007; Einarsen et al., 2011). In addition, social relationships at work also affect organizations: High quality workplace relationships with peers and managers are positively associated with productivity (Dutton & Ragins, 2007; Einarsen et al., 2011) and organisational commitment (Hanpachern et al., 1998).

Research on the role of social relationships in health and wellbeing indicates that social relationships constitute an important resource to cope with negative or stressful experiences (Cohen & Wills, 1985; Frisch et al., 2014; Jetten et al., 2012). In other words, those who have positive social relationships with others are better able to cope with a variety of negative life events (and some argue this is especially the case for women compared to men; Taylor et al., 2000). Social relationships *with other members of the same in-group* have particularly important benefits for health and wellbeing (Frable et al., 1998; Sanchez & Garcia, 2009). Studies focusing specifically on workplace friendships, or informal relationships with peers at the same level in the hierarchy (Bridge & Baxter, 1992; Myers & Johnson, 2004), have also highlighted the importance of peer relationships, especially among members of minority or disadvantaged groups (Hays, 1989; Jones, 1991). In sum, social relationships with other women are an important resource for women's well-being. Here, we examine whether experiences of sexism might interfere with these relationships, hindering or facilitating women's access to this important resource.

3.2. The Impact of Sexism on Women's Social Relationships with Other Women

There is a developing line of research on how devaluation affects social relationships, but findings in this area are inconsistent and sometimes contradictory. On the one hand, research has shown that being targeted by prejudice and discrimination can negatively affect close interpersonal relationships, including with friends and family (Doyle & Molix, 2014b,

2014c, 2015b). However, that work does not specifically address the effects of devaluation on relationships with other members of the devalued group (i.e., in-group members). In the context of gender, some research has shown that women can respond to gender discrimination by distancing themselves from other women (Derks, Van Laar, & Ellemers, 2016; Faniko et al., 2016; Ely, 1994), especially if being a woman is not an important part of their identity to begin with (Derks, Van Laar, et al., 2011). At the same time, however, it has often been suggested that members of devalued groups tend to "draw together" when threatened (Haslam & Reicher, 2006). For example, the extent to which individuals perceive themselves and their group to be targets of discrimination is positively associated with in-group identification (Branscombe et al., 1999; Jetten et al., 2001).

One source of confusion in this area is that what can broadly qualify as self-group distancing is very diverse and varies in critical ways. For example, researchers studying self-group distancing have examined how experiences of sexism impact how women relate to women as a whole (e.g., how similar they see themselves to the typical woman, Derks, Van Laar et al., 2011; to what extent they identify with other women, Branscombe et al., 1999), as well as how experiences of sexism impacts the extent to which women use stereotypically feminine vs. masculine traits to describe themselves (Derks, Ellemers et al, 2011; Faniko et al., 2016; Faniko et al., 2017), and by looking at how experiences of sexism impact women's evaluations of their subordinates (Derks, Ellemers et al., 2011; Derks, Van Laar et al., 2011; Faniko at al., 2016; Faniko et al., 2017). Our aim in this chapter is to contribute to this literature by focusing specifically on women's *interpersonal relationships* with ingroup members, i.e., female co-workers. In addition, while the majority of the self-group distancing work was particularly focused on uncovering the conditions under which women distance themselves from each other, we are additionally interested in when they might draw together in response to sexism (see also Derks, Van Laar et al., 2011). Indeed, self-group distancing is

problematic both because it can be interpreted as discrimination from ingroup members and because it inhibits the social support (seeking and provision), which is most directly evidenced by directly examining when women draw together.

Prior research on interpersonal relationships (and in-group relationships) therefore suggests that women might respond to sexism at work by distancing themselves from other women, but there is also evidence that the opposite can happen, whereby experiences of sexism instead lead women to draw together. In this paper, we hope to clarify these somewhat contradictory findings by considering the role played by organisational climate in shaping women's relationships with other women at work. We argue that when women experience sexism at work, the organisational climate in which that sexism occurs can hinder or facilitate women's access to this important coping response. Specifically, when women experience sexism at work, the perception that the organisational climate is *intolerant* of sexism will lead women to report more positive social relationships with other women in the workplace. However, the perception that organisational climate is *tolerant* of sexism may hinder drawing towards other women as a response to sexism.

3.3. The Role of Organisational Climate

Research has shown that organisational climates that tolerate sexism tend to be associated with more sexism and sexual harassment compared to organisational climates that do not tolerate sexism (Parker et al., 2002; Willness et al., 2007). However, an organisational climate that does not tolerate sexism does not automatically eliminate sexism altogether (Kaiser et al., 2013). We argue that *perceived* organisational tolerance of sexism is also likely to shape health and wellbeing outcomes when sexism does occur in an organisation. When sexism occurs in an organisation where there is a climate of tolerance of sexism, this might affect how pervasive sexism is expected to be. Sexism that is perceived to be pervasive has been shown to have more damaging effects on wellbeing (an important correlate and

precursor of social affiliative behaviour) than sexism that is perceived to be rare (Schmitt & Branscombe, 2002; Stroebe et al., 2011). In addition, when organizations tolerate sexism, victims are more likely to expect that complaining or seeking social support is likely to be very costly—and it is already known that the anticipated social costs of complaining decrease actual complaints (Shelton & Steward, 2004). Based on this reasoning, we argue that the organisational climate within which sexism occurs will impact women's social relationships following experiences of sexism. We specifically expect that when women experience sexism at work, the perception that the organisational climate does not tolerate sexism will have a beneficial effect on their relationships with female colleagues. However, we expect that this beneficial effect will fade away when the organisational climate is perceived to tolerate sexism.

Organisational climates include practices, procedures, and norms about behaviour that an organization expects from their employees (Schein, 2010; Ostroff et al., 2003; Zohar & Hoffman, 2012). The particular focus of this chapter is on organisational tolerance of sexism, which therefore refers to the absences of practices, procedures, and norms about the inappropriateness of sexism in the workplace. Importantly, organisational climates can also be expressed at the interpersonal level (Paustian-Underdahl et al., 2017), for instance by managers and by peers (Madlock & Booth-Butterfileds, 2011), and having a high-level organisational policy that clarifies intolerance of discrimination does not mean that this necessarily translates into similar levels of intolerance of discrimination at lower levels in the organization (Hebl et al., 2002; Brady et al., 2015). In this chapter, then, organisational climate is operationalised at three levels, namely the extent to which 1) peers, 2) managers, and 3) organisational policies do or do not reject sexism and support those targeted by sexist treatment.

Organisational policies around equality and diversity clarify that discrimination is unacceptable and facilitate disciplinary action when it occurs—and therefore may reduce expectations of discriminatory or unfair treatment (Button, 2001; Ragins & Cornwell, 2001; Ruggs et al., 2015). Previous studies support the idea that managers also strongly influence the extent to which the workplace is perceived to tolerate discrimination (Salin, 2003; Bulutlar & Oz, 2009; Samnani, 2012). One reason for this is that managers are expected to have the power to determine how much intolerance of discrimination is emphasised at the local level, as well as how discriminatory events are handled (Edelman, 2005; Martinez et al., 2013), and to provide support to victims of discrimination (Beehr et al., 1990; Ely, 1994; Ragins & Scandura, 1994). However, the most proximal determinant of organisational climate is one's peers. As is the case for managers, it has been shown that peer networks play an important role in establishing social norms within the work context (James & Sells, 1981; James et al., 1990), and this is also likely to be true with regard to norms around sexism. However, it is not known how this might affect social relationships amongst women after they have experienced sexism, which is the focus of the current work. One previous study (Doyle & Molix, 2015a) with sexual minorities in the United States showed that discrimination was associated with greater friendship strain, but that this effect was reversed for those who lived in states with laws and policies that supported sexual minorities against discrimination. However, this study examined interpersonal relationships broadly (rather than social relationships with members of the in-group) and it was not conducted within an organisational setting as is the current research.

3.4. The Present Research

In this research, we examined how experiences of sexism at work affect women's social relationships with other women. We assessed the role played by tolerance of sexism in the workplace, including perceptions of tolerance of sexism at the peer-, manager-, and

policy-level. We expected to find that women respond to sexism by drawing together when they perceive the organisational climate as *less* tolerant of sexism. However, we expect that drawing together behaviour is not triggered when they perceive the organisational climate as *more* tolerant of sexism. Additionally, we aim to provide insight into which source (or sources) of tolerance of sexism (i.e., peer, manager, policy) have a more substantial impact on women's social relationships with other women following experiences of sexism at work. Studies in this chapter have been approved by the ethical review committee at the University of Exeter.

3.5. Study 2

In Study 2, we surveyed women working in the United Kingdom, asking about their experiences of sexism in the workplace during the previous six months as well as perceived tolerance of sexism amongst their peers, their managers, and policies within their organisations. In addition, we assessed social relationships between participants and their female co-workers using a measures of co-worker friendship.

In line with previous literature examining interpersonal relationships as a function of exposure to discrimination (e.g., Doyle & Molix, 2014b) we hypothesized that, overall, experiences of sexism would have detrimental effects on social relationships amongst women (H1). However, we hypothesized an interaction between experiences of sexism and perceived tolerance of sexism within the organisation (H2), such that experiences of sexism would be positively associated with social relationships with female colleagues, but only when the organisational climate was perceived to be less tolerant of sexism. We hypothesized that this effect would disappear when the organisational climate was perceived to be more tolerant of sexism.

3.5.1. Method

3.5.1.1. Design and Participants

This was a cross-sectional study among working women resident in the UK. All participants were sampled from Prolific Academic and were compensated £2 for their time and effort, which is on par with payments for tasks of comparable length (approximately 15 minutes). Using the effect size obtained in Study 1 (f^2=.02; power =.80, alpha = .05), power analyses conducted in G*Power version 3.1 (Erdfelder et al., 1996) indicated a sample size of 395 was necessary to detect a comparable effect. A total of 406 participants were recruited online. However, one participant was excluded from the study as they reported they worked alone with no peers or managers in their daily work environment. The age of the final 405 participants ranged from 18 to 66 years with a mean of 37.54 years ($SD = 10.37$ years).

Of the 405 participants, 264 (65.2%) worked full time and 141 (34.8%) worked part time at the time of data collection. More than half of the participants (64%) indicated having a female manager. In terms of percentage of women in the branch or immediate work group, 232 participants (57.3%) indicated that more than 60% of their colleagues were female and 145 (35.8%) stated that they worked with between 20 and 60% female co-workers.

3.5.1.2. Procedure and Measure.

Participants were invited to take part in an online study about workplace experiences. The measures were presented in the order described here.

3.5.1.2.1. Perceived Experiences with Sexism at Work. Participants completed an 11-item sexism scale developed in prior work, focusing on personal experiences with sexism (Van Breen et al., manuscript in preparation). Example items are: "During the last 6 months, have you been in a situation where anyone at work did not take what you said seriously because you are a woman?" and "During the last 6 months, have you been in a situation where anyone at work assumed you had inferior ability (e.g., in maths or science) because you are a woman?" Participants indicated how frequently in the past 6 months they had such

an experience, ranging from 1 (never) to 5 (most of the time). The scale demonstrated good internal consistency in the present research, α=.92.

3.5.1.2.2. Perceived Organisational Tolerance of Sexism. Two items were taken from Bingham and Scherer (1993) focused on how participants perceived sexist incidents were dealt with within the organization: "Unequal treatment of men and women is clearly discouraged in my workplace (including stereotypical comments or jokes)" and "People at my work ignore the unequal treatment of women when it happens". Two other items were developed for the purpose of this study: "There are formal procedures to address the unequal treatment of women at my workplace", and "When women are treated unequally in my workplace this is corrected". These items were repeated three times, referring to perceived peer-, manager-, and policy-level tolerance separately. For example, to measure peer tolerance, the item "Unequal treatment of men and women is clearly discouraged in my workplace," was adjusted to "My co-workers clearly discourage the unequal treatment of men and women in my workplace," while for manager tolerance it was adjusted to "My manager clearly discourages the unequal treatment of men and women in my workplace," and for policy tolerance it was adjusted to "Policies at my work clearly aim to discourage the unequal treatment of men and women in my workplace." Participants rated their level of agreement with each item on a scale ranging from 1 (strongly disagree) to 5 (strongly agree). Relevant items were reverse scored. Responses to these 12 items were subjected to a principal components analysis with direct oblimin rotation, which confirmed that the items clustered into 3 factors reflecting peer- (α=.97), manager- (α=.90), and policy-level tolerance (α=.86).

3.5.1.2.3. Workplace Friendships. The central dependent variable in this study was a measure of women's friendship with other women at work. To measure this, we adjusted the workplace friendship scale developed by Nielsen et al., (2000) by adding "female" before co-

workers for each sentence. Six items measured *friendship opportunity* (e.g., "I have the opportunity to develop close friendships with my female co-workers at my workplace," α = .90) and six items measured *friendship prevalence* (e.g., "I have formed strong friendships with my female co-workers at work," α=.90). Participants responded to these items on a scale from 1 (strongly disagree) to 5 (strongly agree). These two scales were highly correlated, $r(405) = .62$, $N= 405$ $p \leq .001$, and were thus combined for further analyses (α = .92).

It is important to emphasize that the measure of sexism experiences focused on personal experiences with sexism in the workplace, whereas the measure of tolerance of sexism focused on perceptions of how peers, managers, or the organization as a whole responded to sexism, irrespective of who the target is. Also, while the peer tolerance measure focused broadly on 'co-workers' and 'people', the measure of workplace friendships clearly and specifically referred to 'female co-workers'.

3.5.1.2.4. Demographics. We included 2 items adapted from Glomb et al., (1997) to assess the gender composition of the immediate work environment. The items were: "What is your manager's gender?" and "Please estimate the percentage of women in your branch or immediate work group" (ranging from 1 "0-5%" to 5 "81-100%"). Finally, participants indicated their age, highest educational attainment, occupation, how long they had been at their current job, the size of the organisation, the size of their immediate work group, how many people they supervised, place of birth, and their employment status.

3.5.2. Results

3.5.2.1. Analytic Strategy.

We utilized hierarchical linear regression, and entered managers' gender (dummy coded as 0 = male, 1 = female), age, and reported percentage of women in the branch or immediate work group (mean-centred) as covariates. Age was entered as a covariate due to prior research with non-college samples demonstrating a negative association between age

and experiences with sexism (e.g., Lott et al., 2001). We then entered perceived sexism, and peer-, manager-, and policy-level tolerance of sexism (all mean centred). Finally, we added the interactions between sexism and each tolerance of sexism variable (i.e., three separate interaction terms). Means, standard deviations, and correlations for these variables are provided in Table 3.1.

Table 3.1.

Means, standard deviations, and correlations for Study 2

Variable	*M*	*SD*	1	2	3	4	5	6
1.Age	37.54	10.37						
2.Percentage of women	3.59	1.19	.06					
3.Sexism	1.52	.66	-.16**	-.29**				
4.Peer tolerance	2.49	.81	-.06	-.21**	.45**			
5.Manager tolerance	2.29	.96	-.02	-.12**	.44**	.63**		
6.Policy tolerance	2.29	.93	-.02	-.07	.21**	.42**	.52**	
7.Friendship	3.84	.76	-.08	.13**	-.20**	-.46**	-.45**	-.35**

Note. M and *SD* are used to represent means and standard deviation, respectively. **indicates p<.01. The answer categories for percentage of women are: 1= 0-20%, 2= 21-40%, 3= 41-60%, 4= 61-80%, 5= 81-100%.

3.5.2.2. Workplace Friendship with Women.

Overall, the main effect of sexism on workplace friendship with women was not statistically significant, $b = .05$, $t_{(397)} = .85$, $p = .40$, 95% CI [-.07, .16], indicating that exposure to sexism was not associated with social distancing from other women.

The main effect of peer tolerance of sexism was statistically significant, $b = -.28$, $t_{(397)} = -5.16$, $p < .001$, 95% CI [-.38, -.17], indicating that women who perceived their peers as less tolerant of sexism also reported greater workplace friendship with women. As predicted, this main effect of peer tolerance of sexism was qualified by a significant interaction with personal experiences with sexism, $b = -.21$, $t_{(397)} = -3.03$, $p = .003$, 95% CI [-.34, -.07].

Breaking down this interaction[2] showed that amongst women who perceived less peer tolerance of sexism (-1*SD*), more frequent experiences with sexism were associated with stronger workplace friendships, $b = .24$, $t_{(397)} = 2.54$, $p = .004$, 95% CI [.05, .42]. This was not the case for women who perceived more peer tolerance of sexism, $b=-.10$, $t_{(397)}=1.25$, $p=.21$, CI[-.25, .06]. These results are plotted in Figure 3.1.

Regarding manager-level tolerance of sexism, results showed a main effect of manager tolerance on workplace friendships, such that women who perceived their managers to be less tolerant of sexism reported stronger workplace friendships with other women, $b =-.17$, $t_{(397)} = -3.59$, $p < .001$, 95% CI [-.26, -.08]. As predicted—and as we found for peer tolerance workplace friendships with women were also affected by an interaction between sexism and manager tolerance of sexism, $b =.12$, $t_{(397)} = 2.00$, $p = .046$, 95% CI [.00, .24]. However, decomposition of this interaction[3] showed that more experiences of sexism were associated with stronger workplace friendships only for women who perceived their managers to be more tolerant of sexism (+1*SD*), $b = .19$, $t_{(397)} = 2.41$, $p = .02$, 95% CI [.04, .34]. This effect was not present for women who perceived their managers to be less tolerant of sexism (-1*SD*), $b = -.05$, $t_{(397)} = -.48$, $p = .63$, 95% CI [-.24, .15]. In sum, although there was an interaction between experiences of sexism and manager tolerance similar to that found for peer tolerance, the simple slopes revealed patterns that were quite different from

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[2] The alternative breakdown showed that amongst women who had frequent experiences with sexism, the perception that peers were less tolerant of sexism was associated with more friendships with women, $b=-.35$, $t_{(397)}=-5.94$, $p<.001$, CI[-.46, -.23].

[3] The alternative breakdown showed that women who perceived their managers to be less tolerant of sexism reported stronger workplace friendship with other women. This effect was stronger for women whose actual experiences of sexism were low $b=-.30$, $t_{(397)}=-4.00$, $p<.001$, CI[-.44, -.15], relative to when experiences of sexism were high, $b=-.14$, $t_{(397)}=-2.61$, $p=.009$, CI[-.24, -.03].

what was obtained for peers, as evidence for drawing together after sexism was only apparent when managers were perceived to be *tolerant*, rather than *intolerant* of sexism.

Perceived tolerance of sexism at the policy-level also had a significant main effect on workplace friendship with other women, showing that women who reported that policies in their workplace were less tolerant of sexism also reported stronger workplace friendships with other women, $b = -.10$, $t_{(397)} = -2.45$, $p = .02$, 95% CI [-.18, -.02]. However, results showed no statistically significant interaction between sexism and policy-level tolerance of sexism on workplace friendships, $b = .03$, $t_{(397)} = .40$, $p = .67$, 95% CI [-.10, .15].

Figure 3.1.

How peer tolerance of sexism (M) moderates the relationship between personal experiences with sexism (X) and workplace friendship with female co-workers (Y) in Study 2
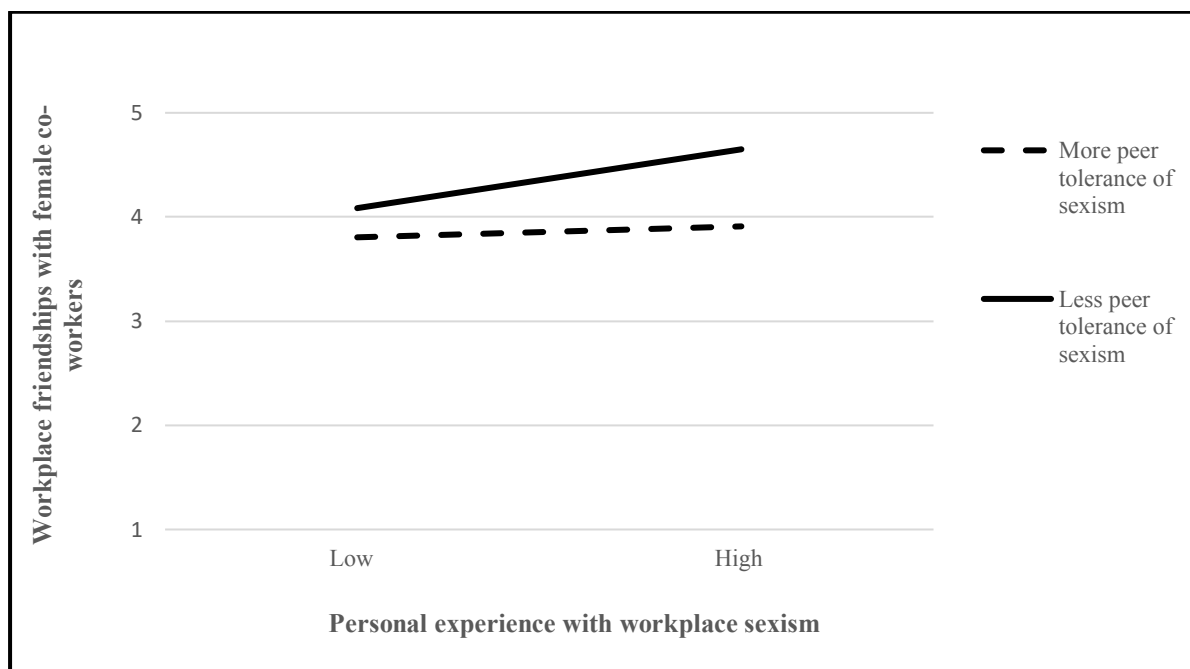
3.5.3. Discussion

Summarising the results of Study 2, we did not observe evidence in support of H1, or social distancing following exposure to sexism at work. However, we did observe some evidence in support of H2. That is, sexism was associated with stronger social relationships amongst women, but only in climates where peers were perceived to be relatively *less* tolerant of sexism; this drawing towards other women was disrupted in climates where peers

were perceived to be relatively *more* tolerant of sexism. In contrast, sexism was associated with stronger social relationships amongst women in climates where *managers* were perceived to be relatively *more* tolerant of sexism. Policy-level tolerance only had a main effect on women's interpersonal relationships in the workplace but did not appear to modify the effect of sexism.

3.6. Study 3

Having found initial evidence supporting the idea that sexism and organisational climate together might affect women's interpersonal relationships at work, in Study 3 we sought to replicate and expand on this work by investigating our hypotheses in a quasi-experimental design. Specifically, we measured women's perceptions of tolerance of sexism at their workplace (peer-, manager-, and policy-level), and then introduced a manipulation of experiences of sexism by asking women to think back to a recent experience of sexism in their own lives. The outcome variable of central focus was once again friendships with female co-workers. For exploratory purpose, we also included a new outcome variable: *Closeness* to female co-workers. Specifically, we aimed to explore whether the central effects observed for friendship amongst women also appear on other indicators of social relationships (i.e., closeness between women).

Our hypotheses remained largely the same as in Study 2. First, as before, we hypothesized that experiences of sexism would have a detrimental effect on women's friendships with other women in the workplace. Even though we did not find evidence for distancing in Study 2, we believed it would be beneficial to re-examine this idea in an experimental design. Secondly, we hypothesized that peer tolerance of sexism would interact with experiences of sexism to affect women's friendships with their female co-workers. Specifically, we expected that being reminded of experiences of sexism would increase reported friendship with female co-workers, but only for those who perceived that peers do

not tolerate sexism. Support for this hypothesis would replicate the effect found in Study 2. Third, we hypothesized that managers' tolerance of sexism would mirror the effect described for peers above. While this was not what we observed in Study 2, we sought to further test this hypothesis with an experimental manipulation of sexism before reconsidering hypotheses regarding the pattern of effects for manager tolerance. Given that policy-level tolerance did not modify the effect of sexism in Study 2, we raised no hypotheses here, and instead included it as an exploratory variable. This study was pre-registered on the Open Science Framework at https://osf.io/82mgq.

3.6.1. Method

3.6.1.1. Design and Participants

This quasi-experimental study was a 2 cell (sexism vs no sexism) between-participants design, with continuous scales measuring perceptions of peer, manager, and policy tolerance of sexism in the workplace.

All participants were sampled through Prolific Academic. Using the effect size (f^2 = .019) detected in Study 2 for the interaction between sexism and peer tolerance, power analysis in G*Power version 3.1 (Erdfelder et al., 1996) indicated that a sample size of 416 was necessary to achieve power of .80. Since participants who do not report having at least one experience of sexism in session 1 will not be invited to session 2, to be able to reach this number we recruited 700 participants for the first session. Of these 700, 462 participants reported that they had experienced at least one instance of workplace sexism and gave consent for the researchers to contact them a week later, again through Prolific Academic. Of these 462 participants who were invited to the second session, 392 participated; however, 15 were excluded from the study later as they did not provide the information required to manipulate sexism, or indicated that they had never experienced sexism at work (even though they indicated that they had previously experienced sexism during session 1). Therefore, the

final sample comprises 377 participants. All 377 participants in this study were women in employment and residence in the UK. Participants ranged in age from 18 to 64 years old with a mean of 33.31 years ($SD = 10.10$ years).

Of the 377 participants, 251 (66.6%) were in full time employment, while 126 (33.4%) were working part time when the data was collected. More than half of the participants (50.4%) indicated having a female manager; 153 participants (38.6%) indicated that more than 60% of their colleagues were female and 165 (43.8%) stated that between 20 and 60% of their co-workers were female.

3.6.1.2. Procedure and Measures

The study included two sessions a week apart. Participants provided informed consent in each session and were compensated £0.50 for session 1 (approximately 5 minutes in duration) and £1.00 for session 2 (approximately 10 minutes in duration), in line with Prolific Academic guidelines.

In session 1, participants provided the same demographic information as in Study 2 and responded to the same 12 questions to assess tolerance of sexism. As before, we conducted a principal components analysis with direct oblimin rotation to examine whether these 12 items clustered into the three hypothesized levels (peer-, manager-, and policy-level tolerance). The analysis revealed that the three scales loaded in separate factors, but one of the four items measuring peer and manager tolerance did not load with the respective items. This item was "My co-workers/ my manager clearly discourage(s) the unequal treatment of men and women in my workplace (including stereotypical comments and jokes)" and it was excluded. Excluding this item improved the reliability of the peer tolerance scale (four items: α=.73; three items: α=.83.) and did not change the reliability of the manager tolerance scale (four items: α=.86; three items: α=.86). The four items used to measure tolerance at the policy level loaded together and formed a reliable scale (α = .87).

Participants also reported whether or not they had ever personally experienced sexism in their current workplace in the same way as in Study 2, and this was used to filter participation in the second session: Only participants who reported that they had experienced at least one instance of workplace sexism were asked to participate in the second session. This was done because the manipulation (in the second session) asked participants to recall a time when they had experienced sexism at work. Participants who were eligible for the second session were asked to give consent to be contacted a week later. Those who were not eligible (or indicated that they did not want to be contacted) were directed to the end of the study and debriefed.

To disguise the goals of the study, we also included a few filler items. Four items measured the perceived discrimination of sexual minorities (Doyle & Molix, 2016) and nine items measured workplace age discrimination (Marchiondo et al., 2016). These scales were not included in any analyses.

In the second session, participants were randomly allocated to one of two experimental conditions (sexism, no sexism) and responded to the dependent measures. In the sexism condition, participants were asked to recall and describe an experience when they felt they had been treated unfairly at work because they were women. To ensure that participants recalled this situation in sufficient depth, several prompts were used: "Describe, for example, where it happened, how many people were involved, what the person/people said or did and what is this person's relationship to you." In the no sexism condition, participants were asked to recall and briefly describe their usual daily route from home to work. The prompt for the no sexism condition was "Describe, for example, how long the route is, what means of transportation you use, and what challenges it involves."

Participants then completed the same workplace friendship measure as in Study 1, with minor adjustments. First, participants were asked how they felt about their co-workers *at*

the moment, rather than in general. Second, two items were excluded because they could not be easily adjusted to create a state (vs. trait) measure. As a result, in this study four items measured friendship opportunity (α = .87) and six items measured friendship prevalence (α = .88). As in Study 1, these two scales were highly correlated, $r(391)$ = .70, N = 377, $p < .001$, and were thus combined for further analyses (α = .91).

New to Study 2, to measure closeness to female co-workers, participants were presented with a 'name generator,' in which they were asked to list up to five people to whom they felt close at work. For each individual, participants provided initials, gender, and indicated how close they felt to them on a 5 points scale from 1 (not at all) to 5 (very much). We summed those that were female.

3.6.2. Results

3.6.2.1. Analytic Strategy

To test our hypotheses, we conducted moderation analyses in hierarchical linear regressions, entering managers' gender (dummy coded as 0 = male, 1 = female), age, and reported percentage of women in the branch or immediate work group (mean-centred) as covariates. We then entered sexism (dummy coded as no sexism = 0, sexism = 1) and peer-, manager-, and policy-level tolerance of sexism (mean centred). Finally, we added each of the three interactions between sexism and each of the tolerance variables. Means, standard deviations, and correlations for these variables are provided in Table 3.2.

Table 3.2.
Means, standard deviations, and correlations for Study 3

Variable	M	SD	1	2	3	4	5	6
1.Age	33.31	10.10						
2.Percentage of women	3.10	1.33	.01					
3.Peer tolerance	2.43	.93	.04	-.25**				
4.Manager tolerance	2.31	.97	-.03	-.20**	.67**			
5.Policy tolerance	2.26	.95	-.01	-.13**	.42**			
6.Friendship	3.65	.80	-.16**	.08	-.18**	-.17**	-.16**	
7.Social closeness	3.08	1.03	-.09	-.01	-.07	-.07	-.01	.59**

Note. M and SD are used to represent means and standard deviation, respectively. **indicates p<.01. The answer categories for percentage of women are: 1= 0-20%, 2= 21-40%, 3= 41-60%, 4= 61-80%, 5= 81-100%.

3.6.2.2. Workplace Friendship with Women

As in Study 2, but contradicting Hypothesis 1, the main effect of sexism once again did not attain statistical significance, $b = .00$, $t_{(367)} = .04$, $p = .96$, 95% CI [-.16, .17].

The main effect of peer tolerance of sexism also did not attain statistical significance, $b = -.07$, $t_{(367)} = -1.08$, $p = .28$, 95% CI [-.19, .05]. There was not a statistically significant interaction between sexism and peer tolerance of sexism either, $b = -.21$, $t_{(367)} = -1.76$, $p = .08$, 95% CI [-.45, .03]. However, even though this interaction did not attain statistical significance, we continued to decompose it[4] in order to assess evidence for our further hypothesis, which focused on a simple effect contained within this interaction. In line with our hypothesis and the results of Study 1, for women who perceived less peer tolerance of sexism, recalling sexism at work was significantly associated with stronger workplace friendships relative to the control condition, $b = .22$, $t_{(367)} = 2.59$, $p = .01$, 95% CI [.07 .48]. This effect was not present for women who perceived greater peer tolerance of sexism, $b = -.18$, $t_{(367)} = 1.32$, $p = .19$, 95% CI [-.46 .09]. These effects are represented in Figure 2.

Regarding manager tolerance of sexism, in Study 2 we did not find either a statistically significant main effect of manager tolerance of sexism, $b = -.08$, $t_{(367)} = -1.36$, $p = .17$, 95% CI [-.19, .04], or a significant interaction between sexism and manager tolerance, $b = .02$, $t_{(367)} = .15$, $p = .88$, 95% CI [-.21, .25]. As such, there was no evidence for our hypothesis that after being reminded of sexism, manager tolerance of sexism would improve friendships amongst female colleagues. Furthermore, these findings did not replicate the unexpected pattern of results for manager tolerance of sexism found in Study 1.

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[4] The alternative breakdown showed that after having been reminded of sexism, low perceived tolerance of sexism on the part of the peers predicted greater friendship with female co-workers, $b = -.17$, $t_{(376)} = -1.83$, $p = .07$.

While policy-level tolerance of sexism was included for completeness, neither the main effect of policy-level tolerance of sexism, $b = -.07$, $t_{(367)} = -1.50$, $p = .13$, 95% CI [-.17, .02], nor the interaction between sexism and policy level tolerance of sexism, $b = -.05$, $t_{(367)} = -.56$, $p = .58$, 95% CI [-.24, .14], attained statistical significance.

Figure 3.2.

How peer tolerance of sexism (M) moderates the relationship between personal experiences with sexism (X) and workplace friendship with female co-workers (Y) in Study 3
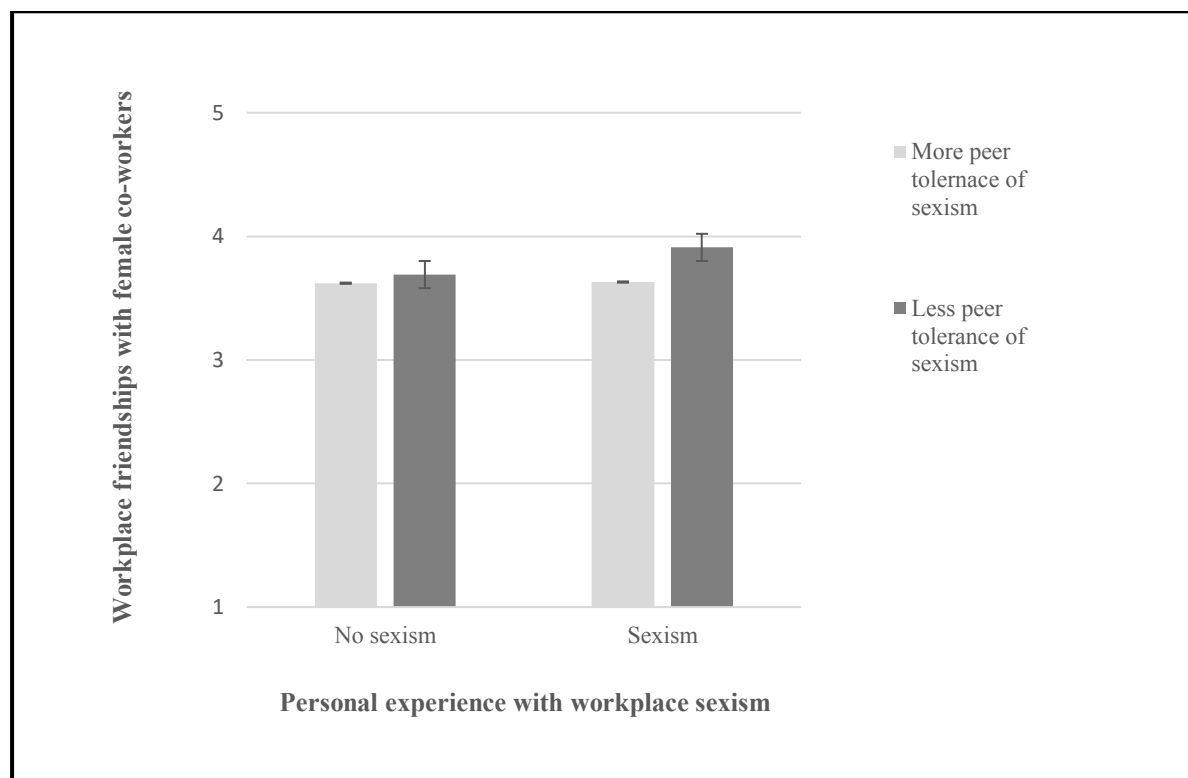
3.6.2.3. Exploratory Analyses: Closeness to Female Co-Workers

We next examined whether similar effects to those observed for workplace friendship with women were also evident on the new measure, *closeness* to female co-workers. Participants' closeness to male co-workers was added as covariate in these analyses because this allowed us to control for what could be a generalized tendency to withdraw socially and to focus in this paper more specifically and uniquely on relationships with women. No statistically significant main effect emerged for sexism, $b = .11$, $t_{(359)} = 1.01$, $p = .31$, 95% CI [-.10, .31].

For peer tolerance of sexism, there was no evidence of a statistically significant main effect, $b = -.01$, $t_{(359)} = -.09$, $p = .93$, 95% CI [-.16, .15], or interaction with sexism, $b = -.01$, $t_{(359)} = -.09$, $p = .93$, 95% CI [-.32, .29]. Similarly, manager tolerance of sexism did not show a statistically significant main effect, $b = -.11$, $t_{(359)} = -1.47$, $p = .14$, 95% CI [-.26, .04], nor did it interact with sexism, $b = -.10$, $t_{(359)} = -.65$, $p = .52$, 95% CI [-.39, .19].

Finally, while there was no evidence of a statistically significant main effect of policy tolerance, $b = -.10$, $t_{(359)} = -.65$, $p = .52$, 95% CI [-..39, .19], the interaction between sexism and policy tolerance was statistically significant, $b = -.30$, $t_{(359)} = -2.38$, $p = .02$, 95% CI [-.54, -.05]. Decomposing this interaction[5] showed that women who perceived less tolerance of sexism at the policy level reported greater closeness with their female co-workers when they were reminded of sexism (sexism condition) compared to those who were not reminded of sexism (control condition), $b = .30$, $t_{(359)} = 2.46$, $p = .01$, 95% CI [.08, .70]. These effects were not apparent for women who perceived greater tolerance of sexism at the policy level, $b = -.17$, $t_{(359)} = -1.11$, $p = .27$, 95% CI [-.49, .14]. However, at this stage these effects should be considered preliminary as they were not directly hypothesized.

3.6.3. Discussion

As in Study 2, in Study 3 we failed to find evidence for social distancing following sexism, contradicting Hypothesis 1. Study 3 did replicate evidence from Study 1 for Hypothesis 2, namely that women who are reminded of sexism report stronger friendships with their female colleagues when they perceive their peers to be intolerant of sexism. However, unlike in Study 1, and unlike our hypothesis, there were no significant effects for manager tolerance of sexism. In addition, policy-level tolerance of sexism showed no

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[5] The alternative decomposition showed that for women who were *not* reminded of sexism (control condition), lower perceptions of policy-level tolerance of sexism *increased* closeness between women, $b=-.17$, $t_{(359)}=-2.10$, $p=.03$, CI[-.34, -.01].

significant effects in Study 1, whereas in Study 3, an interesting pattern emerged suggesting that experiences with sexism were significantly associated with *greater* closeness to female colleagues when participants perceived *less* policy-level tolerance of sexism (mirroring moderating effects of peer tolerance on workplace friendship with women).

In sum, results from Studies 2 and 3 demonstrate that peer tolerance of sexism affects the relationship between sexism and women's affiliation with other women. However, results for manager- and policy-level tolerance are less clear. This led us to conduct another study to replicate and further examine these results. Given mixed findings for closeness in Study 3, we also aimed to prioritize this dependent variable in Study 3 by focusing on it as our key outcome measure.

3.7. Study 4

This study aimed to replicate Study 2, with a new sample. It was virtually identical to Study 3 with one exception: In this study, we focused on closeness to female co-workers, and accordingly chose to measure it before measuring workplace friendship (that is, directly after the manipulation of sexism) in order to account for potential order effects. Therefore, we first asked participants to list their friends and then rate closeness with them before moving on to rate their general friendship with their female colleagues.

The hypotheses of this study were identical to those of Study 3, although we now focus on closeness to female co-workers as well as friendship with female co-workers as the key outcomes. First, as before, we hypothesized that experiences of sexism would have a detrimental effect on women's closeness (H1a) and friendship (H1b) with other women in the workplace. Secondly, we hypothesized that peer tolerance of sexism would interact with experiences of sexism to affect women's closeness (H2b) and friendship (H2b) with their female co-workers. Specifically, we expected that being reminded of experiences of sexism would strengthen closeness and friendship with female co-workers, but only for those who

perceived that peers were less tolerant of sexism in the workplace. However, we expected that this effect would disappear for those who perceived that peers were more tolerant of sexism. Given that manager- and policy-level tolerance produced inconsistent results in Studies 2 and 3, we included them here without making firm hypotheses regarding their effects.

3.7.1. Method

Means, standard deviations, and correlations for these variables are provided in Table 3.3.

Table 3.3.

Means, standard deviations, and correlations for Study 4

Variable	*M*	*SD*	1	2	3	4	5	6
1.Age	34.69	10.48						
2.Percentage of women	3.46	1.22	.06					
3.Peer tolerance	2.50	.83	-.07	-.13**				
4.Manager tolerance	2.28	.90	-.04	-.11	.64**			
5.Policy tolerance	2.26	.94	-.15**	-.03	.45**	.48**		
6.Friendship	3.68	.79	-.12**	.04	-.23**	-.14**	-.16**	
7.Social closeness	3.29	.95	-.05	-.03	-.19**	-.10	-.07	.56**

Note. M and *SD* are used to represent means and standard deviation, respectively. **indicates p<.01. The answer categories for percentage of women are: 1= 0-20%, 2= 21-40%, 3= 41-60%, 4= 61-80%, 5= 81-100%.

3.7.1.1. Design, Participants, Procedure, and Measures

The design and procedure of this study were identical to that of Study 3 with the exception of the order of outcome measures. Using the effect size (f^2=.019) detected in Study 1, power analysis in G*Power version 3.1 (Erdfelder et al., 1996) indicated that a sample size of 416 was necessary to achieve power of .80. To be able to reach this number at the end of

the second session, we again recruited 700 participants for the first session of the study. Of these 700, 465 participants reported that they had experienced at least one instance of workplace sexism and gave consent for the researchers to contact them a week later, again through Prolific Academic. Of these 465 participants who were invited to the second session, 405 participated; however, 14 were excluded from the study as they did not complete the questions involved in the manipulation of sexism or indicated that they had never experienced sexism at work (even though they had indicated previously experiencing sexism at work during session 1). The final sample comprised 391 participants.

All 391 participants in this study were women in employment and residence in the UK, with ages ranging from 18 to 66 years old ($M = 34.69$ years; $SD = 10.48$ years). Of the 391 participants, 266 (68%) worked full time while 125 (32 %) worked part time when the data were collected. More than half of our participants (57.5 %) indicated having a female manager; 203 participants (51.9 %) indicated that more than 60% of their colleagues were female and 158 (40.4 %) stated that between 20 and 60% of their co-workers were female.

Participants completed the same measures (in the same sessions) as in Study 2 (peer tolerance α=.74, manager tolerance α=.84, policy tolerance α=.87). As in Study 3, in the second session of Study 4, participants were randomly allocated to the sexism or no sexism conditions. Then, participants completed the same measures of closeness to female co-workers and workplace friendships (α=.91; correlation between friendship opportunity and prevalence: $r = .73$, $N = 391$, $p < .001$), but in the reverse order.

3.7.2. Results

3.7.2.1. Closeness to Female Co-Workers

Using the same analytic strategy as in Study 3, we first examined whether the effects observed for workplace friendships in Study 2 and 3 were also evident on our measure of closeness to female co-workers in Study 4. We added women's closeness to male co-workers

as a covariate in the model as we did in Study 3. Results showed a statistically significant main effect of sexism, $b = .28$, $t_{(370)} = 2.42$, $p = .02$, 95% CI [.05, .50], indicating that recalling sexism led women to report *greater* closeness with other women at work, contradicting Hypothesis 1.

The statistically significant main effect of peer tolerance of sexism, $b = -.25$, $t_{(370)} = -2.75$, $p = .006$, 95% CI [-.43, -.07], showed that women who perceived their peers to be less tolerant of sexism reported *greater* closeness to female co-workers. However, these significant main effects were not qualified by a statistically significant interaction between sexism and peer tolerance of sexism, $b = -.31$, $t_{(370)} = -1.69$, $p = .09$, 95% CI [-.05, .67]. As in Study 2, even though this interaction did not attain statistical significance, we continued to decompose it[6] in order to assess evidence for our further hypothesis, which focused on a simple effect contained within this interaction. In line with our hypothesis, for women who perceived less peer tolerance of sexism, experiences with sexism were significantly associated with stronger closeness to female co-workers, $b = .28$, $t_{(370)} = 2.80$, $p = .005$, 95% CI [-.92, -.15]. This association was not apparent for women who perceived greater tolerance of sexism at the peer level, $b = .02$, $t_{(370)} = .11$, $p = .91$, 95% CI [-.39, .35]. These results are plotted in Figure 3.

No statistically significant main effect emerged for manager tolerance of sexism, $b = .09$, $t_{(370)} = 1.07$, $p = .29$, 95% CI [-..08, .27]; the interaction between sexism and manager tolerance of sexism was also not significant, $b = -.14$, $t_{(370)} = -.77$, $p = .44$, 95% CI [-.48, .21]. For policy-level tolerance, neither the main effect, $b = -.03$, $t_{(370)} = -.33$, $p = .74$, 95% CI [-

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[6] The alternative breakdown showed that amongst women who were reminded of sexism (sexism condition), the perception that peers were less tolerant of sexism was associated with greater closeness with female co-workers, $b=-.44$, $t_{(370)}=-3.00$, $p=.003$, CI[-.73, -.15].

.17, .12], nor the interaction with sexism, b = -.19, $t_{(370)}$ = -1.27, p = .21, 95% CI [-.48, .10], attained statistical significance.

Figure 3.3.

How peer tolerance of sexism (M) moderates the relationship between personal experiences of sexism (X) and closeness to female co-workers (Y) in Study 4
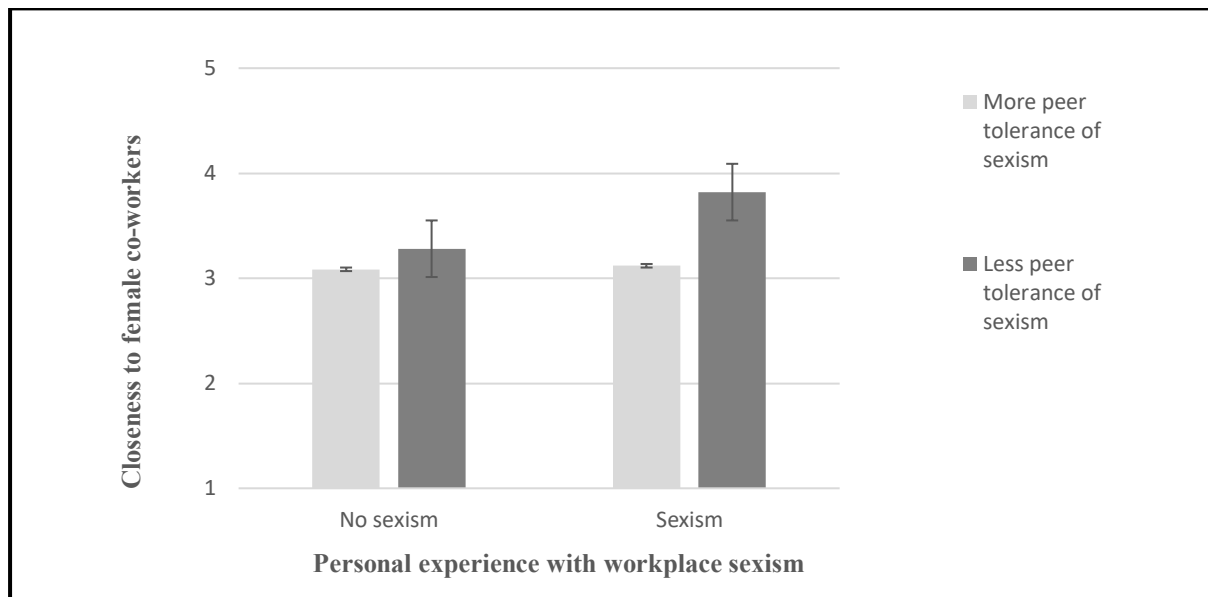
3.7.2.2. Workplace Friendships with Women

As in Study 3, the main effect of sexism on workplace friendships with women was not statistically significant, b = .08, $t_{(370)}$ = .96, p = .34, 95% CI [-.23, .08].

However, once again there was a significant main effect of peer tolerance of sexism, b = -.21, $t_{(370)}$ = -3.23, p = .001, 95% CI [-.33, -.08]. This finding indicated that women who perceived their peers as less tolerant of sexism also reported greater workplace friendships with women. However, the interaction between sexism and peer tolerance of sexism was not statistically significant for this measure, b = -.13, $t_{(370)}$ = -1.01, p = .31, 95% CI [-.12, .38].

Neither the main effect of manager tolerance of sexism, b = .04, $t_{(370)}$ = .64, p = .52, 95% CI [-.08, .16], nor the interaction with sexism, b = -.09, $t_{(370)}$ = -.71, p = .48, 95% CI [-.32, .15], attained statistical significance. There was no significant main effect of policy-level tolerance of sexism, b = -.08, $t_{(370)}$ = -1.71, p = .09, 95% CI [-.18, .01], nor was there a

significant interaction between sexism and policy-level tolerance, $b = -.17$, $t_{(370)} = -1.76$, $p = .08$, 95% CI [-.37, .02]. However, the trend[7] suggested that for women who perceived less policy-level tolerance of sexism, recalling sexism was significantly associated with stronger workplace friendships compared to the control condition, $b = .23$, $t_{(370)} = 1.97$, $p = .049$, 95% CI [-.49, -.00]. These effects were not apparent for women who perceived greater tolerance of sexism at the policy level, $b = -.09$, $t_{(370)} = -.70$, $p = .48$, 95% CI [-.15, .33].

3.7.3. Discussion

Here, we found experiences of sexism led women to report increased closeness with their female colleagues in this study, which does not support Hypothesis 1. However, we again found evidence in support of our second hypothesis, that organisational tolerance of sexism moderates the effect of sexism on women's relationships with other women. Specifically, we found that women reported greater closeness to their female co-workers after recalling sexism, but only for those that perceived their peers to be relatively low in tolerance of sexism.

Although this pattern was revealed in different measures in Studies 2 and 3 relative to Study 4, these measures are conceptually similar, and the patterns are the same across studies. The order in which these variables were presented might explain why the effect appeared on different measures in Studies 3 and 4. In Study 3, participants first completed the measure of workplace friendship, then closeness to female co-workers; but this order was reversed in Study 4.

With regard to the other two levels of organisational tolerance, the results of Study 2 were not replicated in Studies 3 and 4. Specifically, in Study 2 experiences of sexism were

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[7] The alternative breakdown showed that amongst women who were *not* reminded of sexism (control condition), higher perceptions of policy-level tolerance were associated with greater friendship with female colleagues, $b=-.13$, $t_{(370)}=-2.02$, $p=.045$, CI[-.26, .00].

associated with greater friendship with female colleagues, but only amongst those who reported *greater* tolerance of sexism from their managers. However, this effect was not replicated in Studies 3 and 4. With regard to perceived policy tolerance, in Study 2, policy-level tolerance did not interact with perceived sexism to influence women's friendship with their female co-workers; however, in Studies 3 and 4, some interesting patterns emerged, suggesting that in cases of *less* policy-level tolerance of sexism, recalling sexism may significantly *increase* closeness to female colleagues (Study 3) and *strengthen* workplace friendship with female co-workers (Study 4). This pattern – although not directly covered in our hypotheses – suggests that under some circumstances, policy-level tolerance may have effects that mirror peer-level tolerance, whereby experiences of sexism lead women to affiliate with their female colleagues when perceptions of tolerance are low.

3.8. General Discussion

Across three studies, we demonstrated that women's social relationships with their female colleagues might be affected by personal experiences with sexism and the organisational climate in which that sexism occurs. When experiences of sexism occur within an organisational climate that is perceived to be intolerant of sexism, women might strengthen social bonds with their female co-workers as a way of coping with sexism. That is, after experiences with sexism, the perception that peers (and potentially organisational policy) do not tolerate sexism can draw women to each other. However, the perception that one's peers tolerate sexism hinders this effect, thereby making it harder for women to engage in such a positive coping response. This shows that peer tolerance of sexism is key in shaping the social consequences of experiences of sexism. In these studies, affiliative tendencies took the form of stronger workplace friendships with other women as well as greater reported closeness to female co-workers.

While the majority of prior work in this area demonstrates patterns of self-group distancing, our results mainly highlight when women draw together (or fail to do so). Here it is important to stress that this 'other side of the coin' is not unrelated to self-group distancing and can in fact help shed light on when this emerges, as well as when it does not. This has in fact already been acknowledged in prior work, as when Derks and her colleagues (Derks, Ellemers et al., 2011) examined support for collective action and showed that senior women who were highly identified with their gender responded to sexism by reporting more support for collective action in favour of women. Again, we contribute to this analysis by focusing on when women draw to each other and when they do not, which does not provide direct evidence of self-group distancing, but does contribute to broader understandings of when women are able to support each other in response to sexism.

Taken together, then, this work sheds light on the question of when women draw together with other women (Haslam & Reicher, 2006; Branscombe et al., 1999; Jetten et al., 2001). Specifically, this work shows that an organisational climate that is less tolerant of sexism can encourage women to draw together after experiences of sexism. A key theoretical contribution of this work is that while exposure to sexism and perceived tolerance of sexism might often go hand in hand, there is clear value in distinguishing between these concepts. For example, a particular workplace might have a few sexist individuals, but also several colleagues who do not tolerate this behaviour. Our argument is that the harm caused by those few individuals is worse when colleagues tolerate such behaviour than when they do not. This insight may have important practical implications for organizations' efforts to improve diversity climates. The fact that these findings emerged across a correlational study and two quasi-experimental studies attests to the consistency of these effects.

Another issue worth considering is *why* women would pursue closeness with other women. Previous literature has shown that social support can help people deal with negative

experiences in general (Zapf et al., 1996) and sexism in particular (Cihangir et al., 2014; Major et al., 2003). However, past research also shows that other in-group members are not necessarily supportive, especially when it comes to supporting discrimination claims (Kaiser et al., 2006; Kahn et al., 2015). Taking this literature together with the findings from the current work, we suggest that experiences of sexism lead women to pursue closeness with women who are intolerant of sexism *as a way of accessing social support from others whom they expect to be supportive*—a well-considered coping response. That is, this chapter extends previous literature on the benefits of social support by demonstrating that women actively pursue closeness/draw together with those who might provide social support, but may not be able to do so when this type of support is not expected or available (in the case of greater tolerance of sexism).

With regards to tolerance, it was *peer* tolerance of sexism, in particular, that most consistently emerged as a moderator of responses to sexism (although policy tolerance also demonstrated suggestive evidence in the same direction). However, we did not find a similar interaction between sexism and *manager* tolerance of sexism. In Study 2, the main effect of manager tolerance of sexism suggested an overall positive association with friendship with female co-workers. This was qualified by an interaction with sexism, in which experiences of sexism were related to stronger friendship with female co-workers, but only among those who perceived their managers to be *more* tolerant of sexism. Although this finding was not as hypothesised, we consider it interesting to discuss and potentially worthy of further investigation.

Previous research has examined how experiences of sexism affect managers' attitudes towards their subordinates (Derks, Van Laar et al., 2011; Derks et al., 2016), and subordinates' attitudes towards their managers (Sterk et al., 2018). For instance, Paustion-Underdahl and her colleagues (2017) found that women feel less supported by their female

supervisors than their male supervisors. Here, we show that managers' attitudes might similarly impact relationships *amongst their subordinates.* Specifically, when managers are not tolerant of sexism, this might encourage friendships amongst their female subordinates. However, this main effect is qualified by the fact that actually experiencing sexism seemed to be tied to affiliative responses among female subordinates only when managers were *more* tolerant of sexism. This might be because unlike with peer tolerance, manager tolerance does not convey much information about how much support women will receive from other women after they experience sexism. Therefore, when they perceive their managers to be more tolerant of sexism, women may be even more inclined to seek informal social support from other women in the workplace (rather than, for example, lodging an official complaint or addressing the matter with their managers, which is a strategy that might be more appropriate when managers are intolerant of sexism). However, it is worth noting that these effects were only present in Study 2 and not in the experimental studies (Studies 3 and 4), and as such should be interpreted with caution until they are replicated.

Interestingly, policy-level tolerance had little impact on women's friendship with other female co-workers in the correlational study; however, some interesting patterns emerged with regards to closeness between women, suggesting that in cases of *less* policy-level tolerance of sexism, sexism was significantly associated with *greater* closeness to female colleagues (Study 3). There was also a marginally significant interaction showing that sexism is associated with *greater* workplace friendship with female co-workers in cases *less* policy level tolerance of sexism (Study 4). These effects mirror the central findings of this study with regards to peer tolerance, although patterns were not as strong. One reason why they were less strong might be that policy-level tolerance of sexism is relatively abstract (or distal) for women. In other words, policy-level tolerance might be quite removed from women's daily experiences because interactions and experiences with peers are more tangible

and concrete for women. In a similar vein, previous research suggests that having an organisational policy that clarifies intolerance of discrimination does not mean that this necessarily translates into less tolerance of discrimination at lower levels in the organization (Hebl at al., 2002; Brady et al., 2015), suggesting some degree of dissociation between these levels.

3.8.1. Limitations and Future Directions

One limitation of this work is that our participants were primarily employed in female-dominated work environments (although this was not deliberately due to our sampling strategies). It would be interesting to see if the results regarding experiences of sexism and tolerance of sexism differ for women in male dominated work environments. One reason why it is important to work with women in a male dominated setting is that men often show that they are unaware of, and disconnected from, sexist treatment of women (Tougas & Beaton, 2002). Therefore, in a male dominated environment, women might feel *greater* peer tolerance of sexism, as well as have fewer female co-workers with whom to affiliate. That is to say, the findings of the current studies can only emerge when other women are around. It might be interesting to examine, in addition, what is the minimum proportion of women in a work environment necessary to encourage women to draw to each other in response to sexist treatment.

In addition, as studies in this paper did not manipulate, but measured, perceptions of tolerance and interpersonal relationships, it is not possible to know precisely whom participants were thinking about when responding to these measures and whether or not these were the same people. That said, the measure of tolerance we used specifically refers to 'my co-workers' and 'people' (which does not exclude men), while the measures of social relationships explicitly mention 'my female co-workers' or investigate social closeness to 'female co-workers'. However, we acknowledge that this does not completely disambiguate

the results and therefore future research might try to exert more control over these interpretations.

Additionally, we tried to separate three levels of tolerance of sexism (peer-, manager-, and policy-level tolerance), but these three levels are not necessarily entirely distinct from one another. Specifically, manager tolerance and policy-level tolerance of sexism may, in real-life contexts, not be independent. One reason for this is that managers' actions may play a role in shaping organisational policies. For example, Edelman (2005) points to the fact that many organisational managers create their own organisational policies against discrimination. In addition, Martinez and colleagues (Martinez et al., 2013) argue that organisational-level policies are not always clear for employees; for this reason, sometimes managers need to filter these policies through their own beliefs and actions.

The role of manager tolerance of sexism should also be investigated further in future work. The suggestive evidence observed here needs to be replicated, but research examining motivational underpinnings of both seeking support from other women as well as potentially filing formal complaints following sexism could help to clarify discrepant findings in the current studies. Overall, these results underscore the importance of continuing to try to distinguish the various levels of organisational climate that might convey tolerance of sexism.

3.8.2. Conclusions

The goal of the present chapter was to understand when women draw together (versus distance from each other) as a response to sexism. Specifically, we tested whether three levels of organisational tolerance of sexism (peer, manager, and policy), have an impact on women's tendency to draw together at work in response to sexism. The combination of cross-sectional and quasi-experimental studies showed that the effect of peer tolerance of sexism was the most consistent among the three levels of organisational climate, demonstrating that when women perceived that their peers were *less* tolerant of sexism, experiences of sexism

led to increased affiliation with other women, but this did not occur when women perceived their peers to be *more* tolerant of sexism. This insight may have important practical implications for organisations' efforts to improve organizational climate.

Chapter 4: Disentangling Co-Worker Tolerance from Co-Worker Sexism:

A Laboratory Study

In 2016, Nicola Thorp, a London receptionist in a finance company, was sent home from work without pay because she refused to wear high heels at work—an incident considered by many to illustrate the different treatment that men and women often receive at work (Khomami, 2016). Unfortunately, this is not an isolated event: Studies show that women often face sexism, at work and outside work, on a daily basis (Davison & Burke, 2000; Stamarski & Son Hing, 2015). This impacts women in a wide range of ways, from difficulty accessing leadership roles (Eagly & Carli, 2007; Barreto et al., 2009), to underrepresentation in male-dominated fields (Diekmann et al., 2010; Else-Quest et al., 2010). Although the detrimental effects of sexism on women's physical and mental health (Schmader et al., 2008; Borrel et al., 2010; for a review Barreto & Ellemers, 2013) have been well documented, less is known about the impact of sexism on women's social relationships with other women. In this PhD we aim to advance knowledge in this area by examining how aspects of the (work) environment, such as organizational (in)tolerance of sexism, might shape how sexism impacts women's relationships with female co-workers.

Chapters 2 and 3 of this thesis reported our initial steps in this direction. Specifically, in Chapter 2 we found some evidence that women are more distressed about encountering sexism if they also perceive their peers to tolerate sexism. In Chapter 3, we found that women are more likely to report closeness to their female co-workers in response to sexism when they perceive their peers to be less tolerant of sexism. This chapter complements that research in several ways: 1) by disentangling co-worker behavioural tolerance (e.g., protest) from the extent to which co-workers claim to object to sexism; 2) by offering a simultaneous analysis of wellbeing and behaviour within the same study, and testing the possible mediation of behaviour by wellbeing; and 3) by extending the focus on affiliation with other women to

affiliation with male co-workers and perpetrators. In what follows, we elaborate on each of these aims.

4.1. Disentangling Co-Worker Tolerance from Co-Worker Sexism

The studies reported in the prior chapters did not manipulate co-worker tolerance of sexism, but instead measured this predictor. In doing so, although experiences with workplace sexism were also measured and taken into account in the analyses, our operationalisation of tolerance in our prior studies did not separate the extent to which co-workers are expected to state objection to sexism from the extent to which they are expected to actually protest against it. In fact, one might argue that these two factors often go hand in hand in real life—what one might classify as a 'natural confound'. That said, they are not the same thing (Hunt & Folberg, 2021): Co-workers might be very supportive of targets of sexism in private, for example, but unwilling to initiate or support actual protest.

In this chapter, we offer a fully experimental analysis of the interplay between experiences with sexism and peer tolerance of sexism by manipulating both factors and randomly allocating participants to each of the four resulting conditions. Crucially, this allows us to manipulate tolerance of sexism in a way that controls for co-workers' disagreement with the sexist incident and varies only the extent to which they were willing to tolerate the sexism treatment by accepting it or, instead, by protesting against it.

This conceptualization of tolerance of sexism relates to behaviours such as protest, or confrontation of prejudice, also examined in the social psychological literature (see Kaiser & Major, 2006 for a review). Knowledge from these areas suggests that it can be important to control for perceived sexism when examining how those who engage in protest (or confrontation) are perceived. For example, early work by Kaiser and Miller (2001) showed that individuals who complained to have been discriminated against were more negatively evaluated than those who attributed a negative outcome to their poor effort or performance,

even when the odds that discrimination had taken place were extremely high. Other work, however, showed that when researchers compared targets who similarly perceived the treatment they received as discriminatory, but differed in whether or not they protested about that treatment, they found that those who protested were often more positively evaluated than those who did not (Dodd et al., 2001; Garcia et al., 2010; Kahn et al., 2015; Kaiser et al., 2009).

Research in this area has also shown that targets of sexism tend to benefit from others engaging in protest or confrontation on their behalf (Czopp & Monteith, 2003; Czopp et al., 2006). Indeed, when others (often designated as 'allies') point out that a target has received sexist treatment, or engage in protest or confrontation on their behalf, they might improve the extent to which targets detect sexism (Cihangir et al., 2014) and increase the efficacy of protest actions (Czopp & Monteith, 2003). This particular type of social (peer) support is therefore important and might also modify the impact of sexism on social relationships.

In the present study, we extended this to examine whether co-worker tolerance of sexism would moderate the effect of sexism on women's social affiliation with other women. We manipulated co-worker tolerance of sexism by varying whether co-workers expressed disapproval of sexism, but either tolerated that treatment or protested against it. Given that whether allies are male or female can modify the effect of their behaviour on targets (Adams et al., 2006; Cihangir et al., 2014), we wish to sidestep the issue of ally gender by including both male and female co-workers as sources of the message used to manipulate tolerance. When operationalised in this way, and in line with past research, one might expect that sexism might have fewer negative effects when co-workers are less tolerant of sexism than when they are more tolerant of sexism.

4.2. A Simultaneous Analysis of Wellbeing and Social Outcomes

A second goal of the research reported in this chapter was to offer a simultaneous examination of psychological wellbeing and social affiliation. Until now, in this thesis, we have looked separately at the interplay of sexism experiences and tolerance of sexism on women's wellbeing (Chapter 2) and on women's interpersonal relationships with other women (Chapter 3). We now examine these two outcomes in the same study and relate them to each other. Importantly, whereas in Chapter 2 we found that experiences with sexism were only negatively associated with well-being when the workplace was perceived as *more* tolerant of sexism, in Chapter 3 we found that sexism was only positively associated with social behaviour when the workplace was perceived as *less* tolerant of sexism. In short, so far our results suggest that women feel worse about sexism when they perceive their workplace to be more tolerant of sexism and are more likely to affiliate with other women after encountering sexism when they perceive their peers to be less tolerant of sexism. It is of course possible that wellbeing and behavioural outcomes are influenced by different factors. However, it is important to note that the studies in Chapters 2 and 3 employed rather different methods so it is crucial to examine these in the same study. Indeed, in Chapter 2 tolerance was assessed with a measure of general perceptions of workplace tolerance. By contrast, in Chapter 3 we distinguished between three different types of environmental tolerance (peer, manager, and organizational policy) and participants completed all three measures. This might have led to implicit comparisons between workplace tolerance at different levels of analysis, which might have changed the meaning of each measure. In this chapter we manipulate only *peer tolerance* of sexism and examine affect and behaviour within the same study to enable a more direct comparison between the two, as well as explore whether wellbeing mediates effects on behaviour.

As already reviewed in prior chapters, research has shown that exposure to sexism can have important wellbeing consequences in ways that can impact social relationships. For

example, sexism can increase feelings of depression and anxiety (Landrine et al., 1995; Kobrynowicz & Branscombe, 1997; Klonoff et al., 2000; Swim et al., 2001; Barreto & Ellemers, 2005a), lower personal self-esteem (Swim et al., 2001; Schmitt et al., 2002), and increase anger (for a review see Barreto & Ellemers, 2015). At the same time, experiences with prejudice can actually protect wellbeing if they serve as alternative explanations for negative outcomes (Crocker & Major, 1989), though this is not always found (see Barreto & Ellemers, 2015 for a review). In turn, these types of affective responses are important predictors of well-functioning interpersonal relationships: Anxiety, depression, anger, and low self-esteem tend to be detrimental to social interactions (Bolger & Eckenrode, 1991; Diong et al., 2005; Erol & Orth, 2013; Houston & Vavak, 1991; Murray et al., 2000, 2006; Smith et al., 1988; Srivastava & Beer, 2005). Anger, however, is sometimes positive for social affiliation, for example when it stems from discriminatory treatment and draws those who share a stigmatized identity together to address social inequalities (van Zomeran et al., 2004).

We propose that peer tolerance of sexism will moderate the effect of sexism on both wellbeing and behavioural outcomes, and that wellbeing is likely to at least partially mediate the effect of the interaction between sexism and tolerance on women's willingness to engage with other women (see Figure 4.1). Specifically, we expect that experiences with sexism are likely to lead to more anxiety, more depression, lower personal self-esteem, more anger, and less social affiliation with peers. We also expect this is likely to be worsened when peers are perceived to be more tolerant of sexism than when they are less tolerant—that is, we expect more negative wellbeing outcomes when there is less support from peers (i.e., more tolerance for sexism).

Figure 4.1

Theoretical model linking sexism, peer tolerance of sexism, wellbeing, and social affiliation with other women
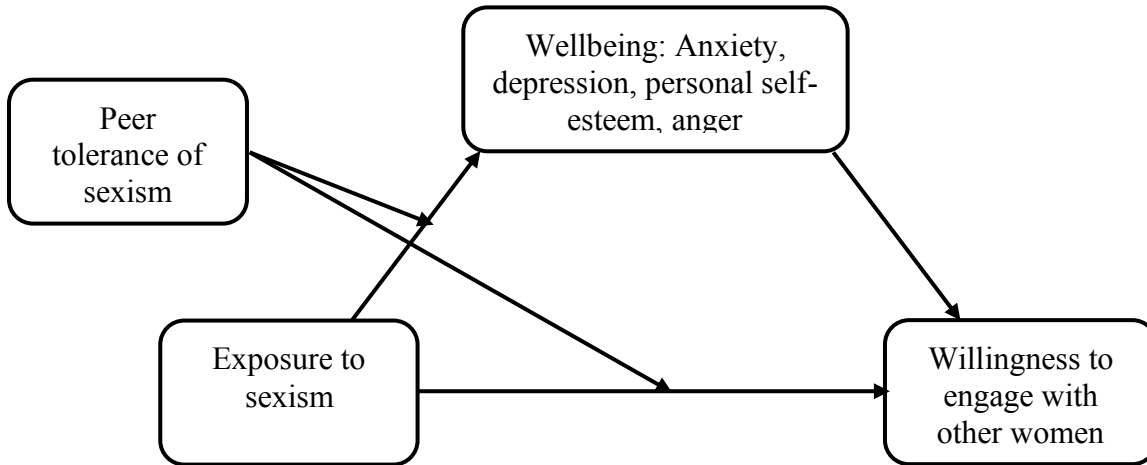
4.3. Exploratory Outcomes: Affiliation with Other Men and the Perpetrator

Finally, the research reported in the current chapter will extend our prior research by adding to the examination of women's willingness to engage with female peers, an exploration of women's willingness to engage with male peers and with a perpetrator. It is important to note that affiliation with other men and the perpetrator were added to this current study for exploratory purposes. Past research on intergroup interactions suggests that experiences with prejudice from dominant group members reduce one's willingness to engage with members of the dominant group (Shelton et al., 2005; Tropp, 2003), often due to anxiety about renewed exposure to prejudice. In addition, research on targets' willingness to confront perpetrators of prejudice shows this behaviour is very infrequent because targets anticipate and fear the social costs associated with doing so (Kaiser & Miller, 2001; Shelton & Stewart, 2004; Swim & Hyers, 1999; Woodzicka & LaFrance, 2001). In this chapter, we explore whether peer tolerance of sexism might moderate these effects, so that the link between exposure to sexism and avoidance of dominant group members and perpetrators might be stronger when peers are unsupportive (i.e., more tolerant of sexism).

4.4. Overview of Study and Hypotheses

In the preceding chapters of this thesis, the emphasis was on understanding how organisational tolerance of sexism impacts women's wellbeing (Chapter 2) and interpersonal relationships with other women (Chapter 3). The aim of this current study was to examine once again whether peer intolerance of sexism moderates the effect of sexism on wellbeing and interpersonal relationships with other women, this time adopting a more restrictive operationalization of tolerance, examining both wellbeing and behaviour in the same study, and orthogonally manipulating both predictors. New to this study, and for exploratory purposes, we also examine willingness to engage with other men and with perpetrators. Based on the results of previous studies in this thesis and in the literature, we proposed the following hypotheses:

Exposure to sexism was expected to have a detrimental effect on women's willingness to engage with other women (Hypothesis 1a). Although in the previous chapter we found that sexism had a positive effect on women's affiliation with other women, the opposite has been found in prior research (Doyle & Molix, 2014a, 2014b, 2015a) and given the changes in methodology we employ in this study, we retain this prediction. We also expected that this negative link between sexism and affiliation with other women would be more apparent when peers are more tolerant of sexism than when they are less tolerant of sexism (Hypothesis 1b).

Exposure to sexism was expected to have a negative effect on psychological wellbeing—increasing anxiety, depression, and anger, and decreasing personal self-esteem (Hypothesis 2a). Again, we also expected sexism and tolerance of sexism to interact to predict wellbeing, so that the negative link between sexism and wellbeing would be stronger when peers are more tolerant of sexism than when they are less tolerant (Hypothesis 2b).

Wellbeing was expected to at least partially mediate the effect of sexism on women's willingness to engage with other women, but we expected this to depend on the specific

wellbeing outcome. Specifically, we expected high anxiety, high depression and low self-esteem to lead to less affiliation with other women (Hypothesis 3a), but high anger to lead to more affiliation with other women (Hypothesis 3b). In practice, this means that anxiety, depression, and self-esteem would be responsible for a negative and anger for a positive indirect effect of sexism on social affiliation.

Peer tolerance of sexism was expected to moderate the direct and indirect effects of exposure to sexism on women's willingness to engage with other women via the wellbeing mediators (Hypothesis 4). Specifically, less peer tolerance of sexism was expected to buffer the impact of sexism on wellbeing and on women's willingness to engage with other women.

For exploratory purposes, we also investigated the effect of the manipulations on women's willingness to engage with other men and perpetrators, and the role of the wellbeing mediators in this process.

4.5. Pilot Study

We started by pilot testing the experimental set-up, to examine whether it appropriately manipulated exposure to sexism and peer tolerance of sexism, as well as trial our dependent measures of willingness to engage with peers and the perpetrator.

4.5.1. Method

4.5.1.1. Design and Participants

This pilot study followed a 2 (peer tolerance of sexism: less vs more) X 2 (exposure to sexism: sexism vs no sexism) between-participants design. Participants were 40 first year female students (10 per condition) at the College of Life and Environmental Science (CLES), University of Exeter. All participants were British to control for commonality with the actors in the videos which were used to deliver the manipulation of peer intolerance of sexism. The study took approximately 20 minutes and participants were compensated with £3 for their time and effort, in line with local guidelines.

4.5.1.2. Procedure

Participants were recruited for a study about improving students' social life in the college. After reading the information sheet and indicating consent, participants were randomly allocated to conditions. The experimenter suggested that there were other participants in adjacent rooms, some completing similar tasks and some completing different tasks. To do that, the experimenter asked participants' names and pretended to go through a list of participants for that session, to allocate them to their particular room. Participants then took their place inside individual cubicles, received the manipulation of intolerance of sexism through the computer and the manipulation of exposure to sexism from the experimenter, and completed the dependent measures.

To manipulate peer tolerance of sexism, participants viewed a video of alleged undergraduate students answering an interviewer's questions. The questions and answers were about the social life of students in the college from which we drew the study sample (College of Life and Environmental Sciences, or CLES). Across conditions, the videos portrayed the same actors (3 pairs of students, each answering separate questions), responding to the questions in exactly the same way across condition, except for the last question, which served to manipulate perceived peer tolerance of sexism (see Appendix E for the full wording of all videos). Because the source of confrontation matters (Czopp et al., 2006; Drury & Kaiser, 2014; Gervais & Hillard, 2014; Vaccarino & Kawakami, 2020), we opted to include both male and female actors in the video that delivered the manipulation, although it was the male actor who made the key statement. In the condition portraying less tolerance of sexism, the last question and answer were:

"How would you describe the atmosphere in the college?

Answer (male student) = it's great, really good. Being a CLES student is really amazing, we get all sorts of great opportunities—sometimes we even get to go into business and meet the big players.

[Turning to his female friend]: Do you remember last year when we went to that company?

Answer (female student) = Yes, I remember, that was cool, except that female students were told they had to wear high heels for the visit...

Answer (male student) = Oh yeah, right. That wasn't good. We all thought at the time that it wasn't right—both the guys and girls were together in this. It's actually rather sexist. Not cool really. We discussed it and decided to complain because we'd rather not go on the visit if this was a condition."

In the condition portraying more tolerance of sexism, the answer to the last question is exactly the same except for the last sentence:

"…

Answer (male student) = Oh yeah, right. That wasn't good. We all thought at the time that it wasn't right—both the guys and girls were together in this. It's actually rather sexist. Not cool really, but we decided just to suck it up and go anyway."

After watching the interviews, we asked participants to generate ideas to improve the social life of students in their college. Participants were told that these ideas would subsequently be judged by other participants, whose task was not to generate ideas, but to evaluate them. We manipulated sexism by varying the (bogus) feedback participants received from these judges. Importantly, participants were told that these judges were not the same students in the video that they had watched. In the sexism conditions, participants were given sexist feedback: "These suggestions are not bad, but they all sound a bit emotional and sensitive. They must be from a female student, it's easy to see that. So I don't think they are

helpful for male students. I am not convinced this is what we should prioritize in CLES." In the non-sexist condition, participants also received negative feedback, but this was not linked to their gender. Specifically, participants in the no sexism condition read: "These suggestions are not bad, but I'm not sure they are helpful for all students. I am not convinced this is what we should prioritize in CLES."

4.5.1.3. Measures

4.5.1.3.1. Manipulation Checks. Peer tolerance of sexism was checked with two items: "CLES students are supportive of each other," and "when female students encounter sexism, CLES students are supportive of them." Responses were given on 5 point Likert-type scales from 1 (strongly disagree) to 5 (strongly agree). To confirm that the manipulation of tolerance of sexism was perceived as intended, this manipulation should not affect ratings of the first item (i.e., participants should all perceive CLES students as supportive), but participants in the less tolerance condition should rate the second item more highly than participants in the more tolerance condition.

To check whether the manipulation of perceived sexism was perceived as intended, participants indicated to what extent the feedback they received was: Negative-positive, unfair- fair, useless-useful, not constructive-constructive on five-point semantic differential scales. To confirm the manipulation was perceived as intended, the manipulation of sexism should not affect ratings of the feedback as positive, useful, and constructive, but it should affect ratings of the feedback as fair. We also asked participants to rate on a five-point semantic differential scale how good (bad-good) and original (not at all original-very original) they thought their own ideas were in order to make sure that there is no difference between groups in terms of how they perceive their own ideas.

4.5.1.3.2. Wellbeing. Participants completed three affect subscales tapping into depression, anxiety, and anger before going through the manipulations and after

manipulations. These measures were taken from Major et al. (2003). Participants responded to all items on a five point Likert-type scale from 1 (not at all) to 5 (extremely). Depression was assessed with 15 items: Discouraged, fine (reverse coded), blue, worthless, proud (reverse coded), embarrassed, like a failure, disappointed in myself, pleased with myself (reverse coded), humiliated, ashamed, inferior to others, sad, depressed, and mortified. These items formed a reliable scale (α=.85) and were averaged for further analysis. Anger was measured with five items: Angry, mad, scornful, irritable, and hostile. These items formed a reliable scale (α=.65) and were averaged for further analysis. To measure anxiety, we used four items: Fearful, worried, calm (reverse coded), and secure (reverse coded). These items formed a reasonably reliable scale (α=.73) and were averaged for further analyses. We used the same scales to measure wellbeing after presenting manipulations and computed difference scores reflecting differences from pre to post measurement (i.e., post score – pre score). When measured after the manipulation, depression (α=.90) and anger (α=.78) still formed reliable scales and anxiety (α=.56) was a less reliable composite.

Personal self-esteem was assessed with the 10 item scale by Rosenberg (1965), with sample items: "I feel that I am a person of worth, at least on an equal plane with others" and "I feel I do not have much to be proud of" (reversed). For all items, participants were asked to report how they felt at the moment on a five point Likert-type scale from 1 (strongly disagree) to 5 (strongly agree). The items formed a reliable scale (α=.82) and were averaged for further analyses (see Appendix E for the complete scale).

4.5.1.3.3. Willingness to Engage with Others. Participants were asked, with five items, to what extent they wanted to meet participants who did the same task as themselves: e.g., "To what extent would you like to meet other participants who did the same task as you?", "To what extent would you like to discuss your suggestions with other participant who did the same task as you?" Responses were given on five point Likert-type scales (from 1 =

not at all to 5 = extremely). The five items used for this formed a reliable scale (α=.81) and were averaged for further analyses. Participants were also asked, again with five items, to what extent they wanted to meet the participant who gave the feedback (in the sexism conditions, this was the perpetrator). These five items also formed a reliable scale (α=.934) and were averaged for further analysis (see Appendix E for the full wording of social engagement questionnaires). Please note that participants were not informed about other participants' gender.

4.5.2. Results

We conducted 2 (peer tolerance of sexism: less vs more) by 2 (exposure to sexism: sexism vs no sexism) ANOVAs to examine whether the manipulation was perceived as intended and to conduct an initial exploration of how it was affecting the dependent measures.

4.5.2.1. Manipulation Checks

The means and standard deviations of all measures in all conditions can be inspected in Table 4.1.

Table 4.1.

Means and standard deviations for the main effects on the manipulation check items in the Pilot Study

	Exposure to Sexism				Peers' Tolerance of Sexism			
	No Sexism Condition		Sexism Condition		Less Tolerance Condition		More Tolerance Condition	
Manipulation Check Questions	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**
"CLES students are supportive of each other"	4.00	.47	4.00	.41	3.92	.49	4.10	.32
"When female students encounter sexism, CLES students are supportive of them"	3.70	.67	4.15	.55	4.08	.49	3.80	.79
Feedback was fair	2.60	.97	2.00	.91	2.31	1.03	2.20	.92
Feedback was positive	1.55	.73	1.60	1.26	1.60	1.26	1.55	.73
Feedback was constructive and useful	2.40	1.15	2.42	1.04	2.31	1.11	2.55	1.04
Evaluation of suggestions	2.95	.93	2.83	.81	2.73	.63	3.11	1.08

Notes. M stands for Means and SD stands for standard deviations

A 2 (peer tolerance of sexism: less vs more) by 2 (exposure to sexism: sexism vs no sexism) ANOVA on "CLES students are supportive of each other" did not reveal any significant main or interaction effects (main effect of tolerance of sexism, $F_{(1,36)}=1.16$, $p=.29$, $\eta^2_{partial}=.06$, main effect of sexism, $F_{(1,36)}=.00$, $p=1$, $\eta^2_{partial}=.00$, two way interaction, $F_{(1,36)}=1.16$, $p=.29$, $\eta^2_{partial}=.06$), which is as we intended.

For the second item ("When female students encounter sexism, CLES students are supportive of them"), which taps into the difference we intended to create with the sexism manipulation, the means are in the intended direction (see Table 4.1). However, a two way ANOVA did not reveal any significant effect of tolerance of sexism, $F_{(1,36)}=.71$, $p=.41$, $\eta^2_{partial}=.04$, of sexism, $F_{(1,36)}=2.52$, $p=.13$, $\eta^2_{partial}=.12$, or of the two-way interaction, $F_{(1,36)}=.01$, $p=.93$, $\eta^2_{partial}=.00$, though the intended effect of sexism was not far from significance. In sum, though the effect of the manipulation is not significant, possibly due to the low sample size, the pattern of means suggests that we might be on the right track with the manipulation of tolerance of sexism.

With regard to how the manipulation of exposure to sexism was perceived, inspection of means suggests that the manipulation might be functioning as intended, with participants in the sexist condition perceiving the feedback as less fair than participants who were not exposed to sexism (see Table 1). Again, the two way ANOVAs on this check also did not reveal any significant main or interaction effects (main effect of sexism, $F_{(1,36)}=2.10$, $p=.16$, $\eta^2_{partial}=.10$, main effect of intolerance of sexism, $F_{(1,36)}=.23$, $p=.63$, $\eta^2_{partial}=.01$, two-way interaction, $F_{(1,36)}=.23$, $p=.63$, $\eta^2_{partial}=.01$), but the main effect of sexism was not far from significance.

Finally, in line with our expectation, participants assigned to the sexism condition and participants assigned to no sexism condition did not show significant difference in terms of finding the feedback positive, $F_{(1,36)}=.001$, $p=.97$, $\eta^2_{partial}=.00$ (main effect of tolerance,

$F_{(1,36)}$=.001 p=.97, $\eta^2_{partial}$=.00, interaction effect, $F_{(1,36)}$=1.30, p=.27, $\eta^2_{partial}$=.08), or constructive and useful, $F_{(1,36)}$=.00, p=1, $\eta^2_{partial}$=.00 (main effect of tolerance, $F_{(1,36)}$=.41 p=.53, $\eta^2_{partial}$=.02, interaction effect, $F_{(1,36)}$=1.13, p=.30, $\eta^2_{partial}$=.06). In addition, participants, who were exposed to sexism and who were not exposed to sexism did not differ in terms of perceiving their own work as good and original, $F_{(1,36)}$=.00, p=.97, $\eta^2_{partial}$=.00 (main effect of tolerance, $F_{(1,36)}$=.88 p=.36, $\eta^2_{partial}$=.05, interaction effect, $F_{(1,36)}$=.46, p=.51, $\eta^2_{partial}$=.02).

4.5.2.2. Dependent measures

The means, standard deviations, and Pearson correlations for the dependent variables are displayed in Table 4.2 and 4.3. The ANOVA results for the study variables are reported in Table 4.4. Overall, the analyses show that peer tolerance of sexism significantly affected the extent to which participants reported more anger post vs. pre manipulation. The interaction effect of exposure to sexism and peer tolerance of sexism on post-pre depression, post-pre anger, and women's willingness to engage with others was also statistically significant. The means suggest that, regarding wellbeing, participants who were exposed to sexism reported increased depression, increased anger, and decreased personal self-esteem compared to those who were not exposed to sexism, but only when they thought their peers were less tolerant of sexism. For anxiety, the means show a similar pattern, but the effect is not significant. Though not significant, the means suggest that these effects were in the opposite direction when participants believed that their peers were more tolerant of sexism. With regard to behaviour, the means suggest that participants who were exposed to sexism showed slightly more willingness to engage with peers and with the perpetrator than those who were not exposed to sexism, only when they perceived their peers as less tolerant of sexism, with the opposite pattern in the more tolerance conditions, but this interaction effect was not statistically significant.

Table 4.2.

The means, standard deviations, and Pearson correlations for the dependent variables in the Pilot Study.

Peer Tolerance of Sexism Conditions	Less tolerance				More tolerance			
Exposure to Sexism Conditions	No Sexism		Sexism		No Sexism		Sexism	
Dependent variables	M	SD	M	SD	M	SD	M	SD
1. Depression	.37[b]*	.37	.99[a]*	.50	.89[ab]*	.40	.60[ab]*	.53
2. Anxiety	.05[a]	.32	.12[a]	.33	.15[a]	.76	.05[a]	.48
3. Anger	.12[b]*	.27	.85[a]*	.64	.12[b]*	.50	.00[b]*	.24
4. PSE	3.92[a]	.72	3.31[b]	.20	3.30[b]	.42	3.36[b]	.52
5. Willingness to engage with peers	2.00[a]	.53	2.42[a]	.62	2.44[a]	.62	1.68[a]	.52
6. Willingness to engage with the perpetrator	1.92[a]	.39	2.50[a]	1.22	2.60[a]	1.21	1.68[a]	.46

Notes. M stands for Means and SD stands for standard deviations. Means within rows with different subscripts differ ($p<.05$). For the means of the difference scores (affect), * denotes significant difference from 0.

Table 4.3.

Pearson correlations for the dependent variables in the Pilot Study.

Dependent variables	1	2	3	4	5
1.Depression	-				
2.Anxiety	.30	-			
3.Anger	.51*	.24	-		
4.PSE	-.48*	.23	-.01	-	
5.Willingness to engage with peers	.15	-.06	.09	-.39	-
6.Willingnes to engage with the perpetrator	.28	.02	.67	-.31	.75***

Note. For the correlations, *** denotes a significant coefficient at p<.001, ** denotes p<.01, * denotes p<.05.

Table 4.4.

ANOVA results for the dependent variables in the Pilot Study.

Dependent variable	Term	F	df	p	η^2_p
Depression	Exposure to sexism	.68	1,36	.42	.03
	Peers tolerance	.10	1,36	.75	.01
	Interaction	5.32	1,36	.03	.22
Anxiety	Exposure to sexism	.004	1,36	.95	.00
	Peers tolerance	.004	1,36	.95	.00
	Interaction	.18	1,36	.67	.009
Anger	Exposure to sexism	2.22	1,36	.15	.10
	Peers tolerance	4.31	1,36	.05	.18
	Interaction	4.31	1.36	.05	.18
Personal self-esteem	Exposure to sexism	1.90	1,36	.18	.09
	Peers tolerance	2.08	1,36	.16	.10
	Interaction	2.83	1,36	.11	.13
Willingness to engage with others	Exposure to sexism	.33	1,36	.57	.02
	Peers tolerance	.28	1,36	.60	.01
	Interaction	4.16	1,36	.05	.18
Willingness to engage with the perpetrator	Exposure to sexism	.17	1,36	.68	.01
	Peers tolerance	.03	1,36	.88	.002
	Interaction	3.32	1,36	.08	.15

Note. F stands for F value, df stands for degrees of freedom, p stands for p value, and η^2_p stands for eta partial square.

4.5.3. Discussion

The aim of the pilot study was primarily to examine how the manipulations of sexism and tolerance of sexism were perceived and whether this was as intended. Although the effects of sexism and peer tolerance of sexism on the manipulations checks did not reach statistical significance (which might be the case with a larger sample size), the means suggest that the manipulations were perceived as intended. Participants found peers in both tolerance conditions to be similarly supportive in general, but they reported that their peers who were portrayed in the videos as less tolerant of sexism would be more inclined to take action to address sexism than those who were portrayed as more tolerant of sexism. These perceptions were as intended and therefore encouraging. Therefore, for the main study we did not make changes to these manipulations.

For the main study, we did change when the manipulation checks were presented, however. Specifically, whereas in the pilot study we included the manipulation checks at the end of the study, for the main study we presented the manipulation checks right after the corresponding manipulation as recommended by Hauser et al. (2018). This was because we wanted to get a better idea of how peer tolerance of sexism was perceived in the absence of the sexism manipulation, which is not possible if the checks are included at the very end of the study.

A related, but separate, issue is that our findings indicated that participants perceived the less tolerance of sexism condition as less supportive than intended. We think that this is partly because we manipulated something relatively specific (i.e. whether peers actually confronted sexism rather than just voiced disapproval of sexist treatment), but we then measured (as a check) something more general than that (i.e., "when female students encounter sexism, CLES students are supportive of them."). To address this, in Study 5 we made the manipulation check questions more specific to how we conceptualized tolerance.

We also aimed to offer an initial test of the dependent measures. The results showed that women were more likely to indicate a wish to meet peers (who were not the perpetrator of the sexist feedback) after experiencing sexism (vs. not) but only when their peers were less tolerant of sexism. Surprisingly, the very same pattern was revealed for willingness to engage with the perpetrator. Though this is an interesting result, it was not statistically significant. Most importantly, however, this suggests some important methodological refinements need to be made. First, in the pilot study we did not specify the gender of other participants, both with regard to other students who did the same task as the participant (peers) and with regard to the perpetrator. With regard to peers, this was an oversight because our aim was precisely to study the impact of sexism on women's social relationships with other women. To address this, in the main study participants were informed about the gender of the other participants to which the measures referred.

With regard to the perpetrator, and because research has found that sexism is perceived and experienced differently depending on the perpetrator's gender (Baron et al., 1991; Cihangir et al., 2014), our aim was precisely to examine the effect of sexism irrespective of its source. However, on further reflection we now realise that this may have led participants to infer the gender of the perpetrator from the feedback they received. That is, participants may have thought that the person who provided sexist feedback was more likely to be male than the person who provided non-sexist feedback. Therefore, to eliminate this possible confound associated with the sexism manipulation, in the main study we established the identity of the perpetrator as male. That is, participants in the main study were told that there is a female peer, a male peer, and a male perpetrator next door and asked whether they would like to meet each of these three people individually.

A final change we made for the main study was that instead of focusing on the college as the organizational unit, we now refer to the whole university. This was mainly to allow us

to recruit participants from a wider pool and ensure they did not overlap with the participants recruited for the pilot study.

4.6. Study 5

4.6.1. Method

4.6.1.1. Design and Participants

This study followed a 2 (peer tolerance of sexism: less vs. more) X 2 (exposure to sexism: sexism vs. no sexism) between participants design. All participants were first year female British students at the University of Exeter. As we stated before, this was due to the British identity of the group that was represented in the video. The study took approximately 30 minutes and participants were compensated £5 for their time and effort. Estimating a medium effect size (η^2=.25) obtained in Study 2, power analysis conducted in G*Power version 3.1 indicated a sample size of 210 was necessary to achieve sufficient power ($1 - \beta =$ .80) to detect the interaction. Given the total number of 216 participants recruited, the study had .81 power to detect the estimated interaction effect of 2 (peer tolerance of sexism: less vs. more) X 2 (exposure to sexism: sexism vs. no sexism). There were equal numbers of participants in each condition.

4.6.1.2. Procedure

The procedure of this study was similar to that of the pilot study with the exceptions outlined above and below. Different from the pilot study, the study context was now the whole University, rather than just a specific college. In this way, the manipulations of peer tolerance of sexism and exposure to sexism were identical to those of the pilot study, but pairs in the videos talked about the University of Exeter in general instead of talking about the specific College of Life and Environmental Sciences (CLES). The same change was made to the manipulation of sexism and to any item that required a reference to the college/university. We now also made the identity of others with whom participants were

asked to engage clear. In this way, we were able to specifically examine women's relationships with other women, as intended.

4.6.1.3. Measures

4.6.1.3.1. Willingness to Engage with Peers. The central dependent variable in this study was a measure of willingness to engage with a female peer. Participants were told that they could have a chance to meet Laura (a female peer who did the same task as they did), Tom (a male peer who did the same task as they did), and Matt (a male peer who gave them the feedback) respectively. It was clarified to participants that Laura, Tom, and Matt are other participants in other rooms and not the people who appeared in the video. We asked participants to indicate their agreement with each of four statements: "To what extent would you like to" (1) "get acquainted with Laura/ Tom/Matt", (2) "discuss your task with Laura/ Tom/ Matt", (3) "discuss your suggestion with Laura/ Tom/ Matt", (4) "discuss the feedback that you received with Laura/ Tom/ Matt.", and (5) "how much time they would like to spend with Laura/ Tom/ Matt?" Responses were provided on 5-point scales, ranging from 1 (strongly disagree) to 5 (strongly agree) for items 1-4 and ranging from "0-5 minutes" to "21-25 minutes" for item 5. These items formed reliable scales for the female peer, Laura (α=.83) and were averaged for further analysis. We named this scale "willingness to engage with a female peer." The items also formed a reliable scale when adapted to measure engagement with the male peer, Tom (α=.84); we named this scale "willingness to engage with a male peer." Similarly, we adapted these items to ask about engagement with the perpetrator (Matt), which again resulted in a reliable scale (α=.85), which we called "willingness to engage with the perpetrator."

4.6.1.3.2. Wellbeing. We included the same measures of wellbeing (before and after delivering manipulations), and personal self-esteem as in the Pilot study. Items for depression (α=.91), anger (α=.71), and anxiety (α=.70) formed reliable scales and were averaged for

further studies. We used the same affect scales after presenting the manipulations and computed difference scores reflecting differences from pre to post measurement (i.e., post score – pre score). Again, at the second measurement point, depression (α=.91) and anger (α=.92) formed reliable scales, and anxiety (α=.60) was a less reliable composite. The same personal self-esteem scale as used in the Pilot study was used for Study 5. The items formed a reliable scale in this study too (α=.89) and were averaged for further analyses.

4.6.1.3.3. Manipulation Checks. To check the manipulation of peer tolerance of sexism, participants were asked to respond to two items on a 5-point scale (ranging from 1 "strongly disagree" to 5 "strongly agree") after the peer tolerance of sexism manipulation was delivered, but before they were exposed to the sexism manipulation. These items were: "University of Exeter students are supportive to each other" and "Students at University of Exeter try to be fair to everyone." Participants were also asked to rate two further items (on a scale ranging from 1 "strongly disagree" to 5 "strongly agree") at the end of the study. These items were: "When female students encounter sexism, University of Exeter students are able to identify it as sexist" and "When female students encounter sexism, University of Exeter students take action to stop it."

In order to check the effectiveness of the manipulation of exposure to sexism, participants indicated whether the feedback they received was: Negative-positive, unfair- fair, useless-useful, not constructive-constructive, on 5-point semantic differential scales. We also ask them to rate how good (bad-good) and original (not original—very original), $r_{(216)}$=.38, p<.001, they thought their ideas were, again on 5-point semantic differential scales.

We also included the in-group identification scale from Ellemers et al. (1999) to test (and hopefully demonstrate) that participants showed no difference in identification across the conditions. Four items were included such as "I identify as a University of Exeter student," "I am glad to be identified as a University of Exeter student." These items were

answered on a scale ranging from 1 "disagree" to 5 (agree). They formed a reliable scale (α=.85) and were averaged for further analysis.

4.6.2. Results

4.6.2.1. Manipulation Checks

We analyzed the effects of the manipulations on the manipulation check questions by performing 2 (peer tolerance of sexism: less vs. more) X 2 (exposure to sexism: no sexism vs sexism) between participant ANOVAs.

The manipulation of tolerance of sexism is considered effective if it had no effect on two items: "University of Exeter students are supportive to each other" and "When female students encounter sexism, University of Exeter students are able to identify it as sexist." Indeed, results showed that tolerance of sexism did not have a significant main effect on perceiving University of Exeter students as generally supportive ($M_{\text{more tolerance}}$=4.12, SD=.62; $M_{\text{less tolerance}}$=4.24, SD=.69), $F_{(1,212)}$=1.79, p=.18, η^2_{partial}=.01), and on perceiving University of Exeter students as identifying sexism when it happens ($M_{\text{more tolerance}}$=4.05, SD=.95; $M_{\text{less tolerance}}$=4.06, SD=.91), $F_{(1,212)}$=.01, p=.94, η^2_{partial}=.00.[8]

On the other hand, to be effective, the manipulation of tolerance of sexism was expected to affect responses to two items: "Students at University of Exeter try to be fair to

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[8] Although participants in the no sexism condition (M=4.24, SD=.75) reported that other students were slightly more supportive in general than those in the sexism condition (M=4.12, SD=.56), there was neither a significant main effect of exposure to sexism, $F_{(1,212)}$=1.79, p=.18, η^2_{partial}=.01, nor a significant interaction effect of tolerance of sexism and exposure to sexism, $F_{(1,212)}$=1.79, p=.18, η^2_{partial}=.00 on perceived supportiveness. Similarly, there was neither a significant main effect of exposure to sexism (M_{sexism}=4.01, SD=.91; $M_{\text{no sexism}}$=4,09, SD=.91), $F_{(1,212)}$=.43, p=.51, η^2_{partial}=.00, nor a significant interaction effect of tolerance of sexism and exposure to sexism, $F_{(1,212)}$=.89, p=.34, η^2_{partial}=.00 on peers' perceived ability to identify sexism. These results, showed that participants in all four conditions were not different in terms of perceiving University of Exeter students as supportive and as identifying sexism when it happens.

everyone" and "When female students encounter sexism, University of Exeter students take action to stop it." As we intended, participants in the more tolerance of sexism condition reported less agreement with the idea that University of Exeter students try to be fair to everyone (M=3.71, SD=.85) than participants in less tolerance of sexism condition (M=4.00, SD=.83), and this difference was statistically significant, $F_{(1,212)}$=6.21, p=.01, $\eta^2_{partial}$=.03. In a similar vein, participants in the less tolerance of sexism condition (M=2.09, SD=.80) declared less agreement for the statement that "University of Exeter students take action to stop sexism" than participants in the more tolerance of sexism condition (M=3.83, SD=.90). This effect was also statistically significant, $F_{(1,212)}$=227.11, p<.001, $\eta^2_{partial}$=.52. These findings evidence that the manipulations were perceived by participants as intended.[9]

With regard to the manipulation of exposure to sexism, we intended this to have no effect on the extent to which participants perceived the feedback as positive, useful, and constructive, but to significantly affect the extent to which it is perceived as fair. However, the results indicated that the feedback was perceived as less positive (or more negative) by participants in the sexism condition (M=1.60, SD=.63) than by participants in the no sexism condition (M=2.00, SD=.58) and this effect was significant, $F_{(1,212)}$=23.72, p<.001,

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[9] In parallel to our expectations, the main effect of *exposure to sexism* (M_{sexism}=3.84, SD=.81; $M_{no\ sexism}$=3.87, SD=.90), $F_{(1,212)}$=.06, p=.81, $\eta^2_{partial}$=.00, and the interaction between exposure to sexism and tolerance of sexism, $F_{(1,212)}$=.16, p=.69, $\eta^2_{partial}$=.00, were nonsignificant on perceiving University of Exeter students as fair to everyone. In a similar vein, there was not a significant main effect of exposure to sexism (M_{sexism}=2.91, SD=1.17; $M_{no\ sexism}$=3.02, SD=1.27), $F_{(1,212)}$=.92, p=.34, $\eta^2_{partial}$=.00, but there was a marginally significant interaction effect, $F_{(1,212)}$=3.70, p=.06, $\eta^2_{partial}$=.02, on expecting University of Exeter students to take action to stop sexism showing that participants who were exposed to sexism (M=3.67, SD=.97) declared less agreement with the statement that "University of Exeter students take action to stop sexism" than participants who were in no sexism condition (M=4.00, SD=.80), only when they perceived their peers as less tolerant of sexism, $F_{(1,212)}$=4.16, p=.04, $\eta^2_{partial}$=.02. This effect was not significant for more tolerance of sexism condition (M_{sexism}=2.15, SD=.81; $M_{no\ sexism}$=2.04, SD=.80), $F_{(1,212)}$=.46, p=.49, $\eta^2_{partial}$=.002.

$\eta^2_{partial}$=.10. Similarly, the feedback was viewed as less constructive and less useful by participants in the sexism condition (M=2.02, SD=.94) than by those in the no sexism condition (M=2.46, SD=.94), and again this effect was significant, $F_{(1,212)}$=11.88, p<.001, $\eta^2_{partial}$=.05, so this was not quite what we expected since the feedback we provided in all conditions was neither positive, useful, nor constructive.[10]

As intended, participants exposed to sexism indicated that the feedback was less fair (M=1.92, SD=.87) than did participants not exposed to sexism (M=2.64, SD=.70) and this effect was significant, $F_{(1,212)}$=46.56, p<.001, $\eta^2_{partial}$=.18.[11]

In sum, the manipulation of sexism affected perceived fairness in the intended way, but it also affected how the feedback was perceived in other ways. Though this was not intended, it is not unreasonable, since how participants interpreted 'positive, useful, or constructive feedback' is likely to have been coloured by the adjacent question about how fair it was.

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[10] Although participants in the less tolerance of sexism condition (M=2.29, SD=.98) found the feedback to be slightly more positive than participants in the more tolerance of sexism condition (M=2.19, SD=.95), neither the main effect of peer intolerance of sexism, $F_{(1,212)}$=3.71, p=.06, $\eta^2_{partial}$=.02, nor the interaction effect on perception of the feedback as positive were significant, $F_{(1,212)}$=.12, p=.73, $\eta^2_{partial}$=.00. The main effect of peer tolerance of sexism on perceiving the feedback as constructive and useful ($M_{more\ tolerance}$=2.19, SD=.95; $M_{less\ tolerance}$=2.29, SD=.98), $F_{(1,212)}$=.58, p=.45, $\eta^2_{partial}$=.00, and the interaction effect, $F_{(1,212)}$=1.27, p=.26, $\eta^2_{partial}$=.01, were not significant.

[11] Peer tolerance of sexism had a significant main effect on perceiving the feedback as fair, $F_{(1,212)}$=7.84, p=.01, $\eta^2_{partial}$=.04, indicating that those assigned to the more tolerance of sexism condition (M=2.13, SD=.86) found the feedback less fair than those assigned to the less tolerance condition (M=2.43, SD=.86). Although this pattern is not surprising, we expected a significant main effect only of exposure to sexism on this variable. The interaction effect was not significant, $F_{(1,212)}$=.28, p=.60, $\eta^2_{partial}$=.00.

Regarding participants' perceptions of the quality of their ideas, there were no significant effects of the manipulations on this estimate (tolerance: $F_{(1,212)}=.00$, $p=.96$, $\eta^2_{partial}=.00$; exposure to sexism: $F_{(1,212)}=1.86$, $p=.17$, $\eta^2_{partial}=.01$, interaction: $F_{(1,212)}=.00$, $p=.96$, $\eta^2_{partial}=.0$). As we expected, these results showed that participants perceived their own ideas as good and original to a similar extent across conditions.

Regarding the identification measure filled by participants before manipulations, the results did not reveal significant main effects neither for exposure to sexism, $F_{(1,212)}=.13$, $p=.72$, $\eta^2_{partial}=.00$, nor for peers' tolerance of sexism, $F_{(1,212)}=.02$, $p=.89$, $\eta^2_{partial}=.00$. The interaction effect was also not significant, $F_{(1,212)}=.00$, $p=.96$, $\eta^2_{partial}=.00$. As intended, participants showed no difference in group identification across the conditions ($M_{sexism}=4.23$, $SD_{sexism}=.74$; $M_{no\ sexism}=4.26$, $SD_{no\ sexism}=.75$; $M_{more\ tolerance}=4.24$, $SD_{more\ tolerance}=.71$; $M_{less\ tolerance}=4.25$, $SD_{less\ tolerance}=.78$).

4.6.2.2. Hypothesis testing

We started by conducting ANOVAs in SPSS, to test the hypothesized effects of sexism and tolerance on behavior and wellbeing (H1 and H2). We subsequently used the PROCESS macro for SPSS to test if wellbeing mediated the effect of sexism (H3) and to test whether this was moderated by tolerance of sexism (H4). Analyses were repeated for all outcome measures and proposed mediators. Means, standard deviations, ANOVA results, and Pearson correlations for the study variables are reported in Tables 4.5. and 4.6.

Table 4.5.

Inter-correlations between all dependent variables in Study

Dependent variables	1	2	3	4	5	6
1.Depression	-					
2.Anxiety	.44***	-				
3.Anger	.34***	.32***	-			
4.Personal self-esteem	-.05	.06	.09	-		
5.Willingness to engage with a female peer	.03	.09	.25**	.09	-	
6.Willingnes to engage with a male peer	-.16	.09	.17*	.13	.86***	-
7.Willingness to engage with the perpetrator	-.25***	-.04	-,01	.11	.65**	.79***

Notes. For the correlations, *** denotes a significant coefficient at p<.001, ** denotes p<.01, * denotes p<.05

Table 4.6.

ANOVA results for dependent variables in Study 5.

Dependent variable	Term	F	df	p	η^2_p
Depression	Exposure to sexism	.12	1,212	.73	.001
	Peers tolerance	.18	1,212	.67	.001
	Interaction	.20	1,212	.66	.001
Anxiety	Exposure to sexism	.34	1,212	.56	.002
	Peers tolerance	.57	1,212	.45	.003
	Interaction	.12	1,212	.73	.001
Anger	Exposure to sexism	28.97	1,212	.000	.120
	Peers tolerance	4.98	1,212	.03	.023
	Interaction	1.30	1.212	.26	.006
Personal self-esteem	Exposure to sexism	3.58	1,212	.007	.034
	Peers tolerance	.01	1,212	.94	.000
	Interaction	.42	1,212	.51	.002
Willingness to engage with a female peer	Exposure to sexism	5.13	1,212	.02	.024
	Peers tolerance	1.87	1,212	.17	.009
	Interaction	5.61	1,212	.02	.026
Willingness to engage with a male peer	Exposure to sexism	2.36	1,212	.07	.016
	Tolerance	.58	1,212	.45	.003
	Interaction	6.31	1,212	.013	.029
Willingness to engage with the perpetrator	Exposure to sexism	.03	1,212	.86	.000
	Peers tolerance	.29	1,212	.59	.001
	Interaction	3.60	1,212	.059	.017

Note. *F* stands for F value, *df* stands for degrees of freedom, *p* stands for p value, and η^2_p stands for eta partial square.

The first hypotheses focus on the effect of sexism on engagement with female peers (H1a) and on whether this is moderated by tolerance of sexism (H1b). The results reveal the opposite of what we expected in H1. Specifically, the ANOVA on willingness to engage with a female peer revealed a significant main effect of exposure to sexism (as expected), but (unexpectedly, though consistent with Chapter 3) this showed that participants exposed to sexism (M=2.97, SD=.91) reported *greater* willingness to engage with a female peer than those who were not exposed to sexism (M=2.73, SD=.77). There was also a significant interaction effect of exposure to sexism and peer tolerance of sexism, with a pattern that did not support H1b. Indeed, inspection of means reveals that sexism elicited significantly *greater* willingness to engage with a female peer compared to no sexism, but only when peers were *more tolerant* of sexism, $F_{(1,212)}$=10.74, p<.001, η^2_p=.05. This effect was not present for those whose peers were less in tolerance of sexism, $F_{(1,212)}$=.01, p=.94, η^2_p=.000. This interaction is plotted in Figure 4.2.
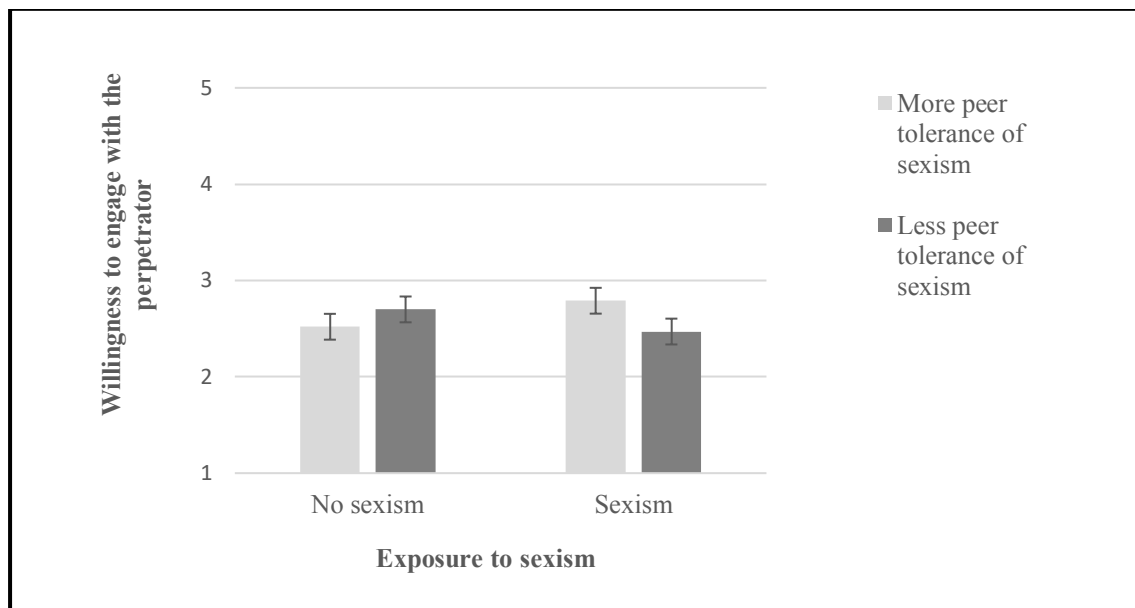
Figure 4.2.

The moderating effect of peer tolerance of sexism on the effect of exposure to sexism on willingness to engage with a female peer
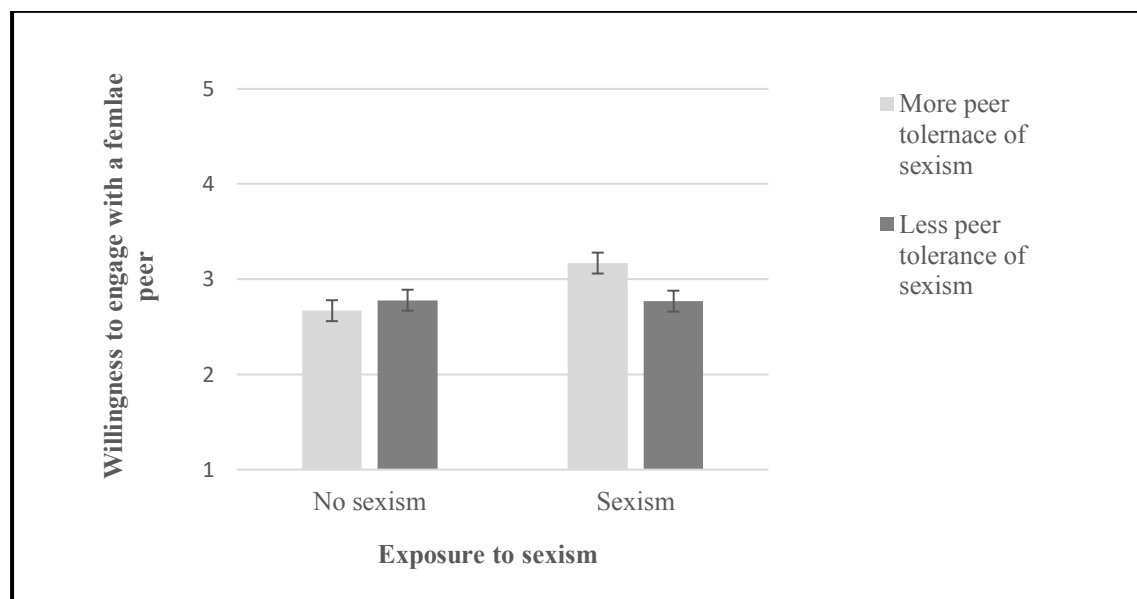
Notes. Error bars represents standard errors.

Hypotheses 2a and 2b focused on the effects of the independent variables on wellbeing. Specifically, H2a posited that sexism was likely to elicit more negative wellbeing and H2b proposed that this would be particularly the case when peers were more tolerant of sexism. To test H2, we conducted ANOVAs on the difference scores between post and pre-manipulation measurements of depression, anxiety, and anger, and on mean personal self-esteem. Results are displayed in Tables 4.6. The analyses did not show any significant effects on depression and anxiety. Anger, however, was affected by a main effect of exposure to sexism and by a main effect of peer tolerance of sexism. These effects showed that anger increased from pre to post measurement for all participants, but more so for those in the sexism condition (*M*=.91, *SD*=1.11) than for those in the no sexism condition (*M*=.27, *SD*=.56). Also, those who believed their peers were more tolerant of sexism (*M*=.72, *SD*=.95) reported greater increased anger than those who believed their peers were less tolerant of sexism (*M*=.46, *SD*=.91). These main effects were not qualified by a significant interaction.

An ANOVA on personal self-esteem revealed a significant main effect of exposure to sexism showing that participants in the sexism condition reported slightly *greater* personal self-esteem (*M*=3.54, *SD*=.71) than participants in the no sexism condition (*M*=3.27, *SD*=.66). There was no significant main effect of peer tolerance of sexism and no significant interaction between the two variables on personal self-esteem. This supports H2a for anger and reveals the opposite result of what was expected for personal self-esteem. It also does not support H2b, since there was no interaction between the two independent variables.

Hypotheses 3a and 3b focused on whether affect mediated the effect of sexism on social engagement, with H3a focusing on anxiety, depression, and personal self-esteem, and H3b focusing on anger. As stated above, there was a main effect of exposure to sexism on anger and personal self-esteem, but not on the other affect variables. As a consequence, we did not test H3 for depression and anxiety, only for anger and personal self-esteem (note that

although self-esteem showed the opposite effect of what was expected, i.e., social affiliation, it still makes sense to test this model). Hypotheses 3a and 3b were tested with Model 4 of the Process macro (with 10,000 bootstraps and 95% bias-corrected intervals). We simultaneously entered anger (post-pre anger) and personal self-esteem as mediators, exposure to sexism as an independent variable, and willingness to engage with a female peer as a dependent variable into the model. The results did not reveal a significant mediating effect of personal self-esteem (indirect effect=.02, *SE*=.02, 95% CI [-.02, .07]). However, anger significantly mediated the positive effect of exposure to sexism on willingness to engage with a female peer (indirect effect=.12, *SE*=.04, 95%CI [.04, .21]). The direct effects of exposure to sexism on women's willingness to engage with a female peer, b=.24, *SE*=.11, $t_{(214)}$=2.24, p=.026, and on anger, b=.64, *SE*=.12, $t_{(214)}$=5.33, p<.001, were significant. Anger also significantly and positively predicted willingness to engage with a female peer, b=.20, *SE*=.06, $t_{(213)}$=3.25, p=.001, and the direct effect of exposure to sexism on willingness to engage with a female peer became weaker and nonsignificant when increased anger was present, b=.12, *SE*=.11, $t_{(213)}$=1.04, p=.30. This supports H3b (for anger), but not H3a (focusing on depression, anxiety, and personal self-esteem).

With regard to H4, there was no interaction effect of exposure to sexism and peer tolerance of sexism on any wellbeing measure, so this hypothesis was not supported. No mediated moderated analyses were necessary to test this hypothesis.

4.6.2.3. Exploratory Results

We also conducted more exploratory tests of how the manipulations affected participants' willingness to engage with a male peer and with the perpetrator, in separate ANOVAs. These analyses showed similar patterns, namely that participants who were exposed to sexism reported greater willingness to engage with others (male peers as well as perpetrators) than when there was no sexism than where there was sexism, but only when

peers were considered *more tolerant* of sexism. As displayed in Table 4.3., the interaction was significant for willingness to engage with a male peer (simple effects of sexism for more tolerance of sexism: $F_{(1,212)}=9.43$, $p=.002$, $\eta^2_{partial}=.04$, less tolerance of sexism: $F_{(1,212)}=.23$, $p=.63$, $\eta^2_{partial}=.001$), but the interaction effect between exposure to sexism and peers' intolerance of sexism only reached a marginally significant level for willingness to engage with the perpetrator (more tolerance of sexism: $F_{(1,212)}=2.16$, $p=.14$, $\eta^2_{partial}=.01$, less tolerance of sexism: $F_{(1,212)}=1.48$, $p=.23$, $\eta^2_{partial}=.01$). These interactions are plotted in Figure 4.3 and Figure 4.4 respectively.

Figure 4.3.

The moderating effect of peer tolerance of sexism on the effect of exposure to sexism on willingness to engage with a male peer
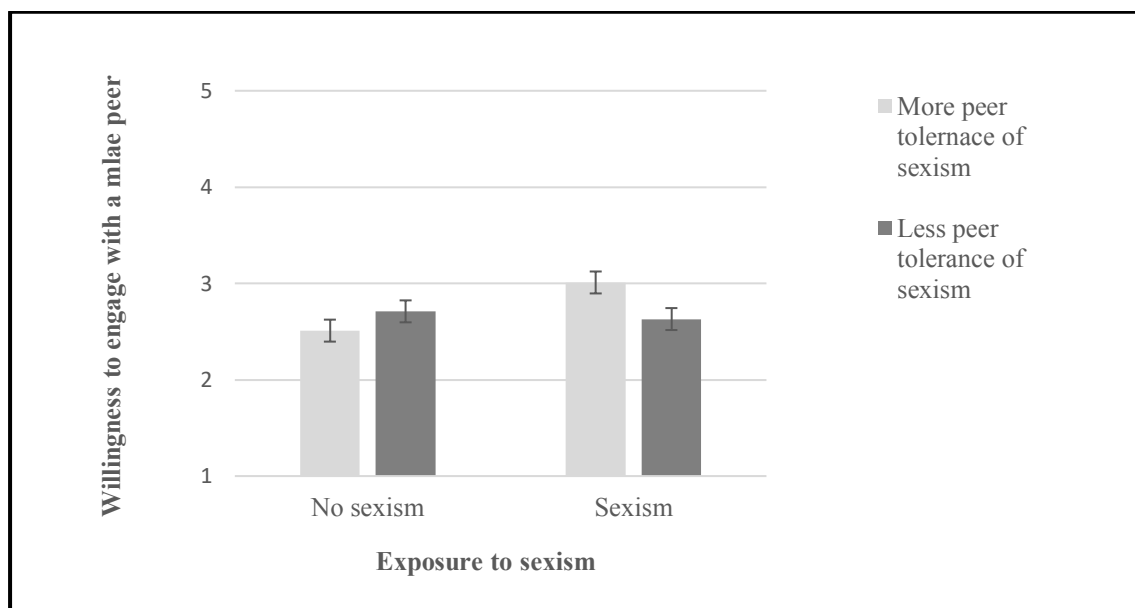
Notes. Error bars represents standard errors.

Figure 4.4.

The moderating effect of peer tolerance of sexism on the effect of exposure to sexism on willingness to engage with the perpetrator

Notes. Error bars represents standard errors.

Next, for exploratory purposes, we conducted the same mediation test for willingness to engage with a male peer and the perpetrator as dependent measures. Results did not show the effect of sexism was mediated by personal self-esteem for either willingness to engage with a male peer (indirect effect=.03, *SE*=.03, 95%CI [-.01, .09]) or willingness to engage with the perpetrator (indirect effect=.04, *SE*=.03, 95%CI [-.01, .11]). Although anger did not significantly mediate the effect of exposure to sexism on willingness to engage with the perpetrator (indirect effect=-.004, *SE*=.05, 95%CI [-.11, .09]), it significantly mediated the relationship between sexism and willingness to engage with a male peer (indirect effect=.10, *SE*=.04, 95%CI [.01, .17]). Specifically, the analysis showed that anger significantly and positively predicted women's willingness to engage with a male peer, *b*=.13, *SE*=.06, $t_{(213)}$=2.01, *p*=.046, 95%CI [.00, .26]. Exposure to sexism did not significantly affect willingness to engage with a male peer when anger was present in the model, *b*=.12, *SE*=.12, $t_{(213)}$=1.02, *p*=.31, 95%CI [-.11, .37]. Therefore, the results indicated that when women

responded to sexism with increased anger, they were more likely to engage with a male peer (as well as a female peer, as already demonstrated above).

4.6.3. Discussion

In this laboratory experiment, we focused on disentangling coworker tolerance of sexism from perceived co-worker sexism by independently manipulating both independent variables. This allowed us to examine the effect of a more restricted operationalization of tolerance of sexism, which corresponds to ensuring that in all conditions peers objected to sexism, but conditions varied in whether or not they tolerated sexism behaviorally. This study also extended our prior research by examining wellbeing and affiliation behaviors in the same study and by examining affiliation with male colleagues and affiliation with the perpetrator.

Based on past research showing the detrimental effect of prejudice on social engagement, Hypothesis 1a predicted that women would be less motivated to engage with others when they encountered sexism—we found the opposite. Specifically, we found that women were *more* motivated to engage with female peers when they encountered sexism than when they did not. This is also what we had found in Chapter 3, but we retained our original hypothesis because of the changes we made to the paradigm and the findings of past research. What our results show is that sexism had a positive effect on women's social engagement when operationalized as sexist feedback, just as it had in Chapter 3 when we tapped into women's daily experiences.

Hypothesis 1b was also not supported because it predicted that the pattern expected in Hypothesis 1a would be present only when peers were more tolerant of sexism—and H1a was not supported. Instead, we did find an interaction, as predicted, but this showed that women were more willing to engage with female peers when they encountered sexism and that this was the case only when peers were *more* (vs. less) tolerant of sexism. Exploratory analyses revealed similar effects for willingness to engage with male peers and for

willingness to engage with the perpetrator, though the latter was not significant. In sum, the women who participated in this study were *more* willing to engage with any other participant when they encountered sexism and felt that their peers objected to sexism, but were unwilling to act against it (i.e., when peers were more tolerant of sexism).

This is not what we expected and it therefore requires further examination. Prior research had already suggested that women could respond to sexism by drawing together (e.g., Haslam & Reicher, 2006; Branscombe et al., 1999; Jetten et al., 2001). The novelty of our findings in this thesis lies in showing the role of environmental tolerance of sexism. In Chapter 3, we found this to be the case when peers were *low in tolerance* for sexism. This made sense because it is then that women might expect to be supported in their experience. In this chapter, by contrast, we find that women drew to other women (and men) when they perceived their peers to be *more* (rather than less) *tolerant* of sexism. This discrepancy across the results of Chapters 3 and 4 might be explained precisely by the difference in the manipulations used in these studies. Specifically, in the study reported in the current chapter all peers objected to sexism. As such, in the high tolerance condition, participants were faced with peers who could be expected to object to sexism, but who did not behaviourally do so; whereas in the low tolerance condition peers objected verbally and behaviourally. In this way, maybe participants drew to others in the high tolerance conditions because their knowledge that their peers objected to sexism made them optimistic about convincing them to protest, or about protesting themselves, driving greater affiliation precisely when peers expressed disapproval of sexism but did not act against it. By contrast, peers who did not tolerate sexism did not need to be convinced. It is also important to note that whereas our hypotheses were focused more on peers' availability as sources of support, our results show that sexism did not affect wellbeing negatively, except for increasing anger.

Alternatively, maybe participants preferred not to engage with peers who did not tolerate sexism because they feared their peers' responses would be too extreme and therefore costly for women. Indeed, women do not always welcome confrontation of sexism because they fear it will confirm stereotypes of women as overly emotional (Shelton & Steward, 2004; Garcia et al., 2005; Kaiser & Miller, 2001). Whether or not women welcome confrontation depends on factors such as women's gender identification (Kaiser et al., 2009), how aggressive the confrontation is (Becker & Barreto, 2014), and women's own sexist beliefs (Kahn et al., 2021). In sum, sometimes women welcome confrontational behavior, but sometimes they do not and they may not always feel safe to affiliate with others in environment which peers confront sexism.

With regard to wellbeing (Hypothesis 2a and 2b), we found that sexism increased women's anger and their personal self-esteem, and we found no significant effect on depression or anxiety. This supported Hypothesis 2a for anger, but revealed that sexism actually boosted (instead of hurting) women's personal self-esteem. The latter effect is not consistent with our hypotheses, but it is consistent with work on attributional ambiguity that proposes that when stigmatized participants have to make attributions for negative feedback, being able to attribute this to prejudice can actually protect their self-esteem (Crocker & Major, 1989).

Hypothesis 2b was not supported since there was no interaction between the two predictors on wellbeing. Instead, results revealed a main effect of peer tolerance, showing that women reported more anger when their peers were more tolerant of sexism, irrespective of whether or not they themselves encountered sexism. This is not what we predicted, but it is not unreasonable—what this suggests is that self-directed wellbeing (personal self-esteem) is affected by personal experiences (with sexism), whereas other-directed wellbeing (anger) is more affected by what others do, in this case, sexism, and peers' choice to tolerate sexism.

Anger, in this study, seems to have been elicited both by the sexist feedback and by peer's tolerance of sexism, independently.

The results also did not support Hypothesis 3a, since depression and anxiety were not affected by sexism and can therefore not mediate its effects on behavior, and since personal self-esteem was (in the opposite direction of what was expected) but did not mediate behavior. However, we found support for Hypothesis 3b. That is, we found that anger was responsible for a positive indirect effect of sexism on women's choice to engage with female peers. In fact, since (opposite to what we expected) we found that sexism had a positive effect on women's affiliation, this effect of anger actually consists of a mediation. We found the same with regard to the positive effect of sexism on engagement with male peers, which was also mediated by anger. Specifically, exposure to sexism elicited more anger, which in turn motivated women to engage with male and female peers, irrespective of the extent to which they perceived peers to tolerate sexism.

In sum, of the psychological wellbeing measures we included in this study, only anger functioned as a mediator, increasing when participants encountered sexism and mediating the effect of sexism on women's affiliation with other women and with men. Therefore, increased anger was not only an outcome of experiencing sexism, but also a catalyst of wishing to engage with female and male colleagues. This is in line with previous research suggesting that anger is an engaging/approaching emotion (Carver & Harmon-Jones, 2009; Tagar et al., 2011; for a review Fisher & Roseman, 2007) and that it motivates people to socially share their feelings (Wetzer et al., 2007; for a review, Rime, 2009). Anger is also an important precursor of collective action (Becker & Wright, 2011; Ellemers & Barreto, 2009; van Zomeran et al., 2004). The weaker (and non-significant) effect on willingness to engage with the perpetrator after experiencing sexism and feeling angry about it is also not surprising. Previous research has also shown (van Coillie & van Mechelen, 2006) that people

feeling angry are motivated to speak to others about their anger primarily when the source of the anger is not present.

In sum, in this study we found that receiving sexist feedback increased women's personal self-esteem and elicited anger. In turn, anger motivated women to engage with other participants (male and female), including the perpetrator. Sexism also had a direct effect on women's social affiliation that was moderated by peer tolerance, so that this direct effect was only significant when peers were perceived to be more tolerant of sexism. Peer tolerance only had one more effect in this study, which was to increase participant anger, but this did not interact with sexism. In the next chapter, these results will be discussed in the overall context of the thesis and of the broader field of research.

Chapter 5. General Discussion

Our aim in this thesis was to understand how experiences with gender devaluation impact on women's social affiliations, specifically with other women, and whether organisational climate plays a role in modifying these effects. In this final chapter, we will first summarize the research reported in each chapter of this thesis, outlining how each contributes to achieve our overall goals; then, we will offer an integrative interpretation of the results of the three empirical chapters. Finally, the implications of this research for theory and practice will be presented, followed by an acknowledgement of its limitations and avenues for future research.

5.1. Summary of State of the Art and Research Aims

In the literature review (Chapter 1) we set the stage for the thesis by outlining how experiences with sexism might affect women in general and why it is important to examine social relationships in this context. Chapter 1 also presented an overview of the existing literature on women's responses to sexism, with a special focus on how sexism might affect their social relationships with other women. We reviewed two separate literatures: One more focused on groups and identities, and another more focused on interpersonal relationships.

The first of these areas of knowledge examines how experiences with social stigma affect people's relationship with their group or identity (e.g., group identification, similarity to women, in general). In this literature, the focus is not on how women relate to other specific women, but on how they relate to the group as a whole, with women being treated as interchangeable. This line of work reveals some important inconsistencies. On the one hand, it has often been suggested that members of devalued groups draw to each other when threatened (Haslam & Reicher, 2006). For example, the extent to which individuals perceive themselves and their group to be targets of discrimination is positively associated with ingroup identification (Branscombe et al. 1999; Jetten et al., 2001). On the other hand,

research has shown that women can respond to discrimination by distancing themselves from other women, especially if they do not strongly identify with their gender (Derks, Van Laar, et al., 2016).

The second line of research we reviewed focuses on how social stigma affects the interpersonal relationships of members of devalued groups. For instance, work by Doyle and Molix has shown that exposure to discrimination is negatively associated with the quality of relationships with family and friends among devalued group members, including sexual minorities, ethnic minorities, and women (Doyle & Molix, 2014a, 2014b, 2015a). In addition, other research has shown that being targeted by sexual harassment can negatively affect women's social relationships, while being targeted by non-sexualised sexism can draw women together (Van Breen et al., in prep).

Our research aimed to build on this past work to examine more closely how exposure to gender devaluation affects women's relationships to other women, and identify the circumstances under which women distance themselves from other women or draw together with other women after exposure to sexism. We specifically examined one possible contextual moderator: Organisational tolerance of sexism. This was operationalised to include procedures, practices, and norms in a work environment that pertain to whether or not sexism is clearly identified, objected to, and addressed. We proposed that although there is a positive correlation between the prevalence of sexist events and organisational tolerance of sexism in a workplace, it is important to distinguish between these two processes and to test whether organisational tolerance of sexism hinders or facilitates social relationships among women after women become targets of sexism at work. We suggested that less organisational tolerance of sexism would boost affiliation amongst women, whilst more organisational tolerance of sexism would hinder this behaviour.

Our theoretical framework also included a consideration of how sexism has been shown to impact women's psychological wellbeing, with a special focus on wellbeing indicators that have been shown to be closely related to the quality of people's interpersonal relationships. For example, experiences with sexism have been shown to be negatively associated with personal self-esteem (Swim et al., 2001; Barreto & Ellemers, 2013) and positively associated with depression, anxiety, and anger (Landrine et al., 1995; Klonoff et al., 2000; Swim et al., 2001; Schmitt et al., 2014; Sojo et al., 2016). Meanwhile, depression, anxiety, and low self-esteem have detrimental effects on social relationships (Murray et al., 2000, 2006) while anger often leads people to draw to others with whom they share the anger-inducing experience (Ellemers & Barreto, 2009; Becker & Wright, 2011; Lemonaki et al., 2015). Therefore, psychological wellbeing variables including depression, anxiety, anger, and personal self-esteem, were included in this research. We advanced the possibility that psychological wellbeing would be affected by the interaction between sexism and organizational tolerance of sexism, and in turn mediate the effect of this interaction on women's social affiliation with each other.

5.2. Summary of Findings

In the first empirical chapter (Chapter 2) we began to analyse the effects of gender devaluation by carrying out secondary analyses of an existing data set that included working women's experiences with gender devaluation, measures of psychological wellbeing, and a measure of organizational tolerance of gender devaluation. Psychological wellbeing indicators, in this study, were affect (depression, anxiety, hostility) and self-esteem (private collective, public collective, identity collective self-esteem, and personal self-esteem). Participants in this study indicated their experiences either with (non-sexualised) sexism or with (sexualised) sexual harassment, but for our purposes we collapsed across these measures in the analyses, treating both as indicators of gender devaluation.

The results showed that experiences with gender devaluation were positively associated with hostility and negatively associated with personal self-esteem when women perceived their workplace as tolerant (more tolerance) of gender devaluation, but not when they perceived their work environment as intolerant (less tolerance) of gender devaluation. That is, a work environment that was perceived to be intolerant of gender devaluation buffered the negative effects of exposure to sexism on psychological wellbeing, in this study. Since these wellbeing variables, particularly personal self-esteem, are important predictors of positive interpersonal relationships (Harris & Orth, 2020; de Moor et al., 2021), these findings can be seen to provide initial support for the idea that tolerance of sexism is likely to modify the impact of sexism on women's social relationships.

In the research reported in Chapter 3 we aimed to build on this finding to address the following question: How does sexism impact women's social relationships with other women at work and how can organizational tolerance of sexism modify this relationship? To this purpose, we conducted one correlational and two quasi experimental studies with working women. Women's experiences with sexism at work were measured in Study 2 and manipulated in Studies 3 and 4. Across all three studies, we assessed the role of organisational tolerance of sexism at three different levels: Peer-, manager-, and policy-level. Affiliative tendencies were indicated by stronger workplace friendships with other women, as well as greater reported closeness to female co-workers. Across these three studies, we demonstrated that women's social relationships with their female colleagues were affected by the interplay of experiences of sexism and the organisational climate in which sexism occurred. Specifically, when women experienced sexism within an organisation they reported stronger (Studies 2 and 3) and closer (Study 4) relationships with their female co-workers, but only where peers were perceived to be intolerant (less tolerance) of sexism. This positive effect disappeared when peers were perceived as tolerant of sexism. That is, we found that

after experiences with sexism, the perception that peers are *intolerant* of sexism can draw women to each other. We found no evidence that women distanced themselves from other women in response to sexism in any of the conditions or studies. Manager and policy level tolerance of sexism had either nonsignificant or inconsistent effects on social affiliation. This suggests that *peer* (relative to managerial or policy) tolerance of sexism is likely to be particularly key in shaping the social consequences of experiences of sexism, particularly the extent to which women draw to each other in its aftermath.

To gain a deeper understanding of the effect of peer (in)tolerance of sexism on women's social relationships with other women, we focused, in Chapter 4, on orthogonally manipulating experiences with sexism and peer tolerance of sexism. This procedure also allowed us to adopt a more restricted conceptualization of peer tolerance. That is, in this experimental study we kept peers' attitudinal objection to sexism constant across conditions and manipulated only whether (less tolerance) or not (more tolerance) they were willing to behaviourally object to (i.e., protest or confront) sexism. As such, Study 5 followed a 2 (exposure sexism: sexism vs no sexism) by 2 (peers' tolerance of sexism: less vs. more) between participants design. In line with the findings reported in Chapter 3, we predicted that, after exposure to sexism, women who believed that their peers are less tolerant to sexism would be more willing to engage with their female counterparts than those who believed that their peers were more tolerant of sexism. The results did not support this hypothesis. Instead, the results showed that women were more willing to engage with their female counterparts when they encountered sexism and believed that their peers were more *tolerant* of sexism (i.e., intolerant in words, but not in actions), but not when they believed their peers were less tolerant of sexism both in words and in actions. Again, we did not find any evidence that women distance themselves from other women when encountering sexism (compared to when no sexism was present) in this study.

In Study 5 we also explored women's engagement with their male counterparts and the male participant who perpetrated sexism (the perpetrator). The effect that we found for affiliation with female counterparts was mirrored for willingness to engage with male counterparts and the perpetrator. That is, this effect was not specific to relationships with women, but extended to social relationships with men. Furthermore, in this study we investigated how sexism impacts wellbeing indicators such as depression, anxiety, anger, and personal self-esteem; how these indicators affected women's affiliation with other people, especially women; and whether this mediation was moderated by peer tolerance of sexism. We found that women responded to sexism with increased anger and personal self-esteem, but only anger primed women to engage with other male and female participants—though not with the perpetrator. This mediating effect was seen for both tolerance of sexism conditions, i.e., it was not moderated by peer tolerance of sexism.

With regard to social affiliation, therefore, the results of Chapters 3 and 4 appear to be inconsistent. It is therefore important to outline how they might be reconciled. These studies differ in several ways. Crucially, while the studies in Chapter 3 measure perceived tolerance of sexism, the study in Chapter 4 manipulates this and controls for whether or not peers object to sexism. This means that less peer tolerance in Chapter 4 corresponds to an environment where peers do identify and object to sexism, but do not behaviourally protest against it. This behavioural tolerance might be experienced as frustrating, but it is also hopeful in the sense that there is a fundamental ground on which to build to seek support as well as to persuade peers to stand up to sexism. By contrast, less tolerance in Chapter 3 meant that peers did not detect, object, or address sexism when it occurred, which is likely to be a much harder basis for interaction when people encounter sexism. As such, one might conclude that, across our studies in Chapters 3 and 4, our results suggest that women who

encounter sexism are most likely to affiliate with other women when they perceive their peers to be willing to stand up to sexism.

With regard to psychological wellbeing, we have consistently found that experience of sexism and tolerance of sexism increased anger among women. However, there is an inconsistency between Chapter 2 and Chapter 4 in terms of findings regarding personal self-esteem. In Study 5, participants reported greater personal self-esteem when they were exposed to sexism than when they were not exposed to sexism (with no effect of tolerance on personal self-esteem). However, in Chapter 2, we found a negative association between experience of sexism and personal self-esteem. The discrepancy in these results is likely to be due to the fact that in Chapter 2 women were reporting on daily and pervasive experiences with sexism, whereas in Chapter 4 they faced a single incident where they could use an attribution to sexism to protect their self-esteem. Indeed, prior research has found that when prejudice can be used as an alternative attribution for a negative outcome, it can protect self-esteem (e.g., Major, Quinton et al., 2003; Major, Kaiser, et al., 2003). However, by contrast, when there is no negative outcome to explain and prejudice is pervasive, it is more likely to be negatively associated with self-esteem (Barreto & Ellemers, 2013).

5.3. Implications for Theory

Despite some limitations, we believe this thesis makes a contribution to several bodies of literature, as well as to practice. Most importantly, our research furthers understanding of the consequences of sexism, with a specific focus on how its consequences for wellbeing and social relationships are moderated by organizational tolerance of sexism. Theoretically, it also contributes to an improved understanding of interpersonal relationships, by illustrating that these emerge in the context of experiences with prejudice. Finally, this research also contributes to existing knowledge on what interventions might protect women from the negative effects of sexism, as we outline in the following paragraphs.

With regard to theoretical implications, first, our research makes a contribution to the literature on the effects of stigma by advancing knowledge of how it affects interpersonal relationships. The effects of stigma on targets' psychological wellbeing (Swim et al., 2001; for a review Barreto & Ellemers, 2013) and physical health (McKee-Ryan et al., 2005; Harnois & Bastos, 2018), and the coping strategies that can be used by devalued group members have been well documented (e.g., Barreto, 2015; van Laar et al., 2019). There have also been studies focusing on interpersonal outcomes of exposure to stigma, but this prior work has mostly focused on intergroup relationships (Frable et al., 1990; Richeson & Shelton, 2007; Vorauer, 2006), or on relationships to the ingroup as a whole (Branscombe et al., 1999, Derks, van Laar, et al., 2011, Derks, Ellemers et al., 2011). Although researchers have started to investigate how stigma affects interpersonal relationships, such as how stigma affects romantic relationships or experiences of strain in family relationships and friendships (Doyle & Molix, 2014a, 2014b, 2015a), there is still relatively little known about the impact of stigma on target's interpersonal relationships, specifically with other members of their stigmatised groups. The review presented in Chapter 1 already contributes to this field by bringing different literatures together to organize existing knowledge, identify discrepancies, and propose some new avenues for research, such as the role of environmental tolerance of sexism.

Specifically, the present thesis contributes to bringing together two literatures: Research on how experiences with stigma affect group members' relationship to their group and the social psychology of interpersonal relationships. Combining these two types of literature is an important aspect of this research and allowed new insights to come to flourish. The first of these lines of work is exemplified by research on the so called "Queen Bee" phenomenon. For example, research in this area has shown that women responded to sexism in the workplace by describing themselves with more masculine than feminine terms (Derks,

van Laar, et al., 2011; Derks, Ellemers, et al., 2011), or by describing themselves with more masculine terms than they described their female subordinates (Ellemers et al., 2004). Other work in this area examined how women perceived their subordinates as a whole (Derks, van Laar, et al., 2011; Derks, Ellemers, et al., 2011; Derks et al., 2016). Our focus in this research was on relationships between co-workers.

The second line of literature on which our work draws is the social psychology of interpersonal relations, where for example the role of affect and psychological wellbeing in relation to social affiliation are more thoroughly examined (e.g., Murray et al., 2000, 2002, 2006). Researchers have started to bring these areas together to investigate how stigma impacts stigmatised group member's social relationships (Doyle & Molix, 2014a, 2014b, 2015a), but this literature has not specifically focused on interpersonal relationships among ingroup members of stigmatised groups; therefore, our research contributes to the interpersonal relationships literature by looking at how interpersonal relationships with ingroup members can be patterned by experiences with prejudice.

Generally, our findings are inconsistent with prior studies that show evidence of ingroup distancing. Many findings in both lines of literature discussed above suggest a negative relationship between exposure to gender devaluation and social affiliation (e.g., Derks, Ellemers, et al, 2011; Derks, van Laar, et al., 2011; Parks-Stamm et al., 2007; Doyle & Molix, 2014b, 2015b; Faniko et al., 2016, 2017; Veldman et al., 2020). We expected that in some conditions this would be the case, but that in other conditions women would draw together, as some studies have found. Instead, we found no evidence for that negative relationship. What we found was a positive relationship between exposure to sexism and social affiliation with ingroup (Studies 2-5) and outgroup (Study 5) members, in some conditions. One reason why our findings might differ from some of the findings shown in the Queen Bee literature is that this literature tends to focus on hierarchical relationships between

women in (male-dominated) leadership positions and their subordinates (Faniko et al., 2020).
In fact, studies examining ingroup distancing from subordinates and from equally ranked
female co-workers at the same time show that these women distance themselves from their
female subordinates, but not from women who are in the same level of the workplace
hierarchy (Faniko et al., 2016). This suggests that whether or not the focus is on hierarchical
relationships might be a key difference in affiliation patterns and related motivations that
would reconcile our findings with some past research.

Another factor that might be important to consider when comparing our results to
previous research is that ingroup distancing by women has been documented mainly in
environments where they are under-represented, i.e., male dominated work environments
(Derks, Ellemers, et al., 2011; Derks et al., 2016; Derks, Van Laar, et al., 2011), whereas our
participants were mostly recruited from female-dominated work environments. Although this
methodological difference to past work was not intentional, it might be important, so another
contribution of our work is to examine the impact of sexism on women's affiliation with
other women in female-dominated work environments. Since, by definition, most women
work in female dominated environments, there is a practical relevance to this contribution.

Regarding the inconsistency with the findings from research on interpersonal
relationships (e.g., Doyle & Molix, 2014b; 2015b), these studies have tended to focus on
close personal relationships, such as dyadic relationships with romantic partners. These types
of close interpersonal relationships can be differentiated from group-based relationships,
primarily by the uniqueness of relational partners. Group-based relational partners are
interchangeable to some extent, while close personal relationships involve unique bonds with
only one or a few other people (Brewer, 2008). In all of our studies, we operationalized
women's social relationships without reference to specific close relational partners (e.g.,
"female co-workers at my workplace" in Chapter 3, strangers who share a group identity in

Chapter 4). Therefore, differences in our results, including no consistent evidence for a direct negative effect of sexism on social relationships, may be due to differences in our operationalization of social relationship outcomes.

Our findings are, by contrast, consistent with research that has shown that group members might respond to group threat (such as gender devaluation) by drawing towards other ingroup members (Derks, Ellemers et al., 2011; Haslam & Reicher, 2006; Jetten et al., 2001; Blake et al., 1968; Bornstein, 2003; Brewer, 2001). This is a pattern we replicated across the four studies that included relationship indicators—and new to our work we demonstrated this can be mediated by anger and moderated by contextual tolerance of sexism. In this way, our work adds to the evidence that disputes that ingroup distancing is a default or pervasive response to sexism contrary to Arvate et al. (2018), Sheppard and Aquino, (2017).

Our evidence for the role of organizational tolerance of sexism points to characteristics of a work environment that can facilitate support seeking, or reaching out, among members of stigmatized groups. It would appear from our findings that women need to feel that their peers at least share a basic understanding of what qualifies as sexism and that sexism is objectionable before they decide to draw to other women in response to sexism. Previous studies looking at the effect of stigma on social relationships focused on other moderators, such as ingroup identification (Derks, Ellemers, et al., 2011; Derks, Van Laar, et al., 2011; Kaiser & Spalding, 2015; Derks et al., 2015; Bourguignon et al., 2020), or relationship length (Doyle & Molix, 2014b). These are important, but perhaps more distantly related to possible interventions than are contextual factors. Few studies have explored the contextual circumstances that hinder or facilitate social affiliations for members of stigmatised groups (but see Doyle & Molix, 2015a). One of the key contribution of this thesis, therefore, is to explore a contextual moderator—organisational tolerance of sexism—

that can have fairly direct implications for what can be done to support women's coping with sexism.

In a similar vein, organisational tolerance of sexism was explored as a moderator to understand the link between experiences of sexism and women's social relationships. In order to understand how organisational tolerance of sexism might contribute to the literature on sexism and social relationships, it is important to understand why social relationships are important. When individuals face group-based discrimination (e.g., sexism), they can cope with the consequences by utilizing various strategies, such as individual mobility (Ellemers & Van Laar, 2010; Van Laar et al., 2019). Another strategy that is often used to cope with negative experiences is to seek social support (Zapf et al., 1996). Related to group-based devaluation, women may seek social support to deal with the consequences of sexism (Cihangir et al., 2014; Major, Quinton et al., 2003; Major, Kaiser et al., 2003), so—aside from the fact that positive social relationships are in themselves important predictors of health and wellbeing (Holt-Lunstad et al., 2003, 2010)—affiliation with other women may be thought of as one way in which women access social support when faced with such negative events. Our results in Chapter 3 showed that women might seek this support specifically when they think their peers are intolerant of sexism; however, perceiving peers as tolerant of sexism might prevent women from obtaining collective support.

In our initial four studies, we focused on perceived tolerance, but in the last empirical chapter we instead manipulated peer tolerance of sexism. Accordingly, in Chapter 4 we adapted our research design in order to distinguish tolerance shown by peers who are supportive of targets of sexism but do not act to address sexism, from tolerance shown by peers who are both supportive and take action against sexism when it happens. Relatedly, Hunt et al. (2021) described tolerance of racism as reacting passively to racism and allowing other's racism to proceed unchecked. In principle, the same concept may apply to tolerance

of sexism as investigated in Chapter 4. These distinctions have not been tested in much past research (involving either racism or sexism), so it was a promising initial step to examine the role of tolerance of sexism in this way, with our findings suggesting that this distinction in peer intolerance with or without action may be important in shaping women's social responses.

We also contribute to existing knowledge by showing that experiences of sexism increase anger (Barreto & Ellemers, 2005a; Salomon et al., 2015; for a review, Barreto & Ellemers, 2013), which is an engaging/approach-oriented emotion (Carver & Harmon-Jones, 2009; Tagar et al., 2011; for a review Fisher & Roseman, 2007). Anger is also a key emotion for social support and collective action (Ellemers & Barreto, 2009; Becker & Wright, 2011; Lemonaki et al., 2015); indeed, our results in Chapter 4 showed that sexism increased anger and this increase impelled women to engage with other women. This contributes to a growing area of research examining the effect of anger on collective action (van Zomeren et al., 2004; Miller et al., 2009; Leonard et al., 2010) by shedding light on the conditions where this anger might be facilitated.

5.4. Implications for Practice

In addition to making a theoretical contribution to psychological literature, as outlined above, the research presented in this thesis also has practical implications. Given increased representation of women in the workforce, there is still a need to ensure positive experiences at work, particularly related to social relationships. Specifically, interventions aimed at protecting women's psychological wellbeing and improving their social relationships at work will help ensure egalitarian outcomes in this domain. Our research contributes to understanding how sexism affects these processes as well as how organisational climate might be adapted to protect women in the face of gender-based devaluation. Specifically, our research points to the importance of work environments where

peers are supportive of each other, clarify their objection to sexism, and call it out when it happens. Although we found that tolerance stemming from managers and policy was less directly relevant for the outcomes we examined, these are likely to play an important role too in other ways, such as by ensure the environment retains sufficient female representation to allow for these patterns to emerge.

A common stereotype across many societies portrays women as "catty" toward one another, in other words, treating members of their gender group coldly in public (Firestone, 2012; Chimamanda Ngozi Adichie, 2012; Weiss, 2016). However, our research showed that women do not naturally and automatically distance themselves from other women, even when confronted with sexism; conversely, women may tend to draw towards each other, unless the social climate interrupts this affiliative behaviour.

5.5. Limitations and Future Directions

The research covered in this thesis has limitations as well as strengths. First, we need to acknowledge our exclusive focus on women in this work, as well as its restriction to women who live and work in the UK. A central reason for this recruitment strategy is that gender equality laws governing the workplace vary from country to country. While we are interested in differences in gender equality policies in the workplace, or policies aimed at countering sexism, we needed all organisations to comply with the same national regulations in order to compare across workplaces. As a consequence, however, we are limited in our ability to generalise from our results to countries other than the UK. For example, Verniers and Vala (2018) suggested that women's experiences with sexism are affected by the cultures in which they live due to cultural norms and traditions. More specifically, their findings showed that women's experiences with sexism negatively affect women's careers in places where being a working mother is perceived as a threat to raising children and family life. However, this same effect may not be apparent in countries where working mothers are

viewed as more normative and not incompatible with traditions around family life. Another reason why sampling participants only from one country might be problematic is the role of structural stigma. Doyle and Molix (2015a) found that the link between perceived discrimination and relationship functioning for sexual minorities is affected by structural stigma, which was assessed via the presence of policies at the state level to secure the rights of sexual minorities. Applying this insight to the consequences of sexism observed in our work, the UK is one of the leading countries in the European Union in terms of progress towards gender equality across Europe (European Institute for Gender Equality, 2020). Therefore, one might argue that sampling participants from the UK could weaken any direct association between sexism and social relationships because the UK has relatively low levels of structural stigma against women compared to other countries, including in Europe. This could help explain why we did not observe evidence for deleterious effects of sexism on women's relationships with other women as we had initially hypothesized. Future work could aim to replicate these studies in various countries with different national gender equality laws to examine whether effects differ based upon structural stigma.

A second limitation of the presented research is that we relied on women's self-reports of their relationships with their female peers across all studies, including the lab study. Issues around self-report measures in psychology have been discussed for many years (e.g., Donaldson & Grant Vallone, 2002; Baumeister et al., 2007; Paulhus & Vazire, 2007). Although exposure to sexism and tolerance of sexism by peers were manipulated in various studies in this thesis, social relationship outcomes, including willingness to engage with female and male peers as well as the perpetrator in Chapter 4, were all self-report measures. When using self-report measures, participants might respond in ways that do not necessarily reflect their private inclinations, but that they believe allow them to present themselves positively (Paulhus & Vazire, 2007); in other words, participants might want to portray

themselves as having socially strong relationships with co-workers at work, even when this is not how they really feel. In Chapter 3, we found that the means of social affiliation scores was higher than 3 out 5 for all levels of experience and tolerance of sexism. In a similar vein, in Chapter 4, we found that the mean scores of willingness to engage with others were over the midpoint (2.5) of the 5 Likert-type scale. These findings seem to suggest that self-report measures of social affiliations might have been somewhat affected by social desirability. This would also explain why, in Chapter 4, participants showed willingness to engage with others regardless of others' gender. Future research might investigate these effects with measures of actual engagement in social interaction with ingroup members.

Although the research discussed in Chapter 4 involved manipulations of tolerance of sexism as well as exposure to sexism, it was conducted with a student sample, which differed from the samples that we collected data for Chapter 2 and 3 (which were composed of adult women in employment). For all of our studies, except Study 5, participants were working women whose mean age was around 35. However, participants in Study 5 were first year female students in a university. Fajak and Haslam (1998) indicated that undergraduate students in liberal western countries tend to be particularly solidary with other female students; however, this is not necessarily the case with non-student women. Our findings appear to support their argument regarding non-student samples. For example, in Chapter 3, we provided some evidence that women's social relationships with other women are interrupted only when they are in an organisation that *tolerates* sexism. However, in Chapter 4 we found that women are more willing to engage with others in an organisation that is more *tolerant* of sexism than an organisation that is less *tolerant* of sexism. While we believe that this difference is more likely to be driven by the difference between how tolerance was conceptualised in Chapters 3 and 4, future research might wish to examine these processes in more diversely aged samples, or replicate Study 5 with an older sample).

Another limitation might be that we have included measures that more directly assess drawing together than distancing behaviours; in other words, we conceptualized potential detrimental effects of sexism on social relationships as the lack of friendship or closeness rather than actively distancing from other women. Although this is not inconsistent with previous literature examining social relationships (e.g., Doyle & Molix, 2014a, Doyle & Molix, 2014b, 2015), which were our primary focus, one might argue that these are not actually measures of distancing from women and therefore our findings do not rule out that distancing might happen in the contexts were we found less social engagement, when other measures are used. Future research might therefore investigate whether organisational tolerance of sexism would show a boosting effect, as it did in our research, or instead a buffering effect when distancing measures are included consistent with other work (e.g., Derks, Ellmers, et al., 2011; Derks, van Laar, et al., 2011; Faniko et al., 2016, 2017).

Whilst we see examining women's experiences with sexism in female-dominated environments as one of the strengths of this thesis, and the results showed a boosting effect on social relationships, we suggest that future research could investigate the role of tolerance of sexism in male-dominated environments as well, to test whether similar pattern would be obtained as demonstrated in this thesis. Yet, further research is also needed on women's experiences with sexism female-dominated environments. Past research has paid particular attention to either women's experiences with sexism in male-dominated fields (Berdahl, 2007; Cuddy, Fiske, & Glick, 2004; Ellemers et al., 2004; Eagly & Karau, 2002; Duguid, 2011; Moss-Racusin et al., 2012) or men's experiences in female-dominated fields (Simpson, 2005; Lupton, 2006; Rochlen et al., 2009). However, as our results suggest, sexism against women still exists in female-dominated fields, so future research might investigate potential barriers inhibiting women from affiliating with other women in female-dominated fields.

Following from this, we suggest that future research might focus specifically on developing interventions in order to protect women's psychological wellbeing at work, as well as provide a safe environment for building healthy social relationships which could be used as a source of social support. In this thesis, we have shown that organisational tolerance of sexism plays an important role in the consequences of sexism for women's psychological wellbeing. Additionally, research in this thesis showed the particular importance of anti-discrimination norms, especially among co-workers. This ingroup support might provide protection for stigmatised group members, such as women, to build resilience against stigma. In other words, increasing organisational intolerance of discrimination could make stigmatised people feel less isolated after experiencing stigma or discrimination. Future studies could focus more on (in)tolerance of discrimination to develop possible workplace interventions.

5.6. Conclusion

In this thesis, we aimed to investigate how women respond to sexism, and what role tolerance of sexism plays. To this purpose, we presented five different studies along with a pilot study. In doing so, we have not obtained any evidence that women distance themselves from other women in response to sexism, but we have shown that, under certain circumstances, women can respond to sexism by drawing towards other women. By examining the role of organisational tolerance of sexism, we have shown that peer tolerance has a significant effect on women's social relationships with other women. Accordingly, we can conclude that women respond to sexism with lowered self-esteem and increased anger when peers are more tolerant of sexism. Regarding social affiliation, we found that sexism can drive women towards female peers when their peers are perceived to be less (vs. more) tolerant of sexism. However, we also found that women who encounter sexism might be particularly motivated to draw towards other women when they think their peers object to

sexism but are not (yet) ready to protest against it. In this way, our results contribute to existing literature by revealing that organisational climate can shape women's social experiences with sexism at work.

References

Abrams, D., & Hogg, M. A. (1988). Comments on the motivational status of self-esteem in
social identity and intergroup discrimination. *European Journal of Social Psychology,
18*(4), 317–334. https://doi.org/10.1002/ejsp.2420180403

Acock, A. C. (2005). Working With Missing Values. *Journal of Marriage and Family*, *67*(4),
1012–1028. https://doi.org/10.1111/j.1741-3737.2005.00191.x

Adams, G., Garcia, D. M., Purdie-Vaughns, V., & Steele, C. M. (2006). The detrimental
effects of a suggestion of sexism in an instruction situation. *Journal of Experimental
Social Psychology*, *42*(5), 602–615. https://doi.org/10.1016/j.jesp.2005.10.004

Allison, P. (2002). *Missing Data*. SAGE Publications, Inc.
https://doi.org/10.4135/9781412985079

Allport, G. W. (1954). *The nature of prejudice.* Addison-Wesley

Anthony, D. B., Wood, J. V., & Holmes, J. G. (2007). Testing sociometer theory: Self-esteem
and the importance of acceptance for social decision-making. *Journal of Experimental
Social Psychology, 43*(3), 425–432. https://doi.org/10.1016/j.jesp.2006.03.002

Arvate, P. R., Galilea, G. W., & Todescat, I. (2018). The queen bee: A myth? The effect of
top-level female leadership on subordinate females. *The Leadership Quarterly, 29*(5),
533–548. https://doi.org/10.1016/j.leaqua.2018.03.002

Asante, K. (2012). Social support and the psychological wellbeing of people living with
HIV/AIDS in Ghana. *African Journal of Psychiatry*, *15*(5).
https://doi.org/10.4314/ajpsy.v15i5.42

Ayduk, O., Downey, G., & Kim, M. (2001). Rejection Sensitivity and Depressive Symptoms
in Women. Personality and Social Psychology Bulletin, 27(7), 868–877.
https://doi.org/10.1177/0146167201277009

Baraldi, A. N., & Enders, C. K. (2010). An introduction to modern missing data

analyses. *Journal of School Psychology*, *48*(1), 5–37.

https://doi.org/10.1016/j.jsp.2009.10.001

Baron, R. S., Burgess, M. L., & Feng, C. (1991). Detecting and Labeling Prejudice: Do

Female Perpetrators Go Undetected? Personality and Social Psychology Bulletin,

17(2), 115–123. https://doi.org/10.1177/01461672910170020

Barreto, M., & Ellemers, N. (2000). You Can't Always Do What You Want: Social Identity

and Self-Presentational Determinants of the Choice to Work for a Low-Status Group.

Personality and Social Psychology Bulletin, 26(8), 891–906.

https://doi.org/10.1177/01461672002610001

Barreto, M., & Ellemers, N. (2005a). The Perils of Political Correctness: Men's and

Women's Responses to Old-Fashioned and Modern Sexist Views. Social Psychology

Quarterly, 68(1), 75–88. https://doi.org/10.1177/019027250506800106

Barreto, M., & Ellemers, N. (2005b). The burden of benevolent sexism: how it contributes to

the maintenance of gender inequalities. *European Journal Of Social*

Psychology, *35*(5), 633-642. https://doi.org/10.1002/ejsp.270

Barreto, M., Ryan, M. K., & Schmitt, M. T. (Eds.). (2009). Introduction: Is the glass ceiling

still relevant in the 21st century? *The glass ceiling in the 21st century: Understanding*

barriers to gender equality, Psychology of women book series. (pp. 3–18).

Washington, DC: American Psychological Association.

https://doi.org/10.1037/11863-001

Barreto, M., & Ellemers, N. (2013). Sexism in contemporary societies: How it is expressed,

perceived, confirmed, and resisted. In M. K. Ryan & N. R. Branscombe (Eds.), *The*

SAGE handbook of gender and psychology (pp. 289–305). London, UK: SAGE

Publications, Ltd. https://doi.org/10.4135/9781446269930.n18

Barreto, M., Ellemers, N. (2015). Detecting and experiencing prejudice: New answers to old questions. *Advances in Experimental Social Psychology, 52*, 139–219. https://doi.org/10.1016/bs.aesp.2015.02.001

Barreto, M. (2015). *Experiencing and coping with social stigma.* In M. Mikulincer, P. R. Shaver, J. F. Dovidio, & J. A. Simpson (Eds.), *APA handbooks in psychology®. APA handbook of personality and social psychology, Vol. 2. Group processes* (p. 473–506). American Psychological Association. https://doi.org/10.1037/14342-018

Barron, L. G. (2009). Sexual orientation employment anti-discrimination legislation and hiring discrimination and prejudice. *Academy of Management Proceedings*, *2009*(1), 1–6. https://doi.org/10.5465/ambpp.2009.44243452

Baumeister, R., & Leary, M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497–529. https://doi. org/10.1037//0033-2909.117.3.497

Baumeister, R. F., Vohs, K. D., & Funder, D. C. (2007). Psychology as the Science of Self-Reports and Finger Movements: Whatever Happened to Actual Behavior? *Perspectives on Psychological Science, 2(4)*, 396–403. https://doi.org/10.1111/j.1745-6916.2007.00051.x

Becker, J. C., & Wright, S. C. (2011). Yet another dark side of chivalry: Benevolent sexism undermines and hostile sexism motivates collective action for social change. Journal of Personality and Social Psychology, 101(1), 62–77. https://doi.org/10.1037/a0022615

Becker, J., & Tausch, N. (2014). When Group Memberships are Negative: The Concept, Measurement, and Behavioral Implications of Psychological Disidentification. *Self And Identity*, *13*(3), 294-321. https://doi.org/10.1080/15298868.2013.819991

Becker, J. C., & Barreto, M. (2014). Ways to Go: Men's and Women's Support for

    Aggressive and Nonaggressive Confrontation of Sexism as a Function of Gender

    Identification. *Journal of Social Issues*, *70*(4), 668–686.

    https://doi.org/10.1111/josi.12085

Beehr, T. A., King, L. A., & King, D. W. (1990). Social support and occupational stress:

    Talking to supervisors. *Journal of Vocational Behavior*, *36*, 61–81.

    https://doi.org/10.1016/0001-8791(90)90015-t

Bell, M. P., Quick, J. C., & Cycyota, C. S. (2002). Assessment and Prevention of Sexual

    Harassment of Employees: An Applied Guide to Creating Healthy

    Organizations. *International Journal of Selection and Assessment*, *10*(1&2), 160–167.

    https://doi.org/10.1111/1468-2389.00203

Bennett, D. A. (2001). How can I deal with missing data in my study? *Australian and New*

    Zealand Journal of Public Health, *25*(5), 464–469. https://doi.org/10.1111/j.1467-

    842x.2001.tb00294.x

Berdahl, J. L., & Moore, C. (2006). Workplace harassment: Double jeopardy for minority

    women. *Journal of Applied Psychology, 91*(2), 426–

    436. https://doi.org/10.1037/0021-9010.91.2.426

Berdahl, J. L. (2007). The sexual harassment of uppity women. Journal of Applied

    Psychology, 92(2), 425–437. https://doi.org/10.1037/0021-9010.92.2.425

Bergsieker, H. B., Wilmot, M. O., Cyr, E. N., & Grey, C. B. (2020). A threat in the network:

    STEM women in less powerful network positions avoid integrating stereotypically

    feminine peers. Group Processes & Intergroup Relations.

    https://doi.org/10.1177/1368430219888274

Bingham, S., & Scherer, L. (1993). Factors associated with responses to sexual harassment

    and satisfaction with outcome. *Sex Roles*, *29*, 239– 269.

https://doi.org/10.1007/bf00289938

Blake, R., Shepard, H., & Mouton, J. (1968). *Managing intergroup conflict in industry*. Houston: Gulf Publishing.

Blascovich, J., & Tomaka, J. (1996). The Biopsychosocial Model of Arousal Regulation. *Advances in Experimental Social Psychology*, 1-51. https://doi.org/10.1016/s0065-2601(08)60235-x

Blascovich, J., Mendes, W. B., Hunter, S. B., Lickel, B., & Kowai-Bell, N. (2001). Perceiver threat in social interactions with stigmatized others. *Journal of Personality and Social Psychology, 80*(2), 253–267. https://doi.org/10.1037/0022-3514.80.2.253

Blodorn, A., Major, B., & Kaiser, C. (2016). Perceived discrimination and poor health: Accounting for self-blame complicates a well-established relationship. *Social science & medicine (1982)*, *153*, 27–34. https://doi.org/10.1016/j.socscimed.2016.01.053

Bolger, N., & Eckenrode, J. (1991). Social relationships, personality, and anxiety during a major stressful event. Journal of Personality and Social Psychology, 61(3), 440–449. https://doi.org/10.1037/0022-3514.61.3.440

Bombay, A., Matheson, K., & Anisman, H. (2014). Appraisals of discriminatory events among adult offspring of Indian residential school survivors: The influences of identity centrality and past perceptions of discrimination. *Cultural Diversity And Ethnic Minority Psychology*, *20*(1), 75-86. https://doi.org/10.1037/a0033352

Bornstein, G. (2003). Intergroup Conflict: Individual, Group, and Collective Interests. Personality and Social Psychology Review, 7(2), 129–145. https://doi.org/10.1207/S15327957PSPR0702_129-145

Borrell, C., Muntaner, C., Gil-González, D., Artazcoz, L., Rodríguez-Sanz, M., Rohlfs, I., & Álvarez-Dardet, C. (2010). Perceived discrimination and health by gender, social

class, and country of birth in a Southern European country. *Preventive Medicine*, *50*, 86–92. https://doi. org/10.1016/j.ypmed.2009.10.016

Bourguignon, D., Teixeira, C. P., Koc, Y., Faniko, K., & Schmitt, M. T. (2020). On the protective role of identification with a stigmatized identity: Promoting engagement and discouraging disengagement coping strategies. *European Journal of Social Psychology*, *50*(6), 1125–1142. https://doi.org/https://doi.org/10.1002/ejsp.2703

Bowen, K., Uchino, B., Birmingham, W., Carlisle, M., Smith, T., & Light, K. (2014). The stress-buffering effects of functional social support on ambulatory blood pressure. *Health Psychology*, *33*(11), 1440-1443. https://doi.org/10.1037/hea0000005

Bowes-Sperry, L., & Tata, J. (1999). A multiperspective framework of sexual harassment: reviewing two decades of research. In G. N. Powell Handbook of gender & work (pp. 263-280). SAGE Publications, Inc., https://www.doi.org/10.4135/9781452231365.n14

Brady, L., Kaiser, C., Major, B., & Kirby, T. (2015). It's fair for us: Diversity structures cause women to legitimize discrimination. *Journal of Experimental Social Psychology*, *57*, 100–110. https://doi. org/10.1016/j.jesp.2014.11.010

Branscombe, N. R., & Ellemers, N. (1998). *Coping with group-based discrimination: Individualistic versus group-level strategies.* In J. K. Swim & C. Stangor (Eds.), *Prejudice: The target's perspective* (p. 243–266). Academic Press. https://psycnet.apa.org/doi/10.1016/B978-012679130-3/50046-6

Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology*, *77*, 135–149. https://doi. org/10.1037/0022-3514.77.1.135

Branscombe, N.R., Fernández, S., Gómez, A., & Cronin, T. (2011). Moving toward or away from a group identity: Different strategies for coping with pervasive discrimination. In J. Jetten, C. Haslam & S.A. Haslam (Eds.), *The social cure: Identity, health and well-being* (pp. 115-131). New York: Psychology Press

Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin*, 86(2), 307–324. https://doi.org/10.1037/0033-2909.86.2.307

Brewer, M. B. (2001). Ingroup identification and intergroup conflict: When does ingroup love become outgroup hate? In R. D. Ashmore, L. Jussim, & D. Wilder (Eds.), *Rutgers series on self and social identity; Vol. 3. Social identity, intergroup conflict, and conflict reduction* (p. 17–41). Oxford University Press.

Brewer, M. B. (2008). Social identity and close relationships. In Forgas, J. P., Fitness, J. (Eds.), *Social relationships: Cognitive, affective, and motivational processes (The Sydney symposium of social psychology, pp. 167-184)*. New York, NY: Psychology Press.

Bridge, K., & Baxter, L. A. (1992). Blended relationships: Friends as work associates. *Western Journal of Communication*, *56*, 200–225. https://doi.org/10.1080/10570319209374414

Bulutlar, F., & Oz, E. U. (2009). The effects of ethical climates on bullying behaviour in the workplace. *Journal of Business Ethics*, *86*, 273–295. https://doi.org/10.1007/s10551-008-9847-4

Button, S. B. (2001). Organisational efforts to affirm sexual diversity: A cross-level examination. *Journal of Applied Psychology*, *86*, 17–28. https://doi.org/10.1037/0021-9010.86.1.17

Cannon, W.B. (1932). *The wisdom of the body* (2nd ed.). Norton & Co.

Carver, C. S., & Harmon-Jones, E. (2009). Anger is an approach-related affect: Evidence and implications. *Psychological Bulletin, 135*(2), 183–204. https://doi.org/10.1037/a0013965

Chimamanda Ngozi Adichie. (2012). *We should all be feminists*. Ted.com; TED Talks. https://www.ted.com/talks/chimamanda_ngozi_adichie_we_should_all_be_feminists?language=en

Cihangir, S., Barreto, M., & Ellemers, N. (2010). The dark side of ambiguous discrimination: How state self-esteem moderates emotional and behavioural responses to ambiguous and unambiguous discrimination. *British Journal of Social Psychology, 49*(1), 155–174. https://doi.org/10.1348/014466609X425869

Cihangir, S., Barreto, M., & Ellemers, N. (2014). Men as allies against sexism: The positive effects of a suggestion of sexism by male (vs. female) sources. *SAGE Open*, *4*, 215824401453916. https://doi. org/10.1177/2158244014539168

Coan, J., & Sbarra, D. (2015). Social Baseline Theory: the social regulation of risk and effort. *Current Opinion In Psychology*, *1*, 87-91. https://doi.org/10.1016/j.copsyc.2014.12.021

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*, 310–357. https://doi. org/10.1037/0033-2909.98.2.310

Cohen, G. L., & Garcia, J. (2005). "I Am Us": Negative Stereotypes as Collective Threats. *Journal of Personality and Social Psychology, 89*(4), 566–582. https://doi.org/10.1037/0022-3514.89.4.566

Colbert, A. E., Bono, J. E., & Purvanova, R. K. (2016). Flourishing via work- place relationships: Moving beyond instrumental support. *Academy of Management Journal*, *59*, 1199–1223. https://doi.org/10.5465/ amj.2014.0506

Corning, A. F. (2002). Self-esteem as a moderator between perceived discrimination and

psychological distress among women. Journal of Counseling Psychology, 49(1), 117–126. https://doi.org/10.1037/0022-0167.49.1.117

Corrigan, P. W., & Calabrese, J. D. (2005). *Strategies for Assessing and Diminishing Self-Stigma.* In P. W. Corrigan (Ed.), *On the stigma of mental illness: Practical strategies for research and social change* (p. 239–256). American Psychological Association. https://doi.org/10.1037/10887-011

Cortina, L. M., Lonsway, K. A., Magley, V. J., Freeman, L. V., Collinsworth, L. L., Hunter, M., & Fitzgerald, L. F. (2002). What's Gender Got to Do with It? Incivility in the Federal Courts. Law Social Inquiry, 27(2), 235–270. https://doi.org/10.1111/j.1747-4469.2002.tb00804.x

Crawford, M. & Unger, R.K. (2004). Women and gender: a feminist psychology (4th ed., p. 9). McGraw-Hill, Boston.

Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review, 96*(4), 608–630. https://doi.org/10.1037/0033-295X.96.4.608

Crocker, J., & Luhtanen, R. (1990). Collective self-esteem and ingroup bias. Journal of Personality and Social Psychology, 58(1), 60–67. https://doi.org/10.1037/0022-3514.58.1.60

Crosby, F. J. (2004). *Affirmative action is dead : long live affirmative action*. Yale University Press.

Crull, P. (1982). Stress effects of sexual harassment on the job: Implications for counseling. *American Journal of Orthopsychiatry*, *52*(3), 539–544. https://doi.org/10.1111/j.1939-0025.1982.tb01440.x

Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2004). When Professionals Become Mothers, Warmth Doesn't Cut the Ice. *Journal of Social Issues, 60*(4), 701–718. https://doi.org/10.1111/j.0022-4537.2004.00381.x

Czopp, A. M., & Monteith, M. J. (2003). Confronting prejudice (literally): Reactions to confrontations of racial and gender bias. *Personality and Social Psychology Bulletin, 29*(4), 532–544. https://doi.org/10.1177/0146167202250923

Czopp, A. M., Monteith, M. J., & Mark, A. Y. (2006). Standing up for a change: Reducing bias through interpersonal confrontation. *Journal of Personality and Social Psychology, 90*(5), 784–803. https://doi.org/10.1037/0022-3514.90.5.784

Davison, H., & Burke, M. (2000). Sex discrimination in simulated employment contexts: A meta-analytic investigation. *Journal of Vocational Behavior*, *56*(2), 225–248. https://doi.org/10.1006/jvbe.1999.1711

De Cremer, D., & Oosterwegel, A. (1999). Collective self-esteem, personal self-esteem, and collective efficacy in in-group and outgroup evaluations. *Current Psychology*, 18(4), 326–339. https://doi.org/10.1007/s12144-999-1007-1

de Lemus, S., Spears, R., Bukowski, M., Moya, M., & Lupiáñez, J. (2013). Reversing implicit gender stereotype activation as a function of exposure to traditional gender roles. *Social Psychology, 44*(2), 109–116. https://doi.org/10.1027/1864-9335/a000140

de Moor, E. L., Denissen, J. J. A., Emons, W. H. M., Bleidorn, W., Luhmann, M., Orth, U., & Chung, J. M. (2021). Self-esteem and satisfaction with social relationships across time. *Journal of Personality and Social Psychology, 120*(1), 173–191. https://doi.org/10.1037/pspp0000379

DeHart, T., Pelham, B., & Murray, S. (2004). Implicit dependency regulation: Self esteem, relationship closeness, and implicit evaluations of close others. *Social Cognition, 22*(1), 126–146. https://doi.org/10.1521/soco.22.1.126.30986

Derks, B., van Laar, C., & Ellemers, N. (2006). Striving for Success in Outgroup Settings: Effects of Contextually Emphasizing Ingroup Dimensions on Stigmatized Group Members' Social Identity and Performance Styles. Personality and Social Psychology Bulletin, 32(5), 576–588. https://doi.org/10.1177/0146167205283336

Derks, B., van Laar, C., & Ellemers, N. (2009). Working for the self or working for the group: How self- versus group affirmation affects collective behavior in low-status groups. *Journal of Personality and Social Psychology*, *96*(1), 183-202. https://doi.org/10.1037/a0013068

Derks, B., Scheepers, D., Van Laar, C., & Ellemers, N. (2011). The threat vs. challenge of car parking for women: How self- and group affirmation affect cardiovascular responses. *Journal of Experimental Social Psychology*, *47*(1), 178-183. https://doi.org/10.1016/j.jesp.2010.08.016

Derks, B., Ellemers, N., van Laar, C., & de Groot, K. (2011). Do sexist organizational cultures create the Queen Bee? *British Journal of Social Psychology*, *50*, 519–535. https://doi.org/10.1348/014466610x 525280

Derks, B., van Laar, C., Ellemers, N., & de Groot, K. (2011). Gender-bias primes elicit queen-bee responses among senior policewomen. *Psychological Science*, *22*, 1243–1249. https://doi.org/10.1177/09567 97611417258

Derks, B., van Laar, C., Ellemers, N., & Raghoe, G. (2015). Extending the Queen Bee Effect: How Hindustani Workers Cope with Disadvantage by Distancing the Self from the Group. *Journal Of Social Issues*, *71*(3), 476-496. https://doi.org/10.1111/josi.12124

Derks, B., Van Laar, C., & Ellemers, N. (2016). The queen bee phenome- non: Why women leaders distance themselves from junior women. *The Leadership Quarterly*, *27*, 456–469. https://doi.org/10.1016/j. leaqua.2015.12.007

Diekman, A. B., Brown, E. R., Johnston, A. M., & Clark, E. K. (2010). Seeking Congruity Between Goals and Roles: A New Look at Why Women Opt Out of Science, Technology, Engineering, and Mathematics Careers. Psychological Science, 21(8), 1051–1057. https://doi.org/10.1177/0956797610377342

Diong, S., Bishop, G. D., Enkelmann, H. C., Tong, E. M. W., Why, Y. P., Ang, J. C. H., & Khader, M. (2005). Anger, stress, coping, social support and health: Modelling the relationships. *Psychology & Health*, *20*(4), 467–495. https://doi.org/10.1080/0887044040512331333960

Dodd, E. H., Giuliano, T. A., Boutell, J. M., & Moran, B. E. (2001). Respected or rejected: Perceptions of women who confront sexist remarks. *Sex Roles: A Journal of Research, 45*(7-8), 567–577. https://doi.org/10.1023/A:1014866915741

Donaldson, S. I., & Grant-Vallone, E. J. (2002). Understanding Self-Report Bias in Organizational Behavior Research. *Journal of Business and Psychology*, *17*(2), 245–260. https://doi.org/10.1023/a:1019637632584

Doosje, B., Ellemers, N., & Spears, R. (1995). Perceived Intragroup Variability as a Function of Group Status and Identification. *Journal of Experimental Social Psychology*, *31*(5), 410-436. https://doi.org/10.1006/jesp.1995.1018

Doyle, D. M., & Molix, L. (2014a). How does stigma spoil relationships? Evidence that perceived discrimination harms romantic relationship quality through impaired self-image. *Journal of Applied Social Psychology*, *44*, 600–610. https://doi.org/10.1111/jasp.12252

Doyle, D. M., & Molix, L. (2014b). Love on the margins: The effects of social stigma and relationship length on romantic relationship quality. *Social Psychological and Personality Science*, *5*, 102–110. https://doi. org/10.1177/1948550613486677

Doyle, D., & Molix, L. (2015a). Perceived discrimination and social relationship functioning

among sexual minorities: Structural stigma as a moderating factor. *Analyses of Social Issues and Public Policy*, *15*, 357–381. https://doi.org/10.1111/asap.12098

Doyle, D. M., & Molix, L. (2015b). Social stigma and sexual minorities' romantic relationship functioning: A meta-analytic review. *Personality and Social Psychology Bulletin*, *41*, 1363–1381. https://doi. org/10.1177/0146167215594592

Doyle, D. M., & Molix, L. (2016). Minority stress and inflammatory mediators: Covering moderates associations between perceived discrimination and salivary interleukin-6 in gay men. *Journal of Behavioral Medicine*, *39*, 782–792. https://doi.org/10.1007/s10865-016-9784-0

Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology, 70*(6), 1327–1343. https://doi.org/10.1037/0022-3514.70.6.1327

Downey, G., Freitas, A. L., Michaelis, B., & Khouri, H. (1998). The self-fulfilling prophecy in close relationships: Rejection sensitivity and rejection by romantic partners. *Journal of Personality and Social Psychology, 75*(2), 545–560. https://doi.org/10.1037/0022-3514.75.2.545

Drury, B. J., & Kaiser, C. R. (2014). Allies against sexism: The role of men in confronting sexism. *Journal of Social Issues, 70*(4), 637–652. https://doi.org/10.1111/josi.12083

Duguid, M. (2011). Female tokens in high-prestige work groups: Catalysts or inhibitors of group diversification? *Organizational Behavior and Human Decision Processes*, *116*(1), 104–115. https://doi.org/10.1016/j.obhdp.2011.05.009

Dunn, J. R., & Schweitzer, M. E. (2005). Feeling and Believing: The Influence of Emotion on Trust. *Journal of Personality and Social Psychology, 88*(5), 736–748. https://doi.org/10.1037/0022-3514.88.5.736

Dutton, J. E., & Ragins, B. R. (2007). *Moving Forward: Positive Relationships at Work as a Research Frontier.* In J. E. Dutton & B. R. Ragins (Eds.), *LEA's organization and management series. Exploring positive relationships at work: Building a theoretical and research foundation* (p. 387–400). Lawrence Erlbaum Associates Publishers.

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109*(3), 573–598. https://doi.org/10.1037/0033-295X.109.3.573

Eagly, A., & Carli, L. (2007). *Through the labyrinth: The truth about how women become leaders*, Leadership for the common good. Boston, MA: Harvard Business School Press.

Edelman, L. B. (2005). Law at work: The endogenous construction of civil rights. In L. B. Nielson & R. L. Nelson (Eds.), *Handbook of employment discrimination research* (pp. 337–352). Dordrecht, The Netherlands: Springer.

Einarsen, S., Hoel, H., Zapf, D., & Cooper, C. L. (2011). The concept of bullying and harassment at work: The European tradition. In S. Einarsen, H. Hoel, D. Zapf, & C. L. Cooper (Eds.), *Bullying and harassment in the workplace: Developments in theory, research, and practice* (2nd ed., pp. 3–39). Boca Raton, FL: CRC Press.

Ellemers, N. (1993). The Influence of Socio-structural Variables on Identity Management Strategies. *European Review Of Social Psychology*, *4*(1), 27-57. https://doi.org/10.1080/14792779343000013

Ellemers, N., Spears, R., & Doosje, B. (1997). Sticking together or falling apart: In-group identification as a psychological determinant of group commitment versus individual mobility. *Journal of Personality and Social Psychology, 72*(3), 617–626. https://doi.org/10.1037/0022-3514.72.3.617

Ellemers, N. (2002). Social identity and relative deprivation. In I. Walker & H.

Smith (Eds.). *Relative deprivation: Specification, development, and*

integration (pp. 239– 264). Cambridge, UK : Cambridge University Press.

Ellemers, N., Heuvel, H., Gilder, D., Maass, A., & Bonvini, A. (2004). The

underrepresentation of women in science: Differential commitment or the queen bee

syndrome?. *British Journal Of Social Psychology*, *43*(3), 315-338.

https://doi.org/10.1348/0144666042037999

Ellemers, N., & Barreto, M. (2009). Collective action in modern times: How modern

expressions of prejudice prevent collective action. *Journal of Social Issues, 65*(4),

749–768. https://doi.org/10.1111/j.1540-4560.2009.01621.x

Ellemers, N., & Van Laar, C. (2010). Individual mobility. In J. F. DovidioM. Hewstone, & P.

Glick *The SAGE handbook of prejudice, stereotyping and discrimination* (pp. 561-

576). SAGE Publications Ltd, https://www.doi.org/10.4135/9781446200919.n34

Else-Quest, N. M., LoConte, N. K., Schiller, J. H., & Hyde, J. S. (2009). Perceived stigma,

self-blame, and adjustment among lung, breast and prostate cancer

patients. *Psychology & Health*, *24*(8), 949–964.

https://doi.org/10.1080/08870440802074664

Else-Quest, N. M., Hyde, J. S., & Linn, M. C. (2010). Cross-national patterns of gender

differences in mathematics: A meta-analysis. *Psychological Bulletin, 136*(1), 103–

127. https://doi.org/10.1037/a0018053

Ely, R. J. (1994). The effects of organizational demographics and social identity on

relationships among professional women. *Administrative Science Quarterly*, *39*(2),

203–238. http://dx.doi. org/10.2307/2393234

Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program.

Behavior Research Methods, Instruments & Computers, *28*(1), 1–11.

https://doi.org/10.3758/BF03203630

Erol, R. Y., & Orth, U. (2013). Actor and partner effects of self-esteem on relationship satisfaction and the mediating role of secure attachment between the partners. *Journal of Research in Personality, 47*(1), 26–35. https://doi.org/10.1016/j.jrp.2012.11.003

Erol, R. Y., & Orth, U. (2016). Self-esteem and the quality of romantic relationships. *European Psychologist, 21*(4), 274–283. https://doi.org/10.1027/1016-9040/a000259

European Institute for Gender Equality. (2020). *About | Gender Equality Index | European Institute for Gender Equality*. European Institute for Gender Equality; EIGE. https://eige.europa.eu/gender-equality-index/about

Fagundes, C. P., Bennett, J. M., Derry, H. M., & Kiecolt-Glaser, J. K. (2011). Relationships and Inflammation across the Lifespan: Social Developmental Pathways to Disease. *Social and personality psychology compass*, *5*(11), 891–903. https://doi.org/10.1111/j.1751-9004.2011.00392.x

Fajak, A., & Haslam, S. A. (1998). Gender solidarity in hierarchical organizations. *BRITISH Journal of Social Psychology*, *37*(1), 73–94. https://doi.org/https://doi.org/10.1111/j.2044-8309.1998.tb01158.x

Fanon, F. (1952). *Black skins, white masks*. New York: Grove Press.

Faniko, K., Ellemers, N., & Derks, B. (2016). Queen bees and alpha males: Are successful women more competitive than successful men? *European Journal of Social Psychology*, *46*, 903–913. https://doi. org/10.1002/ejsp.2198

Faniko, K., Ellemers, N., Derks, B., & Lorenzi-Cioldi, F. (2017). Nothing changes, really: Why women who break through the glass ceiling end up reinforcing it. *Personality and Social Psychology Bulletin*, *43*, 638–651. https://doi.org/10.1177/0146167217695551

Faniko, K., Ellemers, N., & Derks, B. (2020). The Queen Bee phenomenon in Academia 15 years after: Does it still exist, and if so, why? *British Journal of Social Psychology*, *60*(2), 383–399. https://doi.org/https://doi.org/10.1111/bjso.12408

Firestone, L. (2012, November 5). *Lisa Firestone Ph.D. | Psychology Today United Kingdom*. Www.psychologytoday.com. https://www.psychologytoday.com/gb/contributors/lisa-firestone-phd

Fischer, A. R., & Holz, K. B. (2007). Perceived discrimination and women's psychological distress: The roles of collective and personal self-esteem. *Journal of Counseling Psychology*, 54(2), 154–164. https://doi.org/10.1037/0022-0167.54.2.154

Fischer, A. H., & Roseman, I. J. (2007). Beat them or ban them: The characteristics and social functions of anger and contempt. *Journal of Personality and Social Psychology, 93*(1), 103–115. https://doi.org/10.1037/0022-3514.93.1.103

Fiske, S. T., & Glick, P. (1995). Ambivalence and Stereotypes Cause Sexual Harassment: A Theory with Implications for Organizational Change. *Journal of Social Issues*, 51(1), 97–115. https://doi.org/10.1111/j.1540-4560.1995.tb01311.x

Fitzgerald, L. F., Shullman, S. L., Bailey, N., Richards, M., Swecker, J., Gold, Y., Ormerod, M., & Weitzman, L. (1988). The incidence and dimensions of sexual harassment in academia and the workplace. *Journal of Vocational Behavior*, *32*(2), 152–175. https://doi.org/10.1016/0001-8791(88)90012-7

Fitzgerald, L. F., Weitzman, L. M., Gold, Y., & Ormerod, M. (1988). Academic Harassment: Sex and Denial in Scholarly Garb. *Psychology of Women Quarterly*, 12(3), 329–340. https://doi.org/10.1111/j.1471-6402.1988.tb00947.x

Fitzgerald, L. F., & Ormerod, A. J. (1993). *Breaking silence: The sexual harassment of women in academia and the workplace.* In F. L. Denmark & M. A. Paludi

(Eds.), *Psychology of women: A handbook of issues and theories* (p. 553–581). Greenwood Press/Greenwood Publishing Group.

Fitzgerald, L. F., Hulin, C. L., & Drasgow, F. (1994). The antecedents and consequences of sexual harrassment in organizations: An integrated model. In G. P. Keita & J. J. Hurrell, Jr. (Eds.), *Job stress in a changing workforce: Investigating gender, diversity, and family issues* (p. 55–73). American Psychological Association. https://doi.org/10.1037/10165-004

Fitzgerald, L. F., Gelfand, M. J., & Drasgow, F. (1995). Measuring sexual harassment: Theoretical and psychometric advances. *Basic and Applied Social Psychology*, 17(4), 425–445. https://doi.org/10.1207/s15324834basp1704_2

Fitzgerald, L. F., Drasgow, F., Hulin, C. L., Gelfand, M. J., & Magley, V. J. (1997). Antecedents and consequences of sexual harassment in organizations: A test of an integrated model. *Journal of Applied Psychology*, *82*(4), 578–589. https://doi.org/10.1037/0021-9010.82.4.578

Fitzgerald, L. F., Swan, S., & Magley, V. J. (1997). But was it really sexual harassment?: Legal, behavioral, and psychological definitions of the workplace victimization of women. In W. O'Donohue (Ed.), *Sexual harassment: Theory, research, and treatment* (p. 5–28). Allyn & Bacon.

Fitzgerald, L. F., Magley, V. J., Drasgow, F., & Waldo, C. R. (1999). Measuring Sexual Harassment in the Military: The Sexual Experiences Questionnaire (SEQ—DoD). *Military Psychology*, 11(3), 243–263. https://doi.org/10.1207/s15327876mp1103_3

Frable, D. E., Blackstone, T., & Scherbaum, C. (1990). Marginal and mindful: Deviants in social interactions. *Journal of Personality and Social Psychology, 59*(1), 140–149. https://doi.org/10.1037/0022-3514.59.1.140

Frable, D. E. S., Platt, L., & Hoey, S. (1998). Concealable stigmas and positive self-

perceptions: Feeling better around similar others. *Journal of Personality and Social Psychology*, *74*, 909–922. https://doi. org/10.1037/0022-3514.74.4.909

Frisch, J. U., Hausser, J. A., van Dick, R., & Mojzisch, A. (2014). Making support work: The interplay between social support and social identity. *Journal of Experimental Social Psychology*, *55*, 154–161. https:// doi.org/10.1016/j.jesp.2014.06.009

Frone, M. R. (2000). Work–family conflict and employee psychiatric disorders: The national comorbidity survey. *Journal of Applied Psychology, 85*(6), 888–895. https://doi.org/10.1037/0021-9010.85.6.888

Galván, N., Buki, L. P., & Garcés, D. M. (2009). Suddenly, a Carriage Appears: Social Support Needs of Latina Breast Cancer Survivors. *Journal of Psychosocial Oncology*, *27*(3), 361–382. https://doi.org/10.1080/07347330902979283

Garcia, J. A., Crocker, J., & Wyman, J. F. (2005). Breaking the Cycle of Stigmatization. *Journal of Wound, Ostomy and Continence Nursing*, *32*(1), 38–52. https://doi.org/10.1097/00152192-200501000-00009

Garcia, D. M., Schmitt, M. T., Branscombe, N. R., & Ellemers, N. (2010). Women's reactions to ingroup members who protest discriminatory treatment: The importance of beliefs about inequality and response appropriateness. *European Journal of Social Psychology*, *40*(5), 733-745. https://doi.org/10.1002/ejsp.644

Gervais, S. J., & Hillard, A. L. (2014). Confronting Sexism as Persuasion: Effects of a Confrontation's Recipient, Source, Message, and Context. *Journal of Social Issues*, *70*(4), 653–667. https://doi.org/10.1111/josi.12084

Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70(3), 491–512. https://doi.org/10.1037/0022-3514.70.3.491

Glick, P., & Fiske, S. T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complementary justifications for gender inequality. *American Psychologist*, 56(2), 109–118. https://doi.org/10.1037/0003-066X.56.2.109

Glomb, T., Richman, W., Hulin, C., Drasgow, F., Schneider, K., & Fitzgerald, L. (1997). Ambient sexual harassment: An integrated model of antecedents and consequences. *Organisational Behavior and Human Decision Processes*, *71*, 309–328. https://doi.org/10.1006/ obhd.1997.2728

Glomb, T. M., Munson, L. J., Hulin, C. L., Bergman, M. E., & Drasgow, F. (1999). Structural equation models of sexual harassment: Longitudinal explorations and cross-sectional generalizations. *Journal of Applied Psychology*, 84(1), 14–28. https://doi.org/10.1037/0021-9010.84.1.14

Goldenhar, L., Swanson, N., Hurrell, J., Ruder, A., & Deddens, J. (1998). Stressors and adverse outcomes for female construction workers. *Journal of Occupational Health Psychology*, *3*(1), 19-32. https://doi.org/10.1037/1076-8998.3.1.19

Gruber, J. E. (1998). The Impact of Male Work Environments and Organizational Policies on Women's Experiences of Sexual Harassment. *Gender & Society*, 12(3), 301–320. https://doi.org/10.1177/0891243298012003004

Gruber, J. E., & Smith, M. D. (1995). Women's Responses to Sexual Harassment: A Multivariate Analysis. *Basic and Applied Social Psychology*, *17*(4), 543–562. https://doi.org/10.1207/s15324834basp1704_7

Hanpachern, C., Morgan, G. A., & Griego, O. V. (1998). An extension of the theory of margin: A framework for assessing readiness for change. *Human Resource Development Quarterly.*, *9*, 339–350. https:// doi.org/10.1002/hrdq.3920090405

Harned, M. S., & Fitzgerald, L. F. (2002). Understanding a link between sexual harassment and eating disorder symptoms: A mediational analysis. Journal of Consulting and

Clinical Psychology, 70(5), 1170–1181. https://doi.org/10.1037/0022-006X.70.5.1170

Harnois, C., & Bastos, J. (2018). Discrimination, Harassment, and Gendered Health Inequalities: Do Perceptions of Workplace Mistreatment Contribute to the Gender Gap in Self-reported Health?. *Journal of Health and Social Behavior*, *59*(2), 283-299. https://doi.org/10.1177/0022146518767407

Harris, M. A., & Orth, U. (2020). The link between self-esteem and social relationships: A meta-analysis of longitudinal studies. *Journal of Personality and Social Psychology, 119*(6), 1459-1477. http://dx.doi.org/10.1037/pspp0000265

Haslam, S., & Reicher, S. (2006). Stressing the group: Social identity and the unfolding dynamics of responses to stress. *Journal of Applied Psychology*, *91*, 1037–1052. https://doi. org/10.1037/0021-9010.91.5.1037

Hauser, D. J., Ellsworth, P. C., & Gonzalez, R. (2018). Are Manipulation Checks Necessary? *Frontiers in Psychology*, *9*. https://doi.org/10.3389/fpsyg.2018.00998

Hawkley, L. C., & Capitanio, J. P. (2015). Perceived social isolation, evolutionary fitness and health outcomes: a lifespan approach. *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*, *370*(1669), 20140114. https://doi.org/10.1098/rstb.2014.0114

Hays, R. B. (1989). The day-to-day functioning of close versus casual friendships. *Journal of Social and Personal Relationships*, *6*, 21–37. https://doi.org/10.1177/026540758900600102

Hebl, M. R., Foster, J. B., Mannix, L. M., & Dovidio, J. F. (2002). Formal and interpersonal discrimination: A field study of bias toward homosexual applicants. *Personality and Social Psychology Bulletin*, *28*, 815–825. https://doi.org/10.1177/0146167202289010

Hebl, M., Madera, J. M., & King, E. (2008). Exclusion, Avoidence, and Social Distancing. In

K. M. Thomas (Ed.), *Diversity Resistance in Organisations* (pp. 127–151). New

York: Lawrence Erlbaum Associate.

Holoien, D. S., & Shelton, J. N. (2012). You deplete me: The cognitive costs of

colorblindness on ethnic minorities. *Journal of Experimental Social

Psychology*, *48*(2), 562–565. https://doi.org/10.1016/j.jesp.2011.09.010

Holt-Lunstad, J., Uchino, B. N., Smith, T. W., Olson-Cerny, C., & Nealey-Moore, J. B.

(2003). Social relationships and ambulatory blood pressure: Structural and qualitative

predictors of cardiovascular function during every day social interactions. *Health

Psychology, 22*(4), 388–397. https://doi.org/10.1037/0278-6133.22.4.388

Holt-Lunstad, J., Smith, T., & Layton, J. (2010). Social Relationships and Mortality Risk: A

Meta-analytic Review. *Plos Medicine*, *7*(7), e1000316.

https://doi.org/10.1371/journal.pmed.1000316

House, J., Landis, K., & Umberson, D. (1988). Social relationships and

health. *Science*, *241*(4865), 540-545. https://doi.org/10.1126/science.3399889

Houston, B. K., & Vavak, C. R. (1991). Cynical hostility: Developmental factors,

psychosocial correlates, and health behaviors. *Health Psychology, 10*(1), 9–

17. https://doi.org/10.1037/0278-6133.10.1.9

Hulin, C. L., Fitzgerald, L. F., & Drasgow, F. (1996). Organizational influences on sexual

harassment. In M. S. Stockdale (Ed.), Women and work: A Research and Policy

Series, Vol. 5. Sexual harassment in the workplace: Perspectives, frontiers, and

response strategies (p. 127–150). Sage Publications, Inc.

https://doi.org/10.4135/9781483327280.n7

Hunt, J., Folberg, A., & Ryan, C. (2021). Tolerance of Racism: A New Construct that Predicts Failure to Recognize and Confront Racism. *European Journal of Social Psychology*. https://doi.org/10.1002/ejsp.2759

Inzlicht, M., Kaiser, C. R., & Major, B. (2008). The face of chauvinism: How prejudice expectations shape perceptions of facial affect. *Journal of Experimental Social Psychology*, *44*(3), 758–766. https://doi.org/10.1016/j.jesp.2007.06.004

James, L. R., James, L. A., & Ashe, D. K. (1990). The meaning of organisations: The role of cognition and values. In B. Schneider (Ed.), *Organisational climate and culture* (pp. 40–84). San Francisci, CA: Jossey-Bass.

James, L. R., & Sells, S. B. (1981). Psychological climate: Theoretical perspectives and empirical research. In D. Magnusson (Ed.), *Toward a psychology of situations: An interactional perspective* (pp. 275–295). Hillsdale, NJ: Erlbaum.

Jasinskaja-Lahti, I., Liebkind, K., & Solheim, E. (2008). To Identify or Not To Identify? National Disidentification as an Alternative Reaction to Perceived Ethnic Discrimination. *Applied Psychology*, *58*(1), 105-128. https://doi.org/10.1111/j.1464-0597.2008.00384.x

Jetten, J., Branscombe, N., Schmitt, M., & Spears, R. (2001). Rebels with a cause: Group identification as a response to perceived dis- crimination from the mainstream. *Personality and Social Psychology Bulletin*, *27*, 1204–1213. https://doi.org/10.1177/0146167201 279012

Jetten, J., C. Haslam, & S. A. Haslam (Eds.) (2012). *The social cure: Identity, health and well-being*. New York, NY: Psychology Press. https://doi. org/10.4324/9780203813195

Jones, D. C. (1991). Friendship satisfaction and gender: An examination of sex differences in contributors to friendship satisfaction. *Journal of Social and Personal Relationships*,

8, 167–185. https://doi. org/10.1177/0265407591082002 Kahn, K. B., Barreto, M., Kaiser, C. R., & Rego, M. S. (2015). When do high and low status group members support confrontation? The role of perceived pervasiveness of prejudice. *British Journal of Social Psychology*, *55*, 27–43. https://doi.org/10.1111/bjso.12117

Kahn, K. B., Barreto, M., Kaiser, C. R., & Rego, M. S. (2015). When do high and low status group members support confrontation? The role of perceived pervasiveness of prejudice. *British Journal of Social Psychology*, *55*(1), 27–43. https://doi.org/10.1111/bjso.12117

Kahn, K. B., van Breen, J. A., Barreto, M., & Kaiser, C. R. (2021). When is women's benevolent sexism associated with support for other women's agentic responses to gender-based threat? *British Journal of Social Psychology*. https://doi.org/10.1111/bjso.12441

Kaiser, C. R., & Miller, C. T. (2001). Stop Complaining! The Social Costs of Making Attributions to Discrimination. Personality and Social Psychology Bulletin, 27(2), 254–263. https://doi.org/10.1177/0146167201272010

Kaiser, C. R., & Major, B. (2006). A Social Psychological Perspective on Perceiving and Reporting Discrimination. *Law & Social Inquiry*, *31*(4), 801–830. https://doi.org/10.1111/j.1747-4469.2006.00036.x

Kaiser, C. R., Dyrenforth, P. S., & Hagiwara, N. (2006). Why are attributions to discrimination interpersonally costly? A test of system and group justifying motivations. *Personality and Social Psychology Bulletin*, *32*(11), 1423–1536. https://doi.org/10.1177/0146167206 291475

Kaiser, C. R., Vick, S. B., & Major, B. (2006). Prejudice Expectations Moderate Preconscious Attention to Cues That Are Threatening to Social Identity. *Psychological Science*, *17*(4), 332–338. https://doi.org/10.1111/j.1467-

9280.2006.01707.x

Kaiser, C. R., Hagiwara, N., Malahy, L. W., & Wilkins, C. L. (2009). Group identification

    moderates attitudes toward ingroup members who confront discrimination. *Journal of*

    Experimental Social Psychology, *45*(4), 770–777.

    https://doi.org/10.1016/j.jesp.2009.04.027

Kaiser, C., Major, B., Jurcevic, I., Dover, T., Brady, L., & Shapiro, J. (2013). Presumed fair:

    Ironic effects of organizational diversity structures. *Journal of Personality and Social*

    Psychology, *104*, 504–519. https://doi. org/10.1037/a0030838

Kaiser, C., & Spalding, K. (2015). Do women who succeed in male-dominated domains help

    other women? The moderating role of gender identification. *European Journal Of*

    Social Psychology, *45*(5), 599-608. https://doi.org/10.1002/ejsp.2113

Keller, J. (2007). Stereotype threat in classroom settings: The interactive effect of domain

    identification, task difficulty and stereotype threat on female students' maths

    performance. *British Journal of Educational Psychology*, *77*(2), 323–338.

    https://doi.org/10.1348/000709906x113662

Khomami, N. (2016, May 11). *Receptionist "sent home from PwC for not wearing high*

    heels." The Guardian; The Guardian. https://www.theguardian.com/uk-

    news/2016/may/11/receptionist-sent-home-pwc-not-wearing-high-heels-pwc-nicola-

    thorp

King, E. B., Hebl, M. R., George, J. M., & Matusik, S. F. (2010). Understanding Tokenism:

    Antecedents and Consequences of a Psychological Climate of Gender Inequity.

    Journal of Management, 36(2), 482–510. https://doi.org/10.1177/0149206308328508

Klein, O., & Azzi, A. E. (2001). The strategic confirmation of meta-stereotypes: How group

    members attempt to tailor an out-group's representation of themselves. *British Journal*

    of Social Psychology, 40(2), 279–293. https://doi.org/10.1348/014466601164759

Klonoff, E., & Landrine, H. (1995). The schedule of sexist events: A measure of lifetime and recent sexist discrimination in women's lives. *Psychology of Women Quarterly*, *19*, 439–472. https://doi. org/10.1111/j.1471-6402.1995.tb00086.x

Klonoff, E. A., Landrine, H., & Campbell, R. (2000). Sexist discrimination may account for well-known gender differences in psychiatric symptoms. *Psychology of Women Quarterly, 24*(1), 93–99. https://doi.org/10.1111/j.1471-6402.2000.tb01025.x

Kobrynowicz, D., & Branscombe, N. R. (1997). Who considers themselves victims of discrimination? Individual difference predictors of perceived gender discrimination in women and men. *Psychology of Women Quarterly, 21*(3), 347–363. https://doi.org/10.1111/j.1471-6402.1997.tb00118.x

Kroenke, C. H., Quesenberry, C., Kwan, M. L., Sweeney, C., Castillo, A., & Caan, B. J. (2013). Social networks, social support, and burden in relationships, and mortality after breast cancer diagnosis in the Life After Breast Cancer Epidemiology (LACE) study. *Breast cancer research and treatment*, *137*(1), 261–271. https://doi.org/10.1007/s10549-012-2253-8

Landrine, H., Klonoff, E. A., Gibbs, J., Manning, V., & Lund, M. (1995). Physical And Psychiatric Correlates Of Gender Discrimination: An Application of the Schedule of Sexist Events. Psychology of Women Quarterly, 19(4), 473–492. https://doi.org/10.1111/j.1471-6402.1995.tb00087.x

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.

Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L. W., Pennekamp, S. F., Doosje, B., Ouwerkerk, J. W., & Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology, 95*(1), 144–165. https://doi.org/10.1037/0022-3514.95.1.144

Leach, C. W., & Livingstone, A. G. (2015). Contesting the Meaning of Intergroup Disadvantage: Towards a Psychology of Resistance. *Journal of Social Issues*, *71*(3), 614–632. https://doi.org/10.1111/josi.12131

Leary, M. R., & MacDonald, G. (2003). *Individual differences in self-esteem: A review and theoretical integration.* In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (p. 401–418). The Guilford Press.

Lemonaki, E., Manstead, A. S. R., & Maio, G. R. (2015). Hostile sexism (de)motivates women's social competition intentions: The contradictory role of emotions. *British Journal of Social Psychology, 54(3)*, 483–499. https://doi.org/10.1111/bjso.12100

Leonard, D. J., Moons, W. G., Mackie, D. M., & Smith, E. R. (2010). "We're mad as hell and we're not going to take it anymore": Anger self-stereotyping and collective action. *Group Processes & Intergroup Relations, 14(1)*, 99–111. https://doi.org/10.1177/1368430210373779

Leonardelli, G. J., & Tormala, Z. L. (2003). The negative impact of perceiving discrimination on collective well-being: The mediating role of perceived ingroup status. *European Journal of Social Psychology, 33(4)*, 507–514. https://doi.org/10.1002/ejsp.159

Levendosky, A., Bogat, G., Theran, S., Trotter, J., Eye, A., & Davidson, W. (2004). The Social Networks of Women Experiencing Domestic Violence. *American Journal of Community Psychology*, *34*(1-2), 95-109. https://doi.org/10.1023/b:ajcp.0000040149.58847.10

London, B., Downey, G., Romero-Canyas, R., Rattan, A., & Tyson, D. (2012). Gender-based rejection sensitivity and academic self-silencing in women. *Journal of Personality and Social Psychology*, *102*(5), 961–979. https://doi.org/10.1037/a0026615

Long, K. M., Spears, R., & Manstead, A. S. R. (1994). The influence of personal and collective self-esteem on strategies of social differentiation. British Journal of Social Psychology, 33(3), 313–329. https://doi.org/10.1111/j.2044-8309.1994.tb01028.x

Long, K., & Spears, R. (1997). The self-esteem hypothesis revisited: Differentiation and the disaffected. In R. Spears, P. J. Oakes, N. Ellemers, & S. A. Haslam (Eds.), The social psychology of stereotyping and group life (p. 296–317). Blackwell Publishing.

Lott, B., Asquith, K., & Doyon, T. (2001). Relation of ethnicity and age to women's responses to personal experiences of sexist discrimination in the United States. *The Journal of Social Psychology*, *141*, 309–322. https://doi.org/10.1080/00224540109600553

Luckow, A., Reifman, A., & McIntosh, D. N. (1998). Gender differences in coping: a meta-analysis. Annual meetings of the American Psychological Association, San Francisco, CA.

Luhtanen, R., & Crocker, J. (1991). Self-esteem and intergroup comparisons: Toward a theory of collective self-esteem. In J. Suls & T. A. Wills (Eds.), *Social comparison: Contemporary theory and research* (p. 211–234). Lawrence Erlbaum Associates, Inc.

Luhtanen, R., & Crocker, J. (1992). A Collective Self-Esteem Scale: Self-Evaluation of One's Social Identity. *Personality and Social Psychology Bulletin, 18(3)*, 302–318. https://doi.org/10.1177/0146167292183006

Lupton, B. (2006). Explaining men's entry into female-concentrated occupations: Issues of masculinity and social class. *Gender, Work and Organization, 13*, 103–128. doi:10.1111/j.1468-0432.2006.00299.x

McCabe, M. P., & Hardman, L. (2005). Attitudes and Perceptions of Workers to Sexual Harassment. The Journal of Social Psychology, 145(6), 719–740. https://doi.org/10.3200/socp.145.6.719-740

McKee-Ryan, F., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological and physical well-being during unemployment: a meta-analytic study. *The Journal of Applied Psychology*, *90*(1), 53–76. https://doi.org/10.1037/0021-9010.90.1.53

Madlock, P. E., & Booth-Butterfield, M. (2011). The influence of relational maintenance strategies among co-workers. *Journal of Business Communication*, *49*, 21–47. https://doi.org/10.1177/0021943611 425237

Major, B., Quinton, W. J., & Schmader, T. (2003). Attributions to discrimination and self-esteem: Impact of group identification and situational ambiguity. *Journal of Experimental Social Psychology, 39*(3), 220–231. https://doi.org/10.1016/S0022-1031(02)00547-4

Major, B., Kaiser, C., & McCoy, S. (2003). It's not my fault: When and why attributions to prejudice protect self-esteem. *Personality and Social Psychology Bulletin*, *29*, 772–781. https://doi.org/10.1177/01461 67203029006009

Major, B., Mendes, W. B., & Dovidio, J. F. (2013). Intergroup relations and health disparities: A social psychological perspective. *Health Psychology, 32*(5), 514–524. https://doi.org/10.1037/a0030358

Marchiondo, L. A., Gonzales, E., & Ran, S. (2016). Development and validation of the workplace age discrimination scale. *Journal of Business and Psychology*, *31*, 493–513. https://doi.org/10.1007/s1086 9-015-9425-6

Martinez, L. R., Ruggs, E. N., Sabat, I. E., Hebl, M. R., & Binggeli, S. (2013). The role of organisational leaders in sexual orientation equality at organisational and federal levels. *Journal of Business and Psychology*, *28*, 455–466. https://doi.org/10.1007/s10869-013-9293-x

McIntosh, D. N., Keywell, J., Reifman, A., & Ellsworth, P. C. (1994). Stress and Health in First-Year Law Students: Women Fare Worse1. *Journal of Applied Social*

Psychology, 24(16), 1474–1497. https://doi.org/10.1111/j.1559-1816.1994.tb01559.x

Mendoza-Denton, R., Downey, G., Purdie, V. J., Davis, A., & Pietrzak, J. (2002). Sensitivity to status-based rejection: Implications for African American students' college experience. *Journal of Personality and Social Psychology, 83*(4), 896–918. https://doi.org/10.1037/0022-3514.83.4.896

Miller, C. T., & Major, B. (2000). *Coping with stigma and prejudice.* In T. F. Heatherton, R. E. Kleck, M. R. Hebl, & J. G. Hull (Eds.), *The social psychology of stigma* (p. 243–272). Guilford Press.

Miller, C., & Kaiser, C. (2001). A Theoretical Perspective on Coping with Stigma. *Journal of Social Issues*, *57*(1), 73-92. https://doi.org/10.1111/0022-4537.00202

Miller, D. A., Cronin, T., Garcia, A. L., & Branscombe, N. R. (2009). The Relative Impact of Anger and Efficacy on Collective Action is Affected by Feelings of Fear. Group Processes & Intergroup Relations, 12(4), 445–462. https://doi.org/10.1177/1368430209105046

Moradi, B., & Funderburk, J. R. (2006). Roles of perceived sexist events and perceived social support in the mental health of women seeking counseling. *Journal of Counseling Psychology, 53*(4), 464–473. https://doi.org/10.1037/0022-0167.53.4.464

Moss-Racusin, C. A., Dovidio, J. F., Brescoll, V. L., Graham, M. J., & Handelsman, J. (2012). Science faculty's subtle gender biases favor male students. *Proceedings of the National Academy of Sciences*, *109*(41), 16474–16479. https://doi.org/10.1073/pnas.1211286109

Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996). The benefits of positive illusions: Idealization and the construction of satisfaction in close relationships. *Journal of Personality and Social Psychology, 70*(1), 79–98. https://doi.org/10.1037/0022-3514.70.1.79

Murray, S. L., Holmes, J. G., & Griffin, D. W. (2000). Self-esteem and the quest for felt

security: How perceived regard regulates attachment processes. *Journal of*

Personality and Social Psychology, 78(3), 478–498. https://doi.org/10.1037/0022-

3514.78.3.478

Murray, S. L., Rose, P., Bellavia, G. M., Holmes, J. G., & Kusche, A. G. (2002). When

rejection stings: How self-esteem constrains relationship-enhancement

processes. *Journal of Personality and Social Psychology*, *83*(3), 556–573.

https://doi.org/10.1037/0022-3514.83.3.556

Murray, S. L. (2006). *Self-Esteem: Its Relational Contingencies and Consequences.* In M. H.

Kernis (Ed.), *Self-esteem issues and answers: A sourcebook of current*

perspectives (p. 350–358). Psychology Press.

Murray, S. L., Griffin, D. W., Rose, P., & Bellavia, G. (2006). For Better or Worse? Self-

Esteem and the Contingencies of Acceptance in Marriage. *Personality and Social*

Psychology Bulletin, 32(7), 866–880. https://doi.org/10.1177/0146167206286756

Murray, S. L., Holmes, J. G., & Collins, N. L. (2006). Optimizing assurance: The risk

regulation system in relationships. *Psychological Bulletin*, *132*(5), 641–666.

https://doi.org/10.1037/0033-2909.132.5.641

Myers, S. A., & Johnson, A. D. (2004). Perceived solidarity, self-disclosure, and trust in

organizational peer relationships. *Communication Research Reports*, *21*, 75–83.

https://doi.org/10.1080/08824090409359969

Neuberg, S. L., Smith, D. M., Hoffman, J. C., & Russell, F. J. (1994). When we observe

stigmatized and "normal" individuals interacting: Stigma by association. *Personality*

and Social Psychology Bulletin, 20(2), 196–

209. https://doi.org/10.1177/0146167294202007

Nielsen, I., Jex, S., & Adams, G. (2000). Development and validation of scores on a two-

dimensional workplace friendship scale. *Educational and Psychological Measurement*, *60*, 628–643. https://doi. org/10.1177/00131640021970655

O'Leary-Kelly, A. M., Bowes-Sperry, L., Bates, C. A., & Lean, E. R. (2009). Sexual Harassment at Work: A Decade (Plus) of Progress. *Journal of Management*, 35(3), 503–536. https://doi.org/10.1177/0149206308330555

Ostroff, C., Kinicki, A. J., & Tamkins, M. M. (2003). Organizational culture and climate. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology: Industrial and organizational psychology* (pp. 565–593). Hoboken, NJ: John Wiley & Sons Inc.

Parker, S. K., Griffin, M. A., Sprigg, C. A., & Wall, T. D. (2002). Effect of temporary contracts on perceived work characteristics and job strain: A longitudinal study. *Personnel Psychology*, *55*, 689–719. https://doi.org/10.1111/j.1744-6570.2002.tb00126.x

Parker, S. K., & Griffin, M. A. (2002). What is so bad about a little name-calling? Negative consequences of gender harassment for over performance demands and distress. Journal of Occupational Health Psychology, 7(3), 195–210. https://doi.org/10.1037/1076-8998.7.3.195

Parks-Stamm, E. J., Heilman, M. E., & Hearns, K. A. (2007). Motivated to penalize: Women's strategic rejection of successful women. *Personality and Social Psychology Bulletin*, *34*, 237–247. https://doi. org/10.1177/0146167207310027

Paulhus, D. L., & Vazire, S. (2007). *The self-report method.* In R. W. Robins, R. C. Fraley, & R. F. Krueger (Eds.), *Handbook of research methods in personality psychology* (p. 224–239). The Guilford Press.

Paustian-Underdahl, S. C., King, E. B., Rogelberg, S. G., Kulich, C., & Gentry, W. A. (2017). Perceptions of supervisor support: Resolving paradoxical patterns across

gender and race. *Journal of Occupational and Organisational Psychology*, *90*, 436–457. https://doi.org/10.1111/ joop.12179

Petersen, T., & Morgan, L. (1995). Separate and unequal: Occupation- establishment sex segregation and the gender wage gap. *American Journal of Sociology*, *101*, 329–365. https://doi.org/10.1086/230727

Pinel, E. C. (1999). Stigma consciousness: The psychological legacy of social stereotypes. *Journal of Personality and Social Psychology, 76*(1), 114–128. https://doi.org/10.1037/0022-3514.76.1.114

Plaut, V. C., Thomas, K. M., & Goren, M. J. (2009). Is Multiculturalism or Color Blindness Better for Minorities? *Psychological Science*, 20(4), 444–446. https://doi.org/10.1111/j.1467-9280.2009.02318.x

Pryor, J. B. (1987). Sexual harassment proclivities in men. *Sex Roles*, 17(5-6), 269–290. https://doi.org/10.1007/bf00288453

Pryor, J. B., Reeder, G. D., & Monroe, A. E. (2012). The infection of bad company: Stigma by association. *Journal of Personality and Social Psychology, 102*(2), 224–241. https://doi.org/10.1037/a0026270

Quwerkerk, J. W., de Gilder, D., & de Vries, N. K. (2000). When the Going Gets Tough, the Tough Get Going: Social Identification and Individual Effort in Intergroup Competition. *Personality and Social Psychology Bulletin*, 26(12), 1550–1559. https://doi.org/10.1177/01461672002612009

Ragins, B. R., & Cornwell, J. M. (2001). Pink triangles: Antecedents and consequences of perceived workplace discrimination against gay and lesbian employees. *Journal of Applied Psychology*, *86*, 1244–1261. https://doi.org/10.1037//0021-9010.86.6.1244

Ragins, B. R., & Scandura, T. A. (1994). Gender differences in expected outcomes of mentoring relationships. *Academy of Management Journal*, *37*, 957–971.

https://doi.org/10.5465/256606

Ragins, B. R., & Dutton, J. E. (2007). Positive relationships at work: An introduction and invitation. In J. E. Dutton & B. R. Ragins (Eds.), *Exploring positive relationships at work: Building a theoretical and re- search foundation*, LEA's organization and management series (pp. 29–45). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Ragins, B. R., Singh, R., & Cornwell, J. M. (2007). Making the invisible visible: Fear and disclosure of sexual orientation at work. *Journal of Applied Psychology, 92*(4), 1103–1118. https://doi.org/10.1037/0021-9010.92.4.1103

Reid, P. T., & Clayton, S. (1992). Racism and sexism at work. *Social Justice Research*, 5(3), 249–268. https://doi.org/10.1007/bf01048666

Redersdorff, S., Martinot, D., & Branscombe, N. (2004). The impact of thinking about group-based disadvantages or advantages on women's well-being: An experimental test of the rejection-identification model. *Cahiers de Psychologie Cognitive/Current Psychology of Cognition, 22*(2), 203–222.

Richeson, J. A., & Shelton, J. N. (2007). Negotiating Interracial Interactions: Costs, Consequences, and Possibilities. Current Directions in Psychological Science, 16(6), 316–320. https://doi.org/10.1111/j.1467-8721.2007.00528.x

Richman, L. S., Martin, J., & Guadagno, J. (2016). Stigma-Based Rejection and the Detection of Signs of Acceptance. *Social Psychological and Personality Science*, 7(1), 53–60. https://doi.org/10.1177/1948550615598376

Rimé, B. (2009). Emotion Elicits the Social Sharing of Emotion: Theory and Empirical Review. Emotion Review, 1(1), 60–85. https://doi.org/10.1177/1754073908097189

Rochlen, A. B., Good, G. E., & Carver, T. A. (2009). Predictors of gender-related barriers, work, and life satisfaction among men in nursing. *Psychology of Men & Masculinity, 10*(1), 44–56. https://doi.org/10.1037/a0013291

Rook, K. S. (2001). Emotional health and positive versus negative social exchanges: A daily diary analysis. *Applied Developmental Science*, *5*(2), 86-97. https://doi.org/10.1207/s1532480xads0502_4

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rubin, M., & Hewstone, M. (1998). Social identity theory's self-esteem hypothesis: A review and some suggestions for clarification. Personality and Social Psychology Review, 2(1), 40–62. https://doi.org/10.1207/s15327957pspr0201_3

Ruggs, E. N., Martinez, L. R., Hebl, M. R., & Law, C. L. (2015). Workplace "trans"-actions: How organizations, coworkers, and individual open- ness influence perceived gender identity discrimination. *Psychology of Sexual Orientation and Gender Diversity*, *2*, 404–412. https://doi. org/10.1037/sgd0000112

Ryff, C. D., & Singer, B. (2000). Interpersonal flourishing: A positive health agenda for the new millennium. *Personality and Social Psychology Review*, *4*, 30–44. https://doi.org/10.1207/s15327957pspr0401_4

Salin, D. (2003). Ways of explaining workplace bullying: A review of enabling, motivating and precipitating structures and processes in the work environment. *Human Relations*, *56*, 1213–1232. https://doi. org/10.1177/00187267035610003

Salomon, K., Burgess, K. D., & Bosson, J. K. (2015). Flash fire and slow burn: Women's cardiovascular reactivity and recovery following hostile and benevolent sexism. Journal of Experimental Psychology: General, 144(2), 469–479. https://doi.org/10.1037/xge0000061

Samnani, A. (2012). Embracing new directions in workplace bullying research. *Journal of Management Inquiry*, *22*, 26–36. https://doi. org/10.1177/1056492612451653

Sanchez, D. T., & Garcia, J. A. (2009). When race matters: Racially stigmatized others and perceiving race as a biological construction affect biracial people's daily well-being. *Personality and Social Psychology Bulletin*, *35*, 1154–1164. https://doi.org/10.1177/0146167209 337628

Schein, E. H. (2010). *Organisational culture and leadership*. San Francisco, CA: Jossey-Bass.

Schlomer, G. L., Bauman, S., & Card, N. A. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology*, *57*(1), 1–10. https://doi.org/10.1037/a0018082

Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype threat effects on performance. *Psychological Review*, *115*, 336–356. https://doi.org/10.1037/0033-295x.115.2.336

Schmitt, M. T., & Branscombe, N. R. (2002). The meaning and consequences of perceived discrimination in disadvantaged and privileged social groups. *European Review of Social Psychology*, *12*, 167–199. https://doi.org/10.1080/14792772143000058

Schmitt, M., Branscombe, N., Kobrynowicz, D., & Owen, S. (2002). Perceiving discrimination against one's gender group has different implications for well-being in women and men. *Personality and Social Psychology Bulletin*, *28*, 197–210. https://doi.org/10.1177/01461 67202282006

Schmitt, M. T., Branscombe, N. R., Postmes, T., & Garcia, A. (2014). The consequences of perceived discrimination for psychological well-being: A meta-analytic review. Psychological Bulletin, 140(4), 921–948. https://doi.org/10.1037/a0035754

Seta, C. E., & Seta, J. J. (1992). Observers and participants in an intergroup setting. Journal

of Personality and Social Psychology, 63(4), 629–643. https://doi.org/10.1037/0022-3514.63.4.629

Settles, I. H., Cortina, L. M., Malley, J., & Stewart, A. J. (2006). The Climate for Women in Academic Science: The Good, the Bad, and the Changeable. Psychology of Women Quarterly, 30(1), 47–58. https://doi.org/10.1111/j.1471-6402.2006.00261.x

Shapiro, J. R., & Neuberg, S. L. (2007). From Stereotype Threat to Stereotype Threats: Implications of a Multi-Threat Framework for Causes, Moderators, Mediators, Consequences, and Interventions. Personality and Social Psychology Review, 11(2), 107–130. https://doi.org/10.1177/1088868306294790

Shapiro, J. R., Baldwin, M., Williams, A. M., & Trawalter, S. (2011). The company you keep: Fear of rejection in intergroup interaction. *Journal of Experimental Social Psychology, 47*(1), 221–227. https://doi.org/10.1016/j.jesp.2010.10.006

Shelton, N.J., & Stewart, R.E. (2004). Confronting perpetrators of prejudice: The inhibitory effects of social costs. *Psychology of Women Quarterly*, *28*, 215–223. https://doi.org/10.1111/j.1471-6402.2004.00138.x

Shelton, J. N., Richeson, J. A., & Salvatore, J. (2005). Expecting To Be the Target of Prejudice: Implications for Interethnic Interactions. *Personality and Social Psychology Bulletin*, *31*(9), 1189–1202. https://doi.org/10.1177/0146167205274894

Sheppard, L. D., & Aquino, K. (2017). Sisters at Arms: A Theory of Female Same-Sex Conflict and Its Problematization in Organizations. *Journal of Management, 43(3)*, 691–715. https://doi.org/10.1177/0149206314539348

Sherman, D. K., Kinias, Z., Major, B., Kim, H. S., & Prenovost, M. (2007). The Group as a Resource: Reducing Biased Attributions for Group Success and Failure via Group Affirmation. *Personality and Social Psychology Bulletin*, *33(8)*, 1100–1112. https://doi.org/10.1177/0146167207303027

Shih, M., Pittinsky, T. L., & Ambady, N. (1999). Stereotype Susceptibility: Identity Salience and Shifts in Quantitative Performance. *Psychological Science*, 10(1), 80–83. https://doi.org/10.1111/1467-9280.00111

Simpson, R. (2005). Men in Non-Traditional Occupations: Career Entry, Career Orientation and Experience of Role Strain. *Gender, Work & Organization*, *12*(4), 363–380. https://doi.org/https://doi.org/10.1111/j.1468-0432.2005.00278.x

Smith, T. W., Pope, M. K., Sanders, J. D., Allred, K. D., & O'Keeffe, J. L. (1988). Cynical hostility at home and work: Psychosocial vulnerability across domains. *Journal of Research in Personality*, *22*(4), 525–548. https://doi.org/10.1016/0092-6566(88)90008-6

Smith, H. J., & Ortiz, D. J. (2002). *Is it just me?: The different consequences of personal and group relative deprivation.* In I. Walker & H. J. Smith (Eds.), *Relative deprivation: Specification, development, and integration* (p. 91–115). Cambridge University Press.

Sojo, V. E., Wood, R. E., & Genat, A. E. (2016). Harmful Workplace Experiences and Women's Occupational Well-Being. *Psychology of Women Quarterly*, 40(1), 10–40. https://doi.org/10.1177/0361684315599346

Stamarski, C., & Son Hing, L. (2015). Gender inequalities in the workplace: The effects of organisational structures, processes, practices, and decision makers' sexism. *Frontiers in Psychology*, *6*, 1400. https:// doi.org/10.3389/fpsyg.2015.01400

Steele, C. M. (1988). *The psychology of self-affirmation: Sustaining the integrity of the self.* In L. Berkowitz (Ed.), *Advances in experimental social psychology, Vol. 21. Social psychological studies of the self: Perspectives and programs* (p. 261–302). Academic Press.

Steele, C., Spencer, S., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. *Advances In Experimental Social Psychology*, 379-440. https://doi.org/10.1016/s0065-2601(02)80009-0

Sterk, N., Meeussen, L., & Van Laar, C. (2018). Perpetuating inequality: Junior women do not see queen bee behavior as negative but are nonetheless negatively affected by it. *Frontiers in Psychology*, *9*, 1879. https://doi.org/10.3389/fpsyg.2018.01690

Stinson, D. A., Cameron, J. J., & Robinson, K. J. (2015). The good, the bad, and the risky: Self-esteem, rewards and costs, and interpersonal risk regulation during relationship initiation. *Journal of Social and Personal Relationships*, 32(8), 1109–1136. https://doi.org/10.1177/0265407514558961

Stinson, D. A., Cameron, J. J., & Robinson, K. J. (2015). The good, the bad, and the risky: Self-esteem, rewards and costs, and interpersonal risk regulation during relationship initiation. *Journal of Social and Personal Relationships*, 32(8), 1109–1136. https://doi.org/10.1177/0265407514558961

Srivastava, S., & Beer, J. S. (2005). How self-evaluations relate to being liked by others: Integrating sociometer and attachment perspectives. *Journal of Personality and Social Psychology*, *89*(6), 966–977. https://doi.org/10.1037/0022-3514.89.6.966

Stroebe, K., Ellemers, N., Barreto, M., & Mummendey, A. (2009). For better or for worse: the congruence of personal and group outcomes on targets' responses to discrimination. *European Journal of Social Psychology*, *39*(4), 576–591. https://doi.org/10.1002/ejsp.557

Stroebe, K., Dovidio, J. F., Barreto, M., Ellemers, N., & John, M. S. (2011). Is the world a just place? Countering the negative consequences of pervasive discrimination by affirming the world as just. *British Journal of Social Psychology*, *50*, 484–500. https://doi.org/10.1348/01446 6610x523057

Spencer, S., Steele, C., & Quinn, D. (1999). Stereotype Threat and Women's Math

    Performance. *Journal of Experimental Social Psychology*, *35*(1), 4-28.

    https://doi.org/10.1006/jesp.1998.1373

Swim, J. K., & Hyers, L. L. (1999). Excuse Me—What Did You Just Say?!: Women's Public

    and Private Responses to Sexist Remarks. *Journal of Experimental Social*

    Psychology, *35*(1), 68–88. https://doi.org/10.1006/jesp.1998.1370

Swim, J. K., & Hyers, L. L. (2009). Sexism. In T. D. Nelson (Ed.), *Handbook of prejudice,*

    stereotyping, and discrimination (pp. 407–430). New York, NY: Psychology Press.

Swim, J., Hyers, L., Cohen, L., & Ferguson, M. (2001). Everyday sexism: Evidence for its

    incidence, nature, and psychological impact from three daily diary studies. *Journal of*

    Social Issues, *57*, 31–53. https:// doi.org/10.1111/0022-4537.00200

Tagar, M., Federico, C. M., & Halperin, E. (2011). The positive effect of negative emotions

    in protracted conflict: The case of anger. *Journal of Experimental Social*

    Psychology, *47*(1), 157–164. https://doi.org/10.1016/j.jesp.2010.09.011

Tajfel, H. (1981). *Human Groups and Social Categories: Studies in Social*

    Psychology. Cambridge: Cambridge University Press.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of inter-group conflict. In W. G.

    Austin & S. Worchel (Eds.), *The social psychology of inter-group relations* (pp. 33–

    47). Monterey, CA: Brooks/Cole.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S.

    Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7-24). Chicago:

    Nelson-Hall.

Taylor, D. M., & McKirnan, D. J. (1984). Theoretical contributions: A five-stage model of

    intergroup relations. *British Journal of Social Psychology, 23*(4), 291–

    300. https://doi.org/10.1111/j.2044-8309.1984.tb00644.x

Taylor, S., Klein, L., Lewis, B., Gruenewald, T., Gurung, R., & Updegraff, J. (2000).

    Biobehavioral responses to stress in females: Tend-and- befriend, not fight-or-flight.

    Psychological Review, *107*, 411–429. https://doi.org/10.1037/0033-295x.107.3.411

Thompson, M., Kaslow, N., Kingree, J., Rashid, A., Puett, R., Jacobs, D., & Matthews, A.

    (2000). Partner Violence, Social Support, and Distress Among Inner-City African

    American Women. *American Journal Of Community Psychology*, *28*(1), 127-143.

    https://doi.org/10.1023/a:1005198514704

Tougas, F., & Beaton, A. M. (2002). Personal and group relative deprivation: Connecting the

    "I" to the "We". In I. Walker & H. J. Smith (Eds.), *Relative deprivation:*

    Specification, development and integration (pp. 119–135). New York, NY:

    Cambridge University Press.

Tropp, L. R. (2003). The psychological impact of prejudice: Implications for intergroup

    contact. *Group Processes & Intergroup Relations, 6*(2), 131–

    149. https://doi.org/10.1177/1368430203006002001

Vaccarino, E., & Kawakami, K. (2020). In the office or at the gym: The impact of

    confronting sexism in specific contexts on support for confrontation and perceptions

    of others. *Self and Identity*, 1–20. https://doi.org/10.1080/15298868.2020.1832566

van Breen, J. A., Spears, R., Kuppens, T., & de Lemus, S. (2018). Subliminal Gender

    Stereotypes: Who Can Resist? Personality and Social Psychology Bulletin, 44(12),

    1648–1663. https://doi.org/10.1177/0146167218771895

van Breen, J., Barreto, M., Darden, S., & Dimitriou, E. *Social affiliation following*

    experiences of sexism and sexual harassment at work (manuscript in preparation).

Van Coillie, H., & Van Mechelen, I. (2006). A Taxonomy of Anger-Related Behaviors in

    Young Adults. *Motivation and Emotion, 30*(1), 57–

    74. https://doi.org/10.1007/s11031-006-9000-6

van Dick, R., & Haslam, S. A. (2012). *Stress and well-being in the workplace: Support for key propositions from the social identity approach.* In J. Jetten, C. Haslam, & S. A. Haslam (Eds.), *The social cure: Identity, health and well-being* (p. 175–194). Psychology Press.

Van Laar, C., Meeussen, L., Veldman, J., Van Grootel, S., Sterk, N., & Jacobs, C. (2019). Coping With Stigma in the Workplace: Understanding the Role of Threat Regulation, Supportive Factors, and Potential Hidden Costs. *Frontiers in Psychology*, *10*. https://doi.org/10.3389/fpsyg.2019.01879

van Zomeren, M., Spears, R., Fischer, A. H., & Leach, C. W. (2004). Put Your Money Where Your Mouth Is! Explaining Collective Action Tendencies Through Group-Based Anger and Group Efficacy. *Journal of Personality and Social Psychology, 87*(5), 649–664. https://doi.org/10.1037/0022-3514.87.5.649

van Zomeren, M. (2013). Four Core Social-Psychological Motivations to Undertake Collective Action. *Social And Personality Psychology Compass*, *7*(6), 378-388. https://doi.org/10.1111/spc3.12031

Veldman, J., Van Laar, C., Meeussen, L., & Lo Bue, S. (2020). Daily Coping With Social Identity Threat in Outgroup-Dominated Contexts: Self-Group Distancing Among Female Soldiers. *Personality and Social Psychology Bulletin, 47(1)*, 118–130. https://doi.org/10.1177/0146167220921054

Verkuyten, M., & Yildiz, A. A. (2007). National (Dis)identification and Ethnic and Religious Identity: A Study Among Turkish-Dutch Muslims. *Personality and Social Psychology Bulletin, 33(10)*, 1448–1462. https://doi.org/10.1177/0146167207304276

Vorauer, J. D. (2006). An information search model of evaluative concerns in intergroup interaction. *Psychological Review, 113*(4), 862–886. https://doi.org/10.1037/0033-295X.113.4.862

Weiss, D., & Lang, F. R. (2012). "They" are old but "I" feel younger: Age-group dissociation as a self-protective strategy in old age. *Psychology and Aging*, *27*(1), 153–163. https://doi.org/10.1037/a0024887

Weiss, S. (2016, March 23). *4 Problems With How We're Talking About "Female Friendships."* Everyday Feminism. https://everydayfeminism.com/2016/03/female-friendship-trope/

Verniers, C., & Vala, J. (2018). Justifying gender discrimination in the workplace: The mediating role of motherhood myths. *PLOS ONE*, *13*(1), e0190657. https://doi.org/10.1371/journal.pone.0190657

Wessel, J. L., & Ryan, A. M. (2011). Supportive When Not Supported? Male Responses to Negative Climates for Women. *Sex Roles*, 66(1-2), 94–104. https://doi.org/10.1007/s11199-011-0058-6

Wetzer, I. M., Zeelenberg, M., & Pieters, R. (2007). "Never eat in that restaurant, I did!": Exploring why people engage in negative word-of-mouth communication. *Psychology and Marketing*, *24*(8), 661–680. https://doi.org/10.1002/mar.20178

Williams, J. H., Fitzgerald, L. F., & Drasgow, F. (1999). The effects of organizational practices on sexual harassment and individual outcomes in the military. *Military Psychology*, 11(3), 303–328. https://doi.org/10.1207/s15327876mp1103_6

Willness, C. A., Steel, P., & Lee, K. (2007). A meta-analysis of the antecedents and consequences of workplace sexual harassment. *Personnel Psychology*, *60*, 127–162. https://doi. org/10.1111/j.1744-6570.2007.00067.x

Wood, J., Hogle, A., & McClellan, J. (2009). Self-esteem, effects on relationships. In H. T. Reis, & S. Sprecher (Eds.), *Encyclopedia of human relationships* (pp. 1423-1425). SAGE Publications, Inc., https://www.doi.org/10.4135/9781412958479.n464

Woodzicka, J. A., & LaFrance, M. (2001). Real versus imagined gender harassment. *Journal of Social Issues, 57*(1), 15–30. https://doi.org/10.1111/0022-4537.00199

Woodzicka, J. A., & LaFrance, M. (2005). The Effects of Subtle Sexual Harassment on Women's Performance in a Job Interview. *Sex Roles*, *53*(1-2), 67–77. https://doi.org/10.1007/s11199-005-4279-4

Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990). Responding to membership in a disadvantaged group: From acceptance to collective protest. *Journal of Personality and Social Psychology, 58*(6), 994–1003. https://doi.org/10.1037/0022-3514.58.6.994

Wright, S. C., & Tropp, L. R. (2002). Collective action in response to disadvantage: Intergroup perceptions, social identification, and social change. In I. Walker & H. J. Smith (Eds.), *Relative deprivation: Specification, development, and integration* (p. 200–236). Cambridge University Press.

Yip, T., Douglass, S., & Shelton, J. (2013). Daily Intragroup Contact in Diverse Settings: Implications for Asian Adolescents' Ethnic Identity. *Child Development*, *84*(4), 1425-1441. https://doi.org/10.1111/cdev.12038

Zapf, D., Knorz, C., & Kulla, M. (1996). On the relationship between mobbing factors, and job content, social work environment, and health outcomes. *European Journal of Work and Organisational Psychology*, *5*, 215–237. https://doi.org/10.1080/13594329608414856

Zhang, M., Barreto, M., & Doyle, D. (2020). Stigma-Based Rejection Experiences Affect Trust in Others. Social Psychological and Personality Science, 11(3), 308–316. https://doi.org/10.1177/1948550619829057

Zohar, D. M., & Hofmann, D. A. (2012). Organizational culture and cli- mate. In S. W. J. Kozlowski (Ed.), *Oxford library of psychology. The Oxford handbook of organizational psychology* (pp. 643–666). Oxford, UK: Oxford University Press.

APPENDICES

Appendix A: Materials Used in Study 1 with Full Wording

Study: Workplace experiences
School of Psychology, University of Exeter

This questionnaire takes about 20 minutes to complete and asks about your experiences. As such, there are no right or wrong answers to these questions—what matters to us is your opinion.

This study has been reviewed and approved by the School of Psychology Ethics Review Board. It is not foreseen that the study will cause you any harm. However, some questions pertain to rather sensitive topics. You do not have to answer any questions that you would rather not answer however, if you leave questions unanswered we will not be able to use your responses, so please do try to answer all questions. Note also that all your answers are anonymous and all data collected will be treated confidentially. We will not look at individual answers to the questionnaire, we will only analyse the data as a whole. All data will be stored electronically (in encrypted format) and will only be used for research purposes.

Different questions in this questionnaire have slightly different formats, so please read the instructions carefully. For most questions we provide a series of response alternatives which we ask you to select. In some cases, there is a space to elaborate on your answers, if you so wish. If you choose to do so, please try to write clearly.

Upon completion of this study, you will be provided with more information regarding the aims and expected outcomes of this research. If you have further questions or concerns regarding your participation in this study, or if you wish to receive a brief summary of the results of this study at a later point in time, please contact Dr Safi Darden at s.darden@exeter.ac.uk.

Your participation in this study is very valuable to us but it is completely voluntary and can be discontinued at any time. If you agree to participate, please tick the box below and turn the page to start answering the questionnaire.

□ I have read the information on this form and agree to participate in this study.

INSTRUCTIONS: The questions that follow regard experiences you may have had **at work with supervisors or co-workers**. You may also have had experiences like this outside work, however, for the next few questions, please think about and indicate only the experiences you have had in the work context.

For each question, please first indicate how often you have been in each of these situations **in the past 6 months**. Next, if a situation has occurred at least once, please respond to the associated question to indicate how you experienced it. If the situation has occurred **more than once**, please focus on only one instance when responding to the associated question.

Participants are then given questions based on either sexual or non-sexual experience

INSTRUCTIONS: during the past 6 months, have you been in a situation where anyone at work:

Please circle the appropriate number to indicate your response.

	How often?					How did you experience it?				
	Never	Once or twice	A few times	Several times	Most of the time	Very negative	Somewhat negative	Neutral	Somewhat positive	Very positive
Tried to draw you into discussions of sexual matters?	0	1	2	3	4	0	1	2	3	4
Told sexual stories or jokes?	0	1	2	3	4	0	1	2	3	4
Displayed, used, or distributed sexual materials (for example, pictures, stories, or pornography) to you?	0	1	2	3	4	0	1	2	3	4
Gave you sexual attention?	0	1	2	3	4	0	1	2	3	4
Attempted to establish a romantic or sexual relationship despite your efforts to discourage it?	0	1	2	3	4	0	1	2	3	4
Pressured you to "play along" with sexual jokes and behaviour?	0	1	2	3	4	0	1	2	3	4
Made you feel you needed to flirt with them to be treated well?	0	1	2	3	4	0	1	2	3	4
Touched your face, butt, thigh, or another "private" part of your body?	0	1	2	3	4	0	1	2	3	4
Exposed a private part of their body?	0	1	2	3	4	0	1	2	3	4
Forced themselves on you sexually?	0	1	2	3	4	0	1	2	3	4
Indicated there might be some reward or special treatment if you agreed to engage in sexual behaviour?	0	1	2	3	4	0	1	2	3	4
Made you afraid that you would be penalized if you did not agree to engage in sexual behaviour?	0	1	2	3	4	0	1	2	3	4
Treated you badly for refusing to have sexual relations with them?	0	1	2	3	4	0	1	2	3	4

*Non sexualized

	How often?					How did you experience it?				
	Never	Once or twice	A few times	Several times	Most of the time		Very negative	Somewhat negative	Neutral	Somewhat positive	Very positive
Did not take what you said seriously because you are a woman?	0	1	2	3	4		0	1	2	3	4
Assumed you had inferior ability (e.g., in maths or science) because you are a woman?	0	1	2	3	4		0	1	2	3	4
Assumed that you had certain preferences (e.g., stop working when you have children) because you are a woman?	0	1	2	3	4		0	1	2	3	4
Made comments about your traits, abilities, or preferences that are in line with stereotypes about women (e.g., being emotional or enjoying certain types of films?)	0	1	2	3	4		0	1	2	3	4
Excluded you from specific activities because of being a woman (e.g., not inviting you to the pub?)	0	1	2	3	4		0	1	2	3	4
Expressed disapproval because you behaved in ways that were inconsistent with stereotypes about women (e.g., because you behaved assertively)?	0	1	2	3	4		0	1	2	3	4
Made derogatory jokes about women (e.g., implying that women are not as bright as men)?	0	1	2	3	4		0	1	2	3	4
Expressed hostility towards women (e.g., stating that women want to control men)?	0	1	2	3	4		0	1	2	3	4
Did not give you a good assignment, a job, a raise, a promotion, or other such things at work because you are a woman?	0	1	2	3	4		0	1	2	3	4
Was violent towards you because you are a woman (e.g., spoke aggressively, called you names, pushed, shoved, hit, or threatened with harm)?	0	1	2	3	4		0	1	2	3	4
Treated you unfairly because you are a woman (e.g., did not give the same chances as given to a man)?	0	1	2	3	4		0	1	2	3	4

*Non sexualized

INSTRUCTIONS: Please share with us **ONE of your most recent**, of the
experiences at work you were asked about in the previous section. Describe, for example,
where it happened, how many people were involved, what the person/people said or did and
how you responded:

[AFFECT SCALE}

INSTRUCTIONS: Reflecting on the experience you described on the previous page, please
indicate how it made you feel.

	Not Extremely		at		all
Worthless	1	2	3	4	5
Fine	1	2	3	4	5
Worried	1	2	3	4	5
Embarrassed	1	2	3	4	5
Angry					
Calm	1	2	3	4	5
Disappointed in myself	1	2	3	4	5
Discouraged	1	2	3	4	5
Humiliated	1	2	3	4	5
Blue	1	2	3	4	5
Inferior to others	1	2	3	4	5
Sad	1	2	3	4	5
Hostile					
Pleased with myself	1	2	3	4	5
Irritated	1	2	3	4	5
Mortified	1	2	3	4	5
Ashamed	1	2	3	4	5
Depressed	1	2	3	4	5
Mad					
Fearful	1	2	3	4	5
Proud	1	2	3	4	5
Like a failure	1	2	3	4	5
Secure	1	2	3	4	5
Scornful					

[PERSONAL SELF-ESTEEM]

INSTRUCTIONS: The next questions inquire about how you feel at this current point in time. Of course your feelings change frequently, but for the next questions please try to think about **how you are feeling right now**

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I feel that I am a person of worth, at least on an equal plane with others.	1	2	3	4	5
I feel I do not have much to be proud of.	1	2	3	4	5
I feel satisfied with myself.	1	2	3	4	5
I feel inadequate because I am a woman	1	2	3	4	5
I feel that most people consider women to be ineffective	1	2	3	4	5
I wish I had more respect for myself.	1	2	3	4	5
I feel that being a woman is an important part of who I am	1	2	3	4	5
I feel a bit like I am a failure.	1	2	3	4	5
I feel good about being a woman	1	2	3	4	5
I feel a bit useless.	1	2	3	4	5
I feel that being a woman is an important part of my self-image	1	2	3	4	5
I feel that I have a number of good qualities.	1	2	3	4	5
I feel that women are generally respected by others	1	2	3	4	5
I have a positive attitude toward myself.	1	2	3	4	5
I feel that I am no good at all.	1	2	3	4	5
I feel I am able to do things as well as most people.	1	2	3	4	5

[ORGANSIATIONAL TOLERANCE OF SEXISM/SEXUAL HARASSMENT]

INSTRUCTIONS: Please indicate to what extent each of the following sentences applies to your workplace.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Unequal treatment of men and women is clearly discouraged in my workplace (including stereotypical comments or jokes	1	2	3	4	5
Sexual harassment is clearly discouraged by my supervisors and co-workers (including sexual innuendo and materials)	1	2	3	4	5
People at my work ignore the unequal treatment of women when it happens	1	2	3	4	5
People at my work ignore sexual harassment when it happen	1	2	3	4	5
There are formal procedures to address the unequal treatmen of women at my workplace	1	2	3	4	5
There are formal procedures to address sexually harassing behaviour at my workplace	1	2	3	4	5
When women are treated unequally in my workplace this is corrected	1	2	3	4	5
When women are sexually harassed in my workplace this is addressed	1	2	3	4	5

[DEMOGRAFICS]

INSTRUCTIONS: We would finally like to ask you some demographic information.

- How old are you? (circle as appropriate)

  18- 24   25-34   35-44   45-54   55+

- Please indicate the last level of education you have completed, including any qualification you are currently studying towards:

- Occupation:

- Have you changed jobs in the last 6 months? YES/NO

- Please estimate the number of people that work in your *organisation as a whole*. (Circle as appropriate):
  0-5   6-10   11-20 21-50 51-100   101-500   500-1000   more than 1000

- Please estimate the number of people that work in your *branch or immediate workgroup.* (circle as appropriate):
  0-5   6-10   11-20 21-50 51-100   101-500   500-1000   more than 1000

- Please estimate the percentage of women in your *branch or immediate workgroup.* (circle as appropriate):
  0-20%   21-40%   41-60%   61-80%   81-100%

- How many people do you supervise?
  0   1-5   6-10   11-15   15+

- What is your Nationality?
- How would you describe your ethnicity?

Please use the following space to add any related information you may wish to add.

Appendix B: Materials Used in Study 2 with Full Wording

Workplace Experience

[Information Sheet]

Welcome **Workplace Experience**   This questionnaire asks about your experiences and your social relationships at work. The study will take approximately 20 minutes to complete. The study has been reviewed and approved by the Psychology Ethics Committee at the University of Exeter.

Participation involves answering some questions about your experiences in the workplace, as well as some demographic information (e.g., age, nationality, etc.). Different questions in this questionnaire have slightly different formats, so please read the instructions carefully. For most questions we provide a series of response alternatives, from which we ask you to select. In some cases, there is a space to elaborate on your answers if you so wish. There are no right or wrong answers to these questions, what interests us is your opinion. These questions are not of an intimate nature and we do not expect that participating in this study will cause any distress.

Participation in this study is completely voluntary and you may withdraw participation at any time, without giving a reason or losing your right to compensation. You do not have to answer any questions that you would rather not answer. In exchange for your participation, you will receive £ 2.00.

We will collect data that could, under some circumstances, be traced back to you (your Prolific ID). The reason we collect this data is that we need it to be able to pay you. Once the payment is complete, we will delete this ID number from our data set so that data are fully anonymised. Any responses you give in this study will be treated confidentially by the research team and will be analysed in aggregate form, that is, as averages of the complete sample of participants who responded to this questionnaire. All data will be stored on a password-protected computer for 7 years in accordance with the EU General Data Protection Regulations (GDPR). The online servers, Qualtrics, used to store the data associated with this project   are   also   GDPR   compliant.

The University of Exeter processes personal data for the purposes of carrying out research in the public interest. The University will endeavor to be transparent about its processing of your personal data and this information sheet should provide a clear explanation of this. If you do have any queries about the University's processing of your personal data that cannot be resolved by the research team, further information may be obtained from the University's Data   Protection   Officer   by   emailing   dataprotection@exeter.ac.uk or at www.exeter.ac.uk/dataprotection

The research data may be looked at by members of the research team, individuals from the University of Exeter, where it is relevant to this research. Anonymized responses may also be shared   with   other   researchers   for   use   in   future   research   projects.

If you have any questions or comments about this study, please feel free to contact Esma Ciftci   (PhD   Candidate)   at   ec432@exeter.ac.uk   or   Prof   Manuela   Barreto

at m.barreto@exeter.ac.uk . If you have any ethical concerns regarding this study, please contact the Chair of the School of Psychology's Ethics Committee, Dr Nick Moberly at N.J.Moberly@exeter.ac.uk .

[Consent Form]

Please read each of the sentences below and click the box if they are true of you. If they are, you will be able to proceed with the study. If they are not, that means that you do not provide consent to participate and you will be directed out of this page.

☐   I understand that my participation in this study is completely voluntary and that I am free to withdraw at any time without giving any reason and without my legal rights being affected. (1)

☐   I understand that taking part involves anonymized questionnaire responses to be used for the purposes of scientific research. This includes allowing the research team to perform data analyses and to share the results of these analyses in public presentations and scientific publications. (2)

☐   I understand that my data might be publicly shared, if that is required on a future occasion, but that if this is done I will remain completely anonymous. (3)

☐   I confirm that I have read the information about this project. I have had the opportunity to consider the information and freely choose to participate in this study. (4)

☐   I understand that my Prolific ID number will be stored in an online server, Qualtrics, until I will receive payment for my participation. The researcher, Esma Ciftci, can access my Prolific ID number to be able to pay. Once the payment is complete, my Prolific ID will be deleted from the data set that data are fully anonymised. (5)

Experience of Sexism]

The questions that follow regard experiences you may (or not) have had at work. You may also have had experiences like this outside work, however, for the next few questions, please think about and indicate only experiences you have had **in the work context**. For each question, please indicate how often you have been in each of these situations **in the past 6 months**.

SEQ During the last 6 months, have you been in a situation where anyone at work:

	Never (1)	Once or twice (2)	A few times (3)	Several times (4)	Most of the time (5)
1. Did not take what you said seriously because you are a woman?	○	○	○	○	○
2. Assumed you had inferior ability (e.g., in maths or science) because you are a woman?	○	○	○	○	○
3. Assumed that you had certain preferences (e.g., to stop working when you have children) because you are a woman?	○	○	○	○	○
4. Made comments about your traits, abilities, or preferences that are in line with stereotypes about women (e.g., being emotional or enjoying certain types of films)?	○	○	○	○	○
5. Excluded you from specific activities because of being a woman (e.g., not inviting you to the pub)?	○	○	○	○	○
6. Expressed disapproval because you behaved in ways that were inconsistent with stereotypes about women (e.g., because you behaved assertively)?	○	○	○	○	○
7. Made derogatory jokes about women (e.g., implying that women are not as bright as men)?	○	○	○	○	○
8. Expressed hostility towards women (e.g., stating that women want to control men)?	○	○	○	○	○
9. Did not give you a good assignment, a job, a raise, a promotion, or other such things at work because you are a woman?	○	○	○	○	○
10. Was violent towards you because you are a woman (e.g., spoke aggressively, called you names, pushed, shoved, hit, or threatened with harm)?	○	○	○	○	○
11. Treated you unfairly because you are a woman (e.g., did not give the same chances as given to a man)?	○	○	○	○	○

[Personal Self-Esteem]

PSE Below is a list of statements dealing with your feelings about yourself. These feelings are likely to vary from time to time. We are interested in how you feel **right now**—not in how you normally feel. Please indicate how strongly you agree or disagree with each statement on the scale provided, where 1 = strongly disagree and 5 = strongly agree

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
1. On the whole, I am satisfied with myself.	○	○	○	○	○
2. At times I think I am no good at all.	○	○	○	○	○
3. I feel that I have a number of good qualities.	○	○	○	○	○
4. I am able to do things as well as most other people.	○	○	○	○	○
5. I feel I do not have much to be proud of.	○	○	○	○	○
6. I certainly feel useless at times.	○	○	○	○	○
7. I feel that I'm a person of worth, at least on an equal plane with others.	○	○	○	○	○
8. I wish I could have more respect for myself.	○	○	○	○	○
9. All in all, I am inclined to feel that I am a failure.	○	○	○	○	○
10. I take a positive attitude toward myself.	○	○	○	○	○

[AFFECT]

The following questions are about how you feel **right now**. This includes positive and negative emotions that you might be experiencing to varying degrees. Please indicate to what extent you are experiencing each emotion on a scale from 1 to 5, with 1 = not at all and 5 = extremely. Please do not think too long about each answer—what matters to us is your first impression.

	Not at all (1)	2	3	4	Extremely (5)
1. Worthless	○	○	○	○	○
2. Fine	○	○	○	○	○
3. Worried	○	○	○	○	○
4. Embarrassed	○	○	○	○	○
5. Angry	○	○	○	○	○
6. Calm	○	○	○	○	○
7. Disappointed in myself	○	○	○	○	○
8. Discouraged	○	○	○	○	○
9. Humiliated	○	○	○	○	○
10. Blue	○	○	○	○	○
11. Inferior to others	○	○	○	○	○
12. Sad	○	○	○	○	○
13. Hostile	○	○	○	○	○

14. Pleased with myself   ○   ○   ○   ○   ○

15. Irritated   ○   ○   ○   ○   ○

16. Mortified   ○   ○   ○   ○   ○

17. Ashamed   ○   ○   ○   ○   ○

18. Depressed   ○   ○   ○   ○   ○

19. Mad   ○   ○   ○   ○   ○

20. Fearful   ○   ○   ○   ○   ○

21. Proud   ○   ○   ○   ○   ○

22. Like a failure   ○   ○   ○   ○   ○

23. Secure   ○   ○   ○   ○   ○

24. Scornful   ○   ○   ○   ○   ○

[Tolerance of Sexism]

Now we will ask you some questions about your co-workers, your managers, and policies in your workplace, separately.

By **'co-workers'** we refer to people with whom you work, typically someone in a similar role or at a similar level within your organization.

By **'manager'** we refer to a person responsible for your team, group or department at work. For example, they could be the head of your department, your line manager, or your employer.

When referring to **'policies'**, we are referring to a set of principles, rules, and guidelines formulated or adopted by your organization to reach its long-term goals and typically published in a booklet, online, or in another form that is widely accessible.

Co-workers tolerance]

As indicated, we will start by asking you some questions about your current **co-workers**. Please indicate to what extent each of the following statements reflects how your **co-workers** think, on the scale provided, where 1 = strongly disagree and 5 = strongly agree.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
1. My **co-workers** clearly discourage the unequal treatment of men and women in my workplace (including stereotypical comments or jokes)	○	○	○	○	○
2.My **co-workers** ignore the unequal treatment of women when it happens	○	○	○	○	○
3. My **co-workers** take formal procedures seriously to address the unequal treatment of women at my workplace	○	○	○	○	○
4. When women are treated unequally in my workplace, my **co-workers** try to do something to address it.	○	○	○	○	○

[Manager tolerance]

Now we will ask you some questions about **your current manager**. Please indicate to what extent each of the following statements reflects **your manager** on the scale provided, where 1 = strongly disagree and 5 = strongly agree

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
1. My **manager** clearly discourages the unequal treatment of men and women in my workplace (including stereotypical comments or jokes)	○	○	○	○	○
2. My **manager** ignores the unequal treatment of women when it happens	○	○	○	○	○
3. My **manager** takes formal procedures seriously to address the unequal treatment of women at my workplace	○	○	○	○	○
4. When women are treated unequally in my workplace, my **manager** tries to do something to address it.	○	○	○	○	○

[Policy level tolerance]

The following questions are about **policies in your workplace**. Please indicate to what extent each of the following statements reflects **policies in your workplace** on the scale provided, where 1 = strongly disagree and 5 = strongly agree.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Policies at my work clearly aim to discourage the unequal treatment of men and women in my workplace (including stereotypical comments or jokes) (1)	○	○	○	○	○
Policies at my work do not cover the unequal treatment of women (2)	○	○	○	○	○
Policies at my work include formal procedures to address the unequal treatment of women at my workplace (3)	○	○	○	○	○
Policies at my work outline how to proceed when women are treated unequally in my workplace. (4)	○	○	○	○	○

[Friendship with female co-workers]

Below is a list of statements about your relationships with your **FEMALE** co-workers. Now please think about your relationship with your **FEMALE** co-workers. Please indicate how

strongly you agree or disagree with each statement on the scale provided, where 1 = strongly disagree and 5 = strongly agree.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
1. I have the opportunity to get to know my **FEMALE** co-workers.	○	○	○	○	○
2. I am able to work with my **FEMALE** co-workers to collectively solve problems.	○	○	○	○	○
3. In my organization, I have the chance to talk informally and visit with other **FEMALE** co-workers.	○	○	○	○	○
4. Communication among **FEMALE** employees is encouraged by my organization.	○	○	○	○	○
5. I have the opportunity to develop close friendships with my **FEMALE** co-workers at my workplace.	○	○	○	○	○
6. Informal talk with my **FEMALE** co-workers is tolerated by my organization as long as the work is completed.	○	○	○	○	○
7. I have formed strong friendships with my **FEMALE** co-workers at work.	○	○	○	○	○
8. I socialize with my **FEMALE** co-workers outside of the workplace.	○	○	○	○	○
9. I can confide in **FEMALE** co-workers at work.	○	○	○	○	○
10. I feel I can trust many **FEMALE** co-workers a great deal.	○	○	○	○	○
11. Being able to see my **FEMALE** co-workers is one reason why I look forward to my job.	○	○	○	○	○
12. I do not feel that any **FEMALE** co-workers I work with is a true friend.	○	○	○	○	○

[Team-member exchange with female co-workers]
Now please think again about your relationship with your **FEMALE** co-workers. For each question, please indicate how often you have been in each of these situations at work on a scale from 1 (never) to 5 (always).

	Never (1)	2	3	4	Always (5)
1. How often do you make suggestions about better work methods to **female** members of your team?	○	○	○	○	○
2. Do other **female** members of your team usually let you know when they have done something that makes their jobs easier?	○	○	○	○	○
3. How often do you let other **female** members of your team know when they have done something that makes your job easier?	○	○	○	○	○
4. How well do other **female** members of your team recognize your potential?	○	○	○	○	○
5. How well do other **female** members of your team understand your problems and needs?	○	○	○	○	○
6. How flexible are you about switching job responsibilities to make things easier for other **female** members of your team?	○	○	○	○	○
7. In busy situations, how often do other **female** members of your team ask you to help out?	○	○	○	○	○
8. In busy situations, how often do you volunteer your efforts to help other **female** members on your team?	○	○	○	○	○
9. How willing are you to help finish work that had been assigned to other **female** members of your team?	○	○	○	○	○
10. How willing are other **female** members of your team to help finish work that was assigned to you?	○	○	○	○	○

[Demographics]

How old are you?

What is your country of birth?

What is the highest degree or level of school you have completed? (If you're currently enrolled in school, please indicate the highest degree you have *received*.)

Less than a high school diploma (1)
High school degree or equivalent (e.g. GED) (2)
Some college, no degree (3)
Associate degree (e.g. AA, AS) (4)
Bachelor's degree (e.g. BA, BS) (5)
Master's degree (e.g. MA, MS, MEd) (6)
Professional degree (e.g. MD, DDS, DVM) (7)
Doctorate (e.g. PhD, EdD) (8)

What is your occupation?
What is your current employment status?   Full time (1)   Part time (2)

Do you manage staff at your workplace? yes (1) no (2)

How long have you been working in your current workplace?
Less than 6 months (1)   Between 6 months and a year (2)   more than a year (3)

Please estimate the number of people that work in your *organisation as a whole*.

1.   0-5 (1)
2.   6-10 (2)
3.   11-20 (3)
4.   21-50 (4)
5.   51-100 (5)
6.   101-500 (6)
7.   500-1000 (7)
8.   more than 1000 (8)

Please estimate the number of people that work in your branch or immediate workgroup.
1.   0-5 (1)
2.   6-10 (2)
3.   11-20 (3)
4.   21-50 (4)
5.   51-100 (5)
6.   101-500 (6)
7.   500-1000 (7)
8.   more than 1000 (8)

Please estimate the percentage of women in your ***branch or immediate workgroup.***
   1. 0-20% (1)
   2. 21-40% (2)
   3. 41-60% (3)
   4. 61-80% (4)
   5. 81-100% (5)

What is your manager's gender?
   1. Male (1)
   2. Female (2)
   3. Transgender male (3)
   4. Transgender female (4)
   5. Non-binary (5)
   6. Other (6)

Please use the following space to add any related information you may wish to add.

[Debrief]

This page explains a little more about the goals of this study and what we expect to find. Our goal in this study is to understand how experiences with gender discrimination and intolerance of sexism in the workplace can affect women's relationships at work. Therefore, only women who are currently employed were asked to participate in this study. As you may have noticed, the questionnaire included questions about your relationships to other people at work as well as questions about your experiences with being treated in a sexist way. We expect to find that your experiences with gender discrimination are negatively associated with your relationships with others. We also expect to find that this happens because experiences with gender discrimination create a psychological state that impairs social relationships, i.e., lowering self-esteem, and eliciting depression and anxiety. We realise that for some participants answering these questions may have been somewhat distressing. We sincerely appreciate your willingness to participate despite that potential distress and assure you that your effort will not be in vain: it will be used to improve the understanding of women's experiences at work and ultimately to improve the systems we implement to counteract these experiences. Below you can find a list of resources that provide more information about gender equality in the workplace and how discrimination can be addressed.

If you have further questions or concerns regarding your participation in this study, or if you wish to receive a brief summary of the results of this study at a later point in time, please contact Esma Ciftci (PhD Candidate) at ec432@exeter.ac.uk or Prof Barreto at m.barreto@exeter.ac.uk. If you have any ethical concerns regarding this study, please contact the Chair of the School of Psychology's Ethics Committee, Dr. Nick Moberly at N.J.Moberly@exeter.ac.uk . Again, thank you for your participation.

RESOURCES FOR FURTHER INFORMATION ON GENDER EQUALITY AND DISCRIMINATION AT WORK
Below you can find a list of online and offline resources that provide more information about bullying, harassment, or discrimination at work, or how to cope with these experiences.

1. GOV.UK
Information on workplace bullying and harassment is available at: https://www.gov.uk/workplace-bullying-and-harassment

2. Employee Assistance Professional Association (EAPA)
Employee assistance programmes are counselling services provided and paid for by the employer and are free to the employee. For information on Employee Assistance Programmes please call 0800 783 7616.

3. Acas Helpline (Advisory, Conciliation and Arbitration Service)
For confidential and impartial advice on diversity in employment and employment related issues please call 08457 47 47 47. If you are based in Northern Ireland, please call 028 9032 1442. For an employee's guide to Bullying and Harassment at work please visit http://www.acas.org.uk/CHttpHandler.ashx?id=306&p=0 For general information please visit http://www.acas.org.uk

4. Monster Career advice
To check work related problems: https://www.monster.co.uk/careeradvice/worklife/workplace-problems

5. Equality and Human Rights Commission
If you need expert information, advice, and support on discrimination, please call 0800 800 0082 Please visit www.equalityhumanrights.com for further information.

6. Additional advice can be obtained through:
Your trade union (if you are a member of one), Legal advisers: Citizens Advice Bureaux.

Appendix C: Materials Used in Study 3 and 4 with Full Wording

Workplace Experience Experimental Study

<div align="center">

Session 1

</div>

[Information about study]

This questionnaire asks about your experiences at work. The study will take approximately 5 minutes to complete. The study has been reviewed and approved by the Psychology Ethics Committee at the University of Exeter.

Participation involves answering some questions about your experiences in the workplace, as well as some demographic information (e.g., age, nationality, etc.). Different questions in this questionnaire have slightly different formats, so please read the instructions carefully. For most questions we provide a series of response alternatives, from which we ask you to select. In some cases, there is a space to elaborate on your answers. There are no right or wrong answers to these questions, what interests us is your opinion.

Some participants might be asked to recall an unpleasant experience and that might temporarily elicit some negative feelings. Please note that participation in this study is completely voluntary and you may withdraw participation at any time, without giving a reason, without any prejudice and without losing your right to compensation. If you do withdraw, you will be directed to the end page of the study, where more explanations are provided. You do not have to answer any questions that you would rather not answer. You also are able to withdraw your data after you submit your answers, but before you receive payment, without losing your right to compensation. If you would like to withdraw after participation, please message the researcher, Esma Ciftci, through Prolific, stating that you would like to withdraw your data. In exchange for your participation, you will receive £ 0.50.

We will collect data that could, under some circumstances, be traced back to you (your Prolific ID). The reason we collect this data is that we need it to be able to pay you. However, once the payment is complete, we will delete this ID number from our data set so that data are fully anonymised. Researchers will have no access to any other data about you through your prolific ID. Any responses you give in this study will be treated confidentially by the research team and will be analysed in aggregate form, that is, as averages of the complete sample of participants who responded to this questionnaire. All data will be stored on a password-protected computer for 7 years in accordance with the EU General Data Protection Regulations (GDPR). The online servers, Qualtrics, used to store the data associated with this project are also GDPR compliant.

The University of Exeter processes personal data for the purposes of carrying out research in the public interest. The University will endeavour to be transparent about its processing of your personal data and this information sheet should provide a clear explanation of this. If you do have any queries about the University's processing of your personal data that cannot be resolved by the research team, further information may be obtained from the University's Data Protection Officer by emailing dataprotection@exeter.ac.uk or at www.exeter.ac.uk/dataprotection. The research data may be looked at by members of the research team, individuals from the University of Exeter, where it is relevant to this research. Anonymized responses may also be shared with other researchers for use in future research projects.

If you have any questions or comments about this study, please feel free to contact Esma Ciftci (PhD Candidate) at ec432@exeter.ac.uk, or Prof Manuela Barreto at m.barreto@exeter.ac.uk. If you have any ethical concerns regarding this study, please contact the Chair of the School of Psychology's Ethics Committee, Dr Nick Moberly at N.J.Moberly@exeter.ac.uk .

[Consent]

Please read each of the sentences below and click the box if they are true of you. If they are, you will be able to proceed with the study. If they are not, that means that you do not provide consent to participate and you will be directed out of this page.

☐   I understand that my participation in this study is completely voluntary and that I am free to withdraw at any time without giving any reason and without my legal rights being affected.

☐   I understand that taking part involves anonymized questionnaire responses to be used for the purposes of scientific research. This includes allowing the research team to perform data analyses and to share the results of these analyses in public presentations and scientific publications.

☐   I understand that my data might be publicly shared, if that is required on a future occasion, but that if this is done I will remain completely anonymous.

☐   I confirm that I have read the information about this project. I have had the opportunity to consider the information and freely choose to participate in this study.

☐   I understand that my Prolific ID number will be stored in an online server, Qualtrics, until I will receive payment for my participation. The researcher, Esma Ciftci, can access my Prolific ID number to be able to pay. Once the payment is complete, my Prolific ID will be deleted from the data set that data are fully anonymised.

[Prolific ID]

Prolific Please enter your Prolific ID
It is important that you enter your prolific ID correct for us to be able to make a payment to you at the end of the study. Please enter your full Prolific ID.

_____

[Demographics]

How old are you?

What is your country of birth?

What is the highest degree or level of school you have completed? (If you're currently enrolled in school, please indicate the highest degree you have *received*.)

1. Less than a high school diploma (1)

2. High school degree or equivalent (e.g. GED) (2)

3. Some college, no degree (3)

4. Associate degree (e.g. AA, AS) (4)

5. Bachelor's degree (e.g. BA, BS) (5)

6. Master's degree (e.g. MA, MS, MEd) (6)

7. Professional degree (e.g. MD, DDS, DVM) (7)

8. Doctorate (e.g. PhD, EdD) (8)

What is your occupation?

_____

What is your current employment status? Full time (1)   Part time (2)

Do you manage staff at your workplace? yes (1)   no (2)

How long   have you been working in your current workplace?

1. Less than 6 months (1)

2. Between 6 months and a year (2)

3. more than a year (3)

Please estimate the number of people that work in your ***organisation*** *as a whole.*

0-51 (1)

0-5 6-10 (2)

11-20 (3)

21-50 (4)

51-100 (5)

101-500 (6)

500-1000 (7)

more than 1000 (8)

Please estimate the number of people that work in your *branch or immediate workgroup.*
  0-5 (1)
  6-10 (2)
  11-20 (3)
  21-50 (4)
  51-100 (5)
  101-500 (6)
  500-1000 (7)
  more than 1000 (8)

Please estimate the percentage of women in your *branch or immediate workgroup.*
  0-20% (1)
  21-40% (2)
  41-60% (3)
  61-80% (4)
  81-100% (5)

What is your manager's gender?
  Male (1)
  Female (2)
  Transgender male (3)
  Transgender female (4)
  Non-binary (5)
  Other (6)

[Tolerance of Sexism]

Now we will ask you some questions about your co-workers, your managers, and policies in your workplace, separately.

By **'co-workers'** we refer to people with whom you work, typically someone in a similar role or at a similar level within your organization.
By **'manager'** we refer to a person responsible for your team, group or department at work. For example, they could be the head of your department, your line manager, or your employer.

When referring to **'policies'**, we are referring to a set of principles, rules, and guidelines formulated or adopted by your organization to reach its long-term goals and typically published in a booklet, online, or in another form that is widely accessible.

[Co-workers tolerance]

As indicated, we will start by asking you some questions about your current **co-workers**. Please indicate to what extent each of the following statements reflects how your **co-workers** think, on the scale provided, where 1 = strongly disagree and 5 = strongly agree.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
1. My **co-workers** clearly discourage the unequal treatment of men and women in my workplace (including stereotypical comments or jokes)	○	○	○		○
2. My **co-workers** ignore the unequal treatment of women when it happens	○	○	○		○
3. My **co-workers** take formal procedures seriously to address the unequal treatment of women at my workplace	○	○	○		○
4. When women are treated unequally in my workplace, my **co-workers** try to do something to address it.	○	○	○		○

[Manager tolerance]

Now we will ask you some questions about **your current manager**. Please indicate to what extent each of the following statements reflects **your manager** on the scale provided, where 1 = strongly disagree and 5 = strongly agree

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
1. My **manager** clearly discourages the unequal treatment of men and women in my workplace (including stereotypical comments or jokes)	O	O	O		O
2. My **manager** ignores the unequal treatment of women when it happens	O	O	O		O
3. My **manager** takes formal procedures seriously to address the unequal treatment of women at my workplace	O	O	O		O
4. When women are treated unequally in my workplace, my **manager** tries to do something to address it.	O	O	O		O

[Policy level tolerance]

The following questions are about **policies in your workplace**. Please indicate to what extent each of the following statements reflects **policies in your workplace** on the scale provided, where 1 = strongly disagree and 5 = strongly agree.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
1. **Policies** at my work clearly aim to discourage the unequal treatment of men and women in my workplace (including stereotypical comments or jokes)	○	○	○		○
2. **Policies** at my work do not cover the unequal treatment of women	○	○	○		○
3. **Policies** at my work include formal procedures to address the unequal treatment of women at my workplace	○	○	○		○
4. **Policies** at my work outline how to proceed when women are treated unequally in my workplace.	○	○	○		○

[Sexual Minorities-perceived discrimination]

The questions that follow regard experiences you may (or not) have had at work. You may also have had experiences like this outside work, however, for the next few questions, please think about and report only on experiences you have had in the work context. For each question, please indicate how often you have been in each of these situations in the past 6 months on the scale provided, where 1=never and 5=most of the time. During the last 6 months:

	Never (1)	Once or twice (2)	A few times (3)	Several times (4)	Most of the time (5)
1. At work, you are called names or insulted because of your sexual orientation.					
2. At work, you are threatened or harassed because of your sexual orientation					
3. At work, you hear people use gay slurs (e.g. fag, dyke)					
4. You see other people get harassed because of their sexual orientation.					

[WADS]

The questions that follow regard experiences you may (or not) have had at work. You may also have had experiences like this outside work, however, for the next few questions, please think about and indicate only experiences you have had in the work context. For each question, please indicate how often you have been in each of these situations in the past 6 months on the scale provided, where 1=never and 5=most of the time. During the last 6 months:

	Never (1)	Once or twice (2)	A few times (3)	Several times (4)	Most of the time (5)
1.I have been passed over for a work role/task due to my age.					
2. My contributions are not valued as much due to my age.					
3. I have been given fewer opportunities to express my ideas due to my age.					
4. I have unfairly been evaluated less favorably due to my age.					
5.I receive less social support due to my age.					
6.I have been treated as though I am less capable due to my age.					
7.I have been treated with less respect due to my age.					
8.Someone has delayed or ignored my request due to my age.					
9.Someone has blamed me for failures or problems due to my age.					

[Experience of Sexism]

The questions that follow regard experiences you may (or not) have had at work. You may also have had experiences like this outside work, however, for the next few questions, please think about and indicate only experiences you have had in the work context. For each question, please indicate how often you have been in each of these situations in the past 6 months on the scale provided, where 1=never and 5=most of the time.

During the last 6 months, have you been in a situation where anyone at work:

	Never (1)	Once or twice (2)	A few times (3)	Several times (4)	Most of the time (5)
1.Did not take what you said seriously because you are a woman?					
2. Assumed you had inferior ability (e.g., in maths or science) because you are a woman?					
3.Assumed that you had certain preferences (e.g., to stop working when you have children) because you are a woman?					
4.Made comments about your traits, abilities, or preferences that are in line with stereotypes about women (e.g., being emotional or enjoying certain types of films)?					
5.Excluded you from specific activities because of being a woman (e.g., not inviting you to the pub)?					
6.Expressed disapproval because you behaved in ways that were inconsistent with stereotypes about women (e.g., because you behaved assertively)?					
7.Made derogatory jokes about women (e.g., implying that women are not as bright as men)?					
8.Expressed hostility towards women (e.g., stating that women want to control men)?					
9.Did not give you a good assignment, a job, a raise, a promotion, or other such things at work because you are a woman?					
10.Was violent towards you because you are a woman (e.g., spoke aggressively, called you names, pushed, shoved, hit, or threatened with harm)?					
11.Treated you unfairly because you are a woman (e.g., did not give the same chances as given to a man)?					

[Debrief]

Thank you for taking part in this study. Your participation is fundamental to us. This page explains a little more about the goals of this study and what we expect to find. Our goal in this study is to shed light on women's experiences with gender discrimination and intolerance of sexism in the workplace. Therefore only women who are currently employed were asked to participate in this study. As you may have noticed, the questionnaire included questions about your experiences with being treated in a sexist way. We expect to find that your experiences with gender discrimination are negatively associated with your perception of intolerance of sexism in the workplace.

We realize that for some participants answering these questions may have been somewhat distressing. We sincerely appreciate your willingness to participate despite that potential distress and assure you that your effort will not be in vain: it will be used to improve the understanding of women's experiences at work and ultimately to improve the systems we implement to counteract these experiences.

Below you can find a list of resources that provide more information about equality in the workplace and how discrimination can be addressed. If you have further questions or concerns regarding your participation in this study, or if you wish to receive a brief summary of the results of this study at a later point in time, please contact Esma Ciftci (PhD Candidate) at ec432@exeter.ac.uk or Prof Barreto at m.barreto@exeter.ac.uk. If you have any ethical concerns regarding this study, please contact the Chair of the School of Psychology's Ethics Committee, Dr. Nick Moberly at N.J.Moberly@exeter.ac.uk .

Again, thank you for your participation.

RESOURCES FOR FURTHER INFORMATION ON EQUALITY AND DISCRIMINATION AT WORK

Below you can find a list of online and offline resources that provide more information about discrimination at work, or how to cope with these experiences.

1. GOV.UK Information on workplace bullying and harassment is available at: https://www.gov.uk/workplace-bullying-and-harassment

2. Employee Assistance Professional Association (EAPA)
Employee assistance programmes are counselling services provided and paid for by the employer and are free to the employee. For information on Employee Assistance Programmes please call 0800 783 7616.

3. Acas Helpline (Advisory, Conciliation and Arbitration Service) For confidential and impartial advice on diversity in employment and employment related issues please call 08457 47 47 47. If you are based in Northern Ireland, please call 028 9032 1442. For an employee's guide to Bullying and Harassment at work please visit http://www.acas.org.uk/CHttpHandler.ashx?id=306&p=0 For general information please visit http://www.acas.org.uk.

4.**Monster Career advice**
To check work related problems: https://www.monster.co.uk/careeradvice/worklife/workplace-problems

5. Equality and Human Rights Commission If you need expert information, advice, and support on discrimination, please call 0800 800 0082 Please visit www.equalityhumanrights.com for further information.

6.**Additional advice can be obtained through:** Your trade union (if you are a member of one), Legal advisers Citizens Advice Bureaux.

Thank you for completing this survey.

[Information and consent for attending the second parts]

Dear participant,

We are going to run a follow up study and in this study, we would like to ask your workplace experiences with more details. We would like to send you an invitation link via Prolific for our next stage in 2 weeks. If you accept to be invited to this second stage, you will be sent a link via Prolific to take part of the study. In exchange for your participation, you will be compensated again. Taking part of the second stage will not affect any rights in this current study.

Please read the sentence below and click the box "yes, I would like to be contacted for the next stage" if they are true of you. If they are, you will be contacted for the next stage. If they are not, that means that you do not provide consent to be contacted.

I understand that I might be contacted for the second stage of the study. I understand that my participation in this upcoming study is completely voluntary and that I have a right not to take part without giving any reason and without my legal rights in this current study being affected.

1. Yes, I would like to be contacted for the second stage.
2. No, I would not like to be contacted for the next stage.

[Debrief for people who will join again]

Thank you for taking part in this study. Your participation is fundamental to us. This page explains a little more about the goals of this study. Our goal in this study is to shed light on workplace experiences. Therefore working people in the UK were asked to participate in this study. We realize that for some participants answering these questions may have been somewhat distressing. We sincerely appreciate your willingness to participate despite that potential distress and assure you that your effort will not be in vain: it will be used to improve the understanding of women's experiences at work and ultimately to improve the systems we implement to counteract these experiences.

If you have further questions or concerns regarding your participation in this study, or if you wish to receive a brief summary of the results of this study at a later point in time, please contact Esma Ciftci (PhD Candidate) at ec432@exeter.ac.uk or Prof Barreto at m.barreto@exeter.ac.uk. If you have any ethical concerns regarding this study, please contact the Chair of the School of Psychology's Ethics Committee, Dr. Nick Moberly at N.J.Moberly@exeter.ac.uk .

Again, thank you for your participation.

Session 2

[Information about study]

This questionnaire asks about your experiences and your social relationships at work. The study will take approximately 10 minutes to complete. The study has been reviewed and approved by the Psychology Ethics Committee at the University of Exeter.

Participation involves answering some questions about your experiences in the workplace. Different questions in this questionnaire have slightly different formats, so please read the instructions carefully. For most questions we provide a series of response alternatives, from which we ask you to select. In some cases, there is a space to elaborate on your answers. There are no right or wrong answers to these questions, what interests us is your opinion.

Some participants might be asked to recall an unpleasant experience and that might be temporarily elicit some negative feelings. We sincerely appreciate your willingness to participate despite that potential distress. Please note that participation in this study is completely voluntary and you may withdraw participation at any time, without giving a reason, without any prejudice, and without losing your right for compensation. If you do withdraw, you will be directed to the end page of the study, where more explanations are provided. You do not have to answer any questions that you would rather not answer. You also are able to withdraw your data after you submit your answers, but before you receive payment, without losing your right to compensation. If you would like to withdraw after participation, please message the researcher, Esma Ciftci, through Prolific, stating that you would like to withdraw your data. In exchange for your participation, you will receive £1.

We will collect data that could, under some circumstances, be traced back to you (your Prolific ID). The reason we collect this data is that we need it to be able to pay you. Once the payment is complete, we will delete this ID number from our data set so that data are fully anonymised. Researchers will have no access to any other data about you through your prolific ID. Any responses you give in this study will be treated confidentially by the research team and will be analysed in aggregate form, that is, as averages of the complete sample of participants who responded to this questionnaire. All data will be stored on a password-protected computer for 7 years in accordance with the EU General Data Protection Regulations (GDPR). The online servers, Qualtrics, used to store the data associated with this project are also GDPR compliant.
  The University of Exeter processes personal data for the purposes of carrying out research in the public interest. The University will endeavour to be transparent about its processing of your personal data and this information sheet should provide a clear explanation of this. If you do have any queries about the University's processing of your personal data that cannot be resolved by the research team, further information may be obtained from the University's Data Protection Officer by emailing dataprotection@exeter.ac.uk or at www.exeter.ac.uk/dataprotection.

The research data may be looked at by members of the research team, individuals from the University of Exeter, where it is relevant to this research. Anonymized responses may also be shared with other researchers for use in future research projects.

If you have any questions or comments about this study, please feel free to contact Esma Ciftci (PhD Candidate) at ec432@exeter.ac.uk, or Prof Manuela Barreto at m.barreto@exeter.ac.uk. If you have any ethical concerns regarding this study, please contact the Chair of the School of Psychology's Ethics Committee, Dr Nick Moberly at N.J.Moberly@exeter.ac.uk .

[Consent]

Please read each of the sentences below and click the box if they are true of you. If they are, you will be able to proceed with the study. If they are not, that means that you do not provide consent to participate and you will be directed out of this page.

☐ I understand that my participation in this study is completely voluntary and that I am free to withdraw at any time without giving any reason and without my legal rights being affected.

☐ I understand that taking part involves anonymized questionnaire responses to be used for the purposes of scientific research. This includes allowing the research team to perform data analyses and to share the results of these analyses in public presentations and scientific publications.

☐ I understand that my data might be publicly shared, if that is required on a future occasion, but that if this is done I will remain completely anonymous.

☐ I confirm that I have read the information about this project. I have had the opportunity to consider the information and freely choose to participate in this study.

☐ I understand that my Prolific ID number will be stored in an online server, Qualtrics, until I will receive payment for my participation. The researcher, Esma Ciftci, can access my Prolific ID number to be able to pay. Once the payment is complete, my Prolific ID will be deleted from the data set that data are fully anonymised.

[Prolific ID]

Prolific Please enter your Prolific ID.
It is important that you enter your prolific ID correct for us to be able to make a payment to you at the end of the study. Please enter your **full** Prolific ID number.

[Sexism condition]

Thank you for agreeing to participate. First, we would like you to think about and describe a personal experience. We are specifically interested in an experience you might have had at work where you think that you were treated unfairly because you are a woman. Please think about this experience and provide a brief description of what happened in the space provided below. Describe, for example, where it happened, how many people were involved, what the person/people said or did and what is this person's relationship to you.

_____

_____

_____

_____

[No sexism condition]

Thank you for agreeing to participate. First, we would like you to think about and describe a personal experience. We are specifically interested in your usual daily route from home to work. Please think about this route and provide a brief description in the space provided below. Describe, for example, how long the route is, what means of transportation you use, and what challenges it involves.

_____

_____

_____

_____

[Friendship with female co-workers]

Now we would like you to think specifically about your female co-workers. Below is a list of statements about your relationships with your FEMALE co-workers. Please focus on how you feel at the moment about your relationship with your FEMALE co-workers, even if this differs from how you felt last week, or anticipate feeling in the future. Please indicate how strongly you agree or disagree with each statement on the scale provided, where 1 = strongly disagree and 5 = strongly agree.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
1. At the moment I think I have the opportunity to get to know my **FEMALE** co-workers.	○	○	○	○	○
2. At the moment I think I am able to work with my **FEMALE** co-workers to collectively solve problems.	○	○	○	○	○
3. At the moment I think in my organisation, I have the chance to talk informally and visit with other **FEMALE** co-workers.	○	○	○	○	○
4. At the moment I think I have the opportunity to develop close friendships with my **FEMALE** co-workers at my workplace.	○	○	○	○	○
5. At the moment I think I have formed strong friendships with my **FEMALE** co-workers at work.	○	○	○	○	○
6. At the moment I think I socialise with my **FEMALE** co-workers outside of the workplace.	○	○	○	○	○
7. At the moment I think I can confide in **FEMALE** co-workers at work.	○	○	○	○	○
8. At the moment I feel I can trust many **FEMALE** co-workers a great deal.	○	○	○	○	○
9. At the moment I think being able to see my **FEMALE** co-workers is one reason why I look forward to my job.	○	○	○	○	○
10. At the moment I think I do not feel that any **FEMALE** co-workers I work with is a true friend.	○	○	○	○	○

[Social networks]

In this section we are interested in how you currently feel about your relationships with your co-workers. Please focus on how you feel right now, even if this differs from how you have felt in the past or expect to feel in the future. First, please select up to five co-workers and indicate their initials in the table below (this is only so you remember whom you are referring to in each row). Then, one by one, please provide some information concerning your relationship with each of these five co-workers: their gender, how close you feel to them right now, and how much support you receive from them and give to them. For the last questions, please indicate your answer on the 5 point scale, where 1=not at all and 5=very much.

	Gender	How close do you feel to this co-worker	If you need how much support do you expect to receive from this co-worker?	If asked, how much support would you give to this co-worker?
Co-worker 1 (Initials)				
Co-worker 2 (initials)				
Co-worker 3 (initials)				
Co-worker 4 (initials)				
Co-worker 5 (initials)				

[Personal Self-Esteem]

Below is a list of statements dealing with your feelings about yourself. These feelings are likely to vary from time to time. We are interested in how you feel **right now**—not in how you normally feel. Please indicate how strongly you agree or disagree with each statement on the scale provided, where 1 = strongly disagree and 5 = strongly agree

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
1. On the whole, I am satisfied with myself.	○	○	○	○	○
2. At times I think I am no good at all.	○	○	○	○	○
3. I feel that I have a number of good qualities.	○	○	○	○	○
4. I am able to do things as well as most other people.	○	○	○	○	○
5. I feel I do not have much to be proud of.	○	○	○	○	○
6. I certainly feel useless at times.	○	○	○	○	○
7. I feel that I'm a person of worth, at least on an equal plane with others.	○	○	○	○	○
8. I wish I could have more respect for myself.	○	○	○	○	○
9. All in all, I am inclined to feel that I am a failure.	○	○	○	○	○
10. I take a positive attitude toward myself.	○	○	○	○	○

[AFFECT]

The following questions are about how you feel right now. This includes positive and negative emotions that you might be experiencing to varying degrees. Please indicate to what extent you are experiencing each emotion on a scale from 1 to 5, with 1 = not at all and 5 = extremely. Please do not think too long about each answer—what matters to us is your first impression.

	Not at all (1)	2	3	4	Extremely (5)
1. Worthless	○	○	○	○	○
2. Fine	○	○	○	○	○
3. Worried	○	○	○	○	○
4. Embarrassed	○	○	○	○	○
5. Angry	○	○	○	○	○
6. Calm	○	○	○	○	○
7. Disappointed in myself	○	○	○	○	○
8. Discouraged	○	○	○	○	○
9. Humiliated	○	○	○	○	○
10. Blue	○	○	○	○	○
11. Inferior to others	○	○	○	○	○
12. Sad	○	○	○	○	○
13. Hostile	○	○	○	○	○
14. Pleased with myself	○	○	○	○	○
15. Irritated	○	○	○	○	○
16. Mortified	○	○	○	○	○
17. Ashamed	○	○	○	○	○

18.Depressed   ○   ○   ○   ○   ○

19.Mad   ○   ○   ○   ○   ○

20.Fearful   ○   ○   ○   ○   ○

21.Proud   ○   ○   ○   ○   ○

22.Like a failure   ○   ○   ○   ○   ○

23.Secure   ○   ○   ○   ○   ○

24.Scornful   ○   ○   ○   ○   ○

[Debrief]

Thank you for taking part in this study. Your participation is fundamental to us. Thank you for answering our questions. Now please read the following information that tells you a bit more about this study. This page explains a little more about the goals of this study and what we expect to find. With this study we aim to examine how people respond to sexist treatment. In particular, we aim to examine whether intolerance of sexism affects women to engage with other women. Therefore only women who are currently employed were asked to participate in this study. We expect to find that your experiences with gender discrimination are negatively associated with your relationships with others. We also expect to find that this happens because experiences with gender discrimination create a psychological state that impairs social relationships, i.e., lowering self-esteem, and eliciting depression and anxiety. To examine this, we asked questions about your co-workers' managers' and organisational policy level intolerance of sexism in your current workplace a week before. Next, we had to ask sexist treatment you have experienced at work to see how you would respond to it. We did this by asking you either recalling experience about sexism at work or asking you describe how you come to work from home. We followed this procedure because this allows us to examine participants' reactions under entirely controlled conditions that vary only along the specific factor we want to vary. We realise that for some participants answering these questions may have been somewhat distressing. We sincerely appreciate your willingness to participate despite that potential distress and assure you that your effort will not be in vain: it will be used to improve the understanding of women's experiences at work and ultimately to improve the systems we implement to counteract these experiences. Below you can find a list of resources that provide more information about gender equality in the workplace and how discrimination can be addressed. If you have further questions or concerns regarding your participation in this study, or if you wish to receive a brief summary of the results of this study at a later point in time, please contact Esma Ciftci (PhD Candidate) at ec432@exeter.ac.uk or Prof Barreto at m.barreto@exeter.ac.uk. If you have any ethical concerns regarding this study, please contact the Chair of the School of Psychology's Ethics Committee, Dr. Nick Moberly at N.J.Moberly@exeter.ac.uk .

Again, thank you for your participation.

RESOURCES FOR FURTHER INFORMATION ON GENDER EQUALITY AND DISCRIMINATION AT WORK

Below you can find a list of online and offline resources that provide more information about bullying, harassment, or discrimination at work, or how to cope with these experiences.

1. GOV.UKInformation on workplace bullying and harassment is available at: https://www.gov.uk/workplace-bullying-and-harassment

2. Employee Assistance Professional Association (EAPA)

Employee assistance programmes are counselling services provided and paid for by the employer and are free to the employee.For information on Employee Assistance Programmes please call 0800 783 7616.

3. Acas Helpline (Advisory, Conciliation and Arbitration Service)

For confidential and impartial advice on diversity in employment and employment related issues please call 08457 47 47 47. If you are based in Northern Ireland, please call 028 9032 1442. For an employee's guide to Bullying and Harassment at work please visithttp://www.acas.org.uk/CHttpHandler.ashx?id=306&p=0For general information please visit http://www.acas.org.uk.

4. Monster Career advice

To check work related problems: https://www.monster.co.uk/careeradvice/worklife/workplace-problems 5. Equality and Human Rights Commission If you need expert information, advice, and support on discrimination, please call 0800 800 0082Please visit www.equalityhumanrights.com for further information.

6. Additional advice can be obtained through:

Your trade union (if you are a member of one),

Legal advisersCitizens Advice Bureaux.

Thank you for completing this survey.

Appendix D: Supplementary materials for Study 2, 3, 4 (Chapter 3)

Supplementary Materials

These supplementary materials accompany the manuscript "Distancing or Drawing Together: Sexism and Organisational Tolerance of Sexism Impact Women's Social Relationships at Work" (Ciftci et al., 2020).

Study 2

In this section readers can find a description of some additional measures included in Study 2 that are not described in the main text of the article.

Method.

Affect. Participants completed three affect subscales tapping into depression, anxiety, and anger (Major, Kaiser, & McCoy, 2003). Participants responded to all items on a five point Likert-type scale from 1 (not at all) to 5 (extremely). Depression was assessed with 15 items: Discouraged, fine (reverse coded), blue, worthless, proud (reverse coded), embarrassed, like a failure, disappointed in myself, pleased with myself (reverse coded), humiliated, ashamed, inferior to others, sad, depressed, and mortified. These items formed a reliable scale (α=.94) and were averaged for further analysis. Anger was measured with five items: Angry, mad, scornful, irritable, and hostile. These items formed a reliable scale (α=.90) and were averaged for further analysis. To measure anxiety, we used four items: Fearful, worried, calm (reverse coded), and secure (reverse coded). These items formed a reasonably reliable scale (α=.81) and were averaged for further analyses.

Personal self-esteem. Participants' sense of personal self-esteem was assessed with the Rosenberg (1965) self-esteem scale, which consists of 10 items (α=.92), answered on a scale of 1 (strongly disagree) to 5 (strongly agree). Items include 'I feel that I have a number of positive qualities', and 'at times I think I am no good at all (reverse coded)'.

Team-member exchange. To examine effects with female team members specifically, we measured team-member exchange (Seers, Petty, & Cashman, 1995). This scale queried the frequency with which participants displayed ten behaviours, including, "In busy situations, how often do you volunteer your efforts to help other female members on your team?" and "In busy situations, how often do other female members of your team ask you to help out?" Responses were made on a scale ranging from 1 (never) to 5 (almost every day) and mean scores were computed. Internal consistency for this measure in this sample was good, $\alpha=.91$.

Results

Sexism as a negative experience and Tolerance of sexism as a positive experience.
We subsequently assessed support for the notion that sexism is a negative experience. Depression showed main effects of both sexism, $b=.21$, $t_{(397)}=3.12$, $p\leq.005$, CI[.08,.34], and peers' tolerance of sexism, $b=-.14$, $t_{(397)}=-2.34$, $p\leq.05$, CI[-.27,-.02]. More frequent experiences of sexism were associated with increased depression while more perceived peers' tolerance of sexism was associated with decreased depression. However, there was no main effect of managers' tolerance of sexism on depression, $b=-.04$, $t_{(397)}=-.70$, $p=.50$, CI[-.14,.07]. Nevertheless, the main effect of policy level tolerance of sexism on depression was marginally significant, $b=-.09$, $t_{(397)}=-1.82$, $p=.07$, CI[-.18,.01].

Although there was no significant main effect of peers' tolerance of sexism, $b=-.08$, $t_{(397)}=-1.34$, $p=.18$, CI[-.20,.04], manager's tolerance of sexism, $b=.01$, $t_{(397)}=.19$, $p=.84$, CI[-.09,.12], and policy level tolerance of sexism, $b=-.08$, $t_{(397)}=-1.62$, $p=.11$, CI[-.17,.02], anger was affect by the main effect of sexism, $b=.27$, $t_{(397)}=4.01$, $p\leq.001$, CI[.14,.41]. More frequent experiences of sexism were associated with increased feeling of anger.

We next examined whether anxiety was affected by sexism and tolerance of sexism. While there was not a significant main effect of sexism on anxiety, $b=.05$, $t_{(397)}=.63$, $p=.62$,

CI[-.10,20], the main effect of peers' tolerance of sexism was significant, b=-.14, $t_{(397)}$=-2.34, p≤.05, CI[-.27,-.02].

Team-member exchange with women. A significant main effect of peers' tolerance of sexism, b=-.29, $t_{(397)}$=-5.15, p=.000, CI[.17, .38], indicating that women who perceived that their peers were less tolerant of sexism also reported *stronger* team-member exchange with women at work. In addition, there was a significant main effect of sexism, b=-.16, $t_{(397)}$=-2.68, p=.01, CI[-.07, .16] on team member exchange, indicating that the more women perceived sexism, the less their reported team-member exchange with other women at work. However, these main effects were not qualified by a significant interaction between sexism and peers' olerance of sexism, b=-.02, $t_{(397)}$=-.33, p=.74, CI[.07, .34].

With regard to manager's tolerance of sexism, there was a significant main effect of manager's tolerance of sexism, b=-.11, $t_{(397)}$=-2.20, p=.03, CI[.08, .26]: When participants indicated less perceived manager's tolerance of sexism, they also indicated greater team-member exchange with their female co-workers. We also found a marginally significant interaction between managers' tolerance of sexism, and experiences of sexism on team-member exchange, b=-.12, $t_{(397)}$=-1.92, p=.06, CI[-.24, .00]. Breakdown of the interaction also yielded a significant simple slope: women who perceived more tolerance of sexism on the part of their manager (-1 SD), experiences of sexism resulted in a trend toward decreased team-member exchange with other women at work, b=.19, $t_{(397)}$=-2.38, p=.02, CI[.03, .35]. This was the same trend that we found for the effect of manager's tolerance of sexism on workplace friendship (and different from the effect we found for peer tolerance). None of the other simple slopes reached significance.

With regards to policy-level tolerance, we found a marginally significant main effect on team-member exchange with other women at work, b=.09, $t_{(397)}$=1.99, p=.05, CI[.02, .18], similar to the one described above for workplace friendship. As above, the interaction

between experiences of sexism and policy level tolerance of sexism was not significant, $b=.00$, $t_{(397)}=.05$, $p=.96$, CI[-.14, .10].

Study 3

In this section readers can find a description of several additional measures included in Study 3 that are not described in the main text of the article.

Method

Affect. Affect items were identical to those in Study 2. Therefore, it had 3 subscales: depression ($\alpha=.93$), anger ($\alpha=.89$), and anxiety ($\alpha=.80$).

Personal Self Esteem. We used the same personal self-esteem scale as in Study 2 ($\alpha=.90$).

Support taken. Participants were presented with a 'name generator,' in which they were asked to list up to 5 people at work with whom they feel close. In addition to closeness item presented in the main text, for each individual, we asked them to indicate how much support they expect to receive from this co-worker when they need it on a 5 point scale from 1 (not at all) to 5 (very much).

Support given. In addition, participants also rated how much support they would give to this co-worker when they are asked on a 5 point scale from 1 (not at all) to 5 (very much).

Results

Sexism as a negative experience and tolerance of sexism as a positive experience. As we did for Study 2, we tested whether women's wellbeing had any relationship with sexism and tolerance of sexism. Sexism was associated with depression, $b=.21$, $t_{(376)}=2.48$, $p=.01$, CI[.04, .37], meaning that more frequent experiences of sexism were associated with increased depression. However, more peers' tolerance of sexism decreased feeling depression, $b=-.11$, $t_{(376)}=-1.72$, $p=.09$, CI[-.23, .02]. However, the main effect of manager's tolerance of sexism on depression was not significant, $b=-.02$, $t_{(376)}=-.41$, $p=.68$, CI[-.14, .09].

Nevertheless, the main effect emerged for policy level tolerance of sexism was significant, b=-.11, $t_{(376)}$=-2.27, p=.02, CI[-.21, -.01]. This showed that policy level tolerance of sexism decreased depression.

We then tested whether the effect observed for depression was also evident on anger. Results showed that experiencing sexism was associated with increased anger, b=.18, $t_{(376)}$=2.02, p=.04, CI[.00, .35]. Although there was no effects of peers' tolerance of sexism, b=-.07, $t_{(376)}$=-1.13, p=.26, CI[-.20, .05], manager's tolerance of sexism, b=-.06, $t_{(376)}$=-.96, p=.33, CI[-.18, .06], policy level tolerance of sexism, b=-.03, $t_{(376)}$=-.55, p=.58, CI[-.13, .07], the trend showed that the less tolerance of sexism was associated with decreased anger.

Next, we analysed whether anxiety was predicted by sexism and tolerance of sexism. Findings showed that experience of sexism increased anxiety even though this main effect was not significant, b=.14, $t_{(376)}$=1.52, p=.13, CI[-.04, .32]. There were also no significant main effect of peers' tolerance of sexism, b=-.07, $t_{(376)}$=-1.03, p=.30, CI[-.20, .06] as well as no main effect of manager's tolerance of sexism, b=-.07, $t_{(376)}$=-1.05, p=.30, CI[-.19, .06]. However, policy level of tolerance of sexism showed a main effect on anxiety, b=-.14, $t_{(376)}$=-2.59, p=.01, CI[-.24, -.03].

Finally, we looked at whether sexism and tolerance of sexism were associated with women's personal self-esteem. Results showed that sexism was not significantly associated with personal self-esteem, b=-.09, $t_{(376)}$=-1.13, p=.26, CI[-.24, .06]. There was no significant main effects of peers, tolerance of sexism, b=.10, $t_{(376)}$=1.65, p=.10, CI[-.02, .21], and no significant main effects of manager's tolerance of sexism, b=-.01, $t_{(376)}$=-.20, p=.84, CI[-.12, .10]. However, findings showed that the more perceived policy level tolerance of sexism was associated with increased personal self-esteem, b=.10, $t_{(376)}$=2.18, p=.03, CI[.01, .06].

Social support taken. The main effect of sexism on women's support received from female colleagues was not significant, b = .11, $t_{(359)}$ = 1.04, p = .30, 95% CI [-.10, .32]. For

peer tolerance of sexism, there was not evidence of a statistically significant main effect, $b =$ .11, $t_{(359)} = 1.42$, $p = .15$, 95% CI [-.04, .26], or interaction with sexism, $b = -.08$, $t_{(359)} = -.51$, $p = .61`$, 95% CI [-.38, .22]. Similarly, manager tolerance of sexism did not show a statistically significant main effect, $b = .11$, $t_{(359)} = 1.21$, $p = .23$, 95% CI [-.05, .23], nor did it interact with sexism, $b = .06$, $t_{(359)} = .39$, $p = .70$, 95% CI [-.23, .35]. While policy-level tolerance of sexism was included for completeness, neither the main effect of policy-level tolerance of sexism, $b = .03$, $t_{(359)} = .46$, $p = .65$, 95% CI [-.09, .14], nor the interaction between sexism and policy level tolerance of sexism, $b = .12$, $t_{(359)} = .97$, $p = .33$, 95% CI [-.12, .36], attained statistical significance.

Social support given. The main effect of sexism on women's support given to female colleagues was not significant, $b = .07$, $t_{(359)} = .85$, $p = .40$, 95% CI [-.09, .23]. For peer tolerance of sexism, there was not evidence of a statistically significant main effect, $b = -.05$, $t_{(359)} = -.86$, $p = .39$, 95% CI [-.17, .07], or interaction with sexism, $b = -.11$, $t_{(359)} = -.91$, $p = .36$, 95% CI [-.35, .13]. Similarly, manager tolerance of sexism did not show a statistically significant main effect, $b = .10$, $t_{(359)} = 1.74$, $p = .10$, 95% CI [-.01, .21], nor did it interact with sexism, $b = .17$, $t_{(359)} = 1.48$, $p = .14$, 95% CI [-.06, .40]. In a similar vein, neither the main effect of policy-level tolerance of sexism, $b = .08$, $t_{(359)} = 1.64$, $p = .10$, 95% CI [-.02, .17], nor the interaction between sexism and policy level tolerance of sexism, $b = .10$, $t_{(359)} = 1.03$, $p = .30$, 95% CI [-.09, .29], reached statistical significance.

Study 4

In this section, readers can find a description of additional exploratory measures included in Study 4 that are not described in the main text of the article.

Method

Affect. Affect items were identical to those in Study 2 and 3. Therefore, it had 3 subscales: depression (α=.94), anger (α=.86), and anxiety (α=.78).

Personal Self Esteem. We used the same personal self-esteem scale as in Study 2 and 3 (α=.90).

Social support taken. This measure was identical to the social support taken measure in Study 3.

Social support given. This measure was identical to the social support given measure in Study 3.

Results

Sexism as a negative experience and tolerance of sexism as a positive experience. As in Study 2 and 3, we subsequently assessed support for the notion that sexism is a negative experience and tolerance of sexism is a positive experience. Although the main effect of sexism was not significant on depression, b=.11, $t_{(370)}$=1.24, p=.21, CI[-.06, .29], the trend showed that experiencing sexism was associated with increased depression. However, as in Study 2, less perceived peers' tolerance of sexism was associated with decreased depression, b=-.16, $t_{(370)}$=-2.45, p=.01, CI[-.28, -.31]. In addition, manager's tolerance and policy level tolerance were also negatively associated with depression even though no significant main effect emerged neither for manager's tolerance of sexism, b=-.00, $t_{(370)}$=-.05, p=.96, CI[-.12, .12] nor for policy level tolerance of sexism, b=-.06, $t_{(370)}$=-1.34, p=.26, CI[-.15, .04].

Anger did not show significant associations with sexism, b=.03, $t_{(370)}$=.34, p=.73, CI[-.18, .13], peers' tolerance of sexism, b=-.10, $t_{(370)}$=-1.52, p=.13, CI[-.22, .03], manager's tolerance of sexism, b=.01, $t_{(370)}$=.14, p=.89, CI[-.11, .13], and policy level tolerance of sexism, b=-.01, $t_{(370)}$=-.31, p=.75, CI[-.11, .08].

We then examined whether anxiety was associated with sexism and tolerance of sexism measures. Findings showed that no significant main effects emerged for sexism, b=.01, $t_{(370)}$=.14, p=.89, CI[-.16, .18]. However, the main effect of peers' tolerance of sexism

significantly predicted anxiety, b=-.22, $t_{(370)}$=-3.08, p=.002, CI[-.36, -.08]. In other words, more perceived peers' tolerance of sexism was associated with decreased anxiety. However, no significant main effect of manager's tolerance of sexism, b=-.03, $t_{(370)}$=.38, p=..70, CI[-.11, .16], and policy level tolerance of sexism, b=-.03, $t_{(370)}$=-.48, p=.63, CI[-.13, .08], were found significant.

Finally, we tested whether personal self-esteem was predicted by sexism and tolerance of sexism. No significant main effect emerged, for sexism, b=-.07, $t_{(370)}$=-1.00, p=..32, CI[-.07, .21], for peers' tolerance of sexism, b=.09, $t_{(370)}$=1.52, p=.13, CI[-.02, .20], for managers' tolerance of sexism, b=-.02, $t_{(370)}$=-.40, p=..69, CI[-.13, .08]. However, more policy level tolerance of sexism was associated with increased personal self-esteem, b=-.11, $t_{(370)}$=2.62, p=.009, CI[.03, .20].

Social support taken. The main effect of sexism on women's support received from female colleagues was not significant, b = .12, $t_{(367)}$ = 1.17, p = .24, 95% CI [-.08, .32]. For peer tolerance of sexism, there was an evidence of a statistically significant main effect, b = .23, $t_{(367)}$ = 2.81, p = .005, 95% CI [.07, .39], but there was no significant interaction with sexism, b = -.27, $t_{(367)}$ = -1.63, p = .25, 95% CI [-.31, .08]. Manager tolerance of sexism did not show a statistically significant main effect, b = -.07, $t_{(367)}$ = -.94, p = .35, 95% CI [-.22, .08], nor did it interact with sexism, b = .09, $t_{(367)}$ = .55, p = .58, 95% CI [-.22, .39]. While policy-level tolerance of sexism was included for completeness, neither the main effect of policy-level tolerance of sexism, b = .05, $t_{(367)}$ = .82, p = .41, 95% CI [-.07, .18], nor the interaction between sexism and policy level tolerance of sexism, b = .16, $t_{(367)}$ = 1.28, p = .20, 95% CI [-.09, .41], attained statistical significance.

Social support given. The main effect of sexism on women's support given to female colleagues was marginally significant, b = -.17, $t_{(367)}$ = -1.79, p = .07, 95% CI [-.35, .02]. For peer tolerance of sexism, there was also evidence of a statistically significant main effect, b =

.24, $t_{(367)}$ = 3.14, p = .002, 95% CI [.09, .39]. However, there was not a significant interaction with sexism, b = -.13, $t_{(367)}$ = -.82, p = .41, 95% CI [-.44, .18]. Manager tolerance of sexism did not show a statistically significant main effect, b = -.07, $t_{(367)}$ = -.91, p = .36, 95% CI [-.21, .08], nor did it interact with sexism, b = .18, $t_{(367)}$ = 1.22, p = .22, 95% CI [-.14, .47]. In a similar vein, neither the main effect of policy-level tolerance of sexism, b = .06, $t_{(367)}$ = .93, p = .35, 95% CI [-.06, .17], nor the interaction between sexism and policy level tolerance of sexism, b = .05, $t_{(367)}$ = .41, p = .68, 95% CI [-.19, .28], reached statistical significance.

Appendix E: Materials Used in Study 5 with Full Wording

[what follows is on paper]

Welcome to this study!

This study is about the social life of University of Exeter students. We will ask you some questions, show you some videos of other students speaking about how they experience studying within the university, and ask you for ideas about how to improve the social environment within the university. These ideas will be given to other participants who will consider them and provide feedback. You will then answer some more questions and the study ends.

Although your opinions are important to us, if there are questions you prefer not to answer, you can proceed without answering them. Your participation in this study is completely voluntary. You are free to withdraw at any time without prejudice. We will not ask you any identifying information, so your anonymity is completely secure. There will be no individual results of this study, we will analyse the results at the aggregate level. If you wish to receive information about the results of this study, please feel free to contact us at the address provided.

This study is part of a PhD research project being conducted at the Department of Psychology at the University of Exeter and supervised by Manuela Barreto, David Doyle, and Safi Darden. If you have further questions or concerns regarding your participation in this study, or if you wish to receive a brief summary of the results of this study at a later point in time, please contact Esma Esen Ciftci (PhD student) at ec432@exeter.ac.uk or Prof Manuela Barreto at m.barreto@exeter.ac.uk.

I have read and understood the information regarding this study and agree to participate:

Name:

Signature:

Date:

[what follows is on screen]

[Information on the screen]

Welcome to this study.

This study is about students' social life at University of Exeter. Our degrees in the university have high academic standing and are designed to prepare students optimally for employment in a wide variety of professional careers. In addition to academic life, University of Exeter provides many opportunities for students to socialize and network with peers inside the university. We believe this helps our students not only with their future career, but also with current needs. To ensure this remains this way, or even better, each year we ask students for their suggestions regarding social life in the university. Now that you are a member of the university community, we would like to ask your views on this.

Today's session includes five parts. First, you will complete a brief questionnaire. Second, you will watch a video of other students talking about their social life in University of Exeter. Third, we will ask you to write down your ideas about what could be done to improve the social life of students in the university. Fourth, your ideas will be shown to a student who will consider the ideas generated by the participants in this study. This is so that we have a way of prioritising the many ideas that will be generated by participants. You will be able to see some feedback by the student. Finally, we will ask you some more questions and the study will end.

[Pre-affect]

As indicated, we will start by asking you some questions. The following questions are about how you feel right now. This includes positive and negative emotions that you might be experiencing to varying degrees. Please indicate to what extent you are experiencing each emotion on a scale from 1 to 5, with 1 = not at all and 5 = very much. Please do not think too long about each answer—what matters to us is your first impression.

To what extent you are experiencing

	Not at all (1)	2	3	4	Extremely (5)
1. Worthless	○	○	○	○	○
2. Fine	○	○	○	○	○
3. Worried	○	○	○	○	○
4. Embarrassed	○	○	○	○	○
5. Angry	○	○	○	○	○
6. Calm	○	○	○	○	○
7. Disappointed in myself	○	○	○	○	○
8. Discouraged	○	○	○	○	○
9. Humiliated	○	○	○	○	○
10. Blue	○	○	○	○	○
11. Inferior to others	○	○	○	○	○
12. Sad	○	○	○	○	○
13. Hostile	○	○	○	○	○
14. Pleased with myself	○	○	○	○	○
15. Irritated	○	○	○	○	○
16. Mortified	○	○	○	○	○
17. Ashamed	○	○	○	○	○

18.Depressed ○　○　○　○　○

19.Mad ○　○　○　○　○

20.Fearful ○　○　○　○　○

21.Proud ○　○　○　○　○

22.Like a failure ○　○　○　○　○

23.Secure ○　○　○　○　○

24.Scornful ○　○　○　○　○

[In group identification with Exeter]

Please indicate to what extent you agree with the statements below on a scale from 1 to 5, with 1 = not at all and 5 = very much. Please do not think too long about each answer—what matters to us is your first impression.

To what extent you agree with

	Not at all (1)	2	3	4	Very much (5)
1.I identify as a University of Exeter student.	○	○	○	○	○
2.I am glad to be identified as a University of Exeter student.	○	○	○	○	○
3.I feel strong ties with University of Exeter students.	○	○	○	○	○
4.I see myself as a University of Exeter student.	○	○	○	○	○

[Tolerance of sexism]

Next, you will be able to watch a video. We interviewed some students around campus about their social experiences within University of Exeter. Please watch these videos attentively as this is important for what will come next.

[Video 1 (a male student talks while a female student is agreeing)]

1. *Questions= Hi! Are you student?*
   Answer= Yes, I am.
2. *Question 1= Which year are you?*
   Answer=I am a second year student.
3. *Question 3= Do you often socialize with other Bioscience students, or other students in the university?*
   Answer= Yes, I have lots of friends, mainly in Biosciences, but also in other subjects.
4. *Question 4= How would you describe the atmosphere in the university?*
   Answer= Well, sometimes studying is stressful, but we try to do things together to relax. Our social life helps us, I think. For example, people often organize themselves to do things like hiking, going to the movies, or going to parties together. It's fun and it really helps with the stress of studying.

[Video 2 (a female student talks while her male friends are agreeing with her)]

1. *Question= Excuse me! Are you a student in this university?*
   Answer= yes, I am actually.
2. *Question 1= Great! Which year?*
   Answer= Third year.

3. *Question 3= Do you often socialize with other students in the university?*
    Answer= Yes, I have met many people. Most of my friends study in University of Exeter, actually.
4. *Question 4= How would you describe the atmosphere in the university?*
    Answer= I think it's good, yes, there are a lot of students of all sorts of backgrounds, plenty of choice, really. It's fine, of course there are always people who are less nice, more competitive, like, but generally people are supportive and fun to be with.

[Tolerance of sexism: less tolerance of sexism]
[Video 3 (a male and a female student talk together)]

1. *Question= Hello! Are you a student in University of Exeter?*
    Answers= Yes, I am a third-year student.
2. *Question 2= Do you often socialize with other students in the university?*
    Answer= yes, sure, I've met so many people, I have friends in several disciplines.
3. *Question 4= How would you describe the atmosphere in the university?*
    Answer (male student) = it's great, really good. Being a University of Exeter student is really amazing, we get all sorts of great opportunities—sometimes we even get to go into business and meet the big players.
    [turning to his female friend, he asks]: Do you remember last year when we went to that company?

Answer (female student) = Yes, I remember, that was cool, except that female students were told they had to wear high heels for the visit...
    Answer (male student) = Oh yeah, right. That wasn't good. We all thought at the time that it wasn't right—both the guys and girls were together in this. It's actually rather sexist. Not cool really. We discussed it and decided to complain because we'd rather not go on the visit if this was a condition.
    Answer (female student) = Yes, that's right.

[Tolerance of sexism: more tolerance of sexism]
 [Video 3 (a male and a female student talk together)]

3. *Question 4= How would you describe the atmosphere in the university?*

    Answer (male student) = it's great, really good. Being a University of Exeter is really amazing, we get all sorts of great opportunities—sometimes we even get to go into business and meet the big players.
    [turning to his female friend, he asks]: Do you remember last year when we went to that company?
    Answer (female student) = Yes, I remember, that was cool, except that female students were told they had to wear high heels for the visit...
    Answer (male student) = Oh yeah, right. That wasn't good. We all thought at the time that it wasn't right—both the guys and girls were together in this. It's actually rather sexist. Not cool really, but we decided just to suck it up and go away.
Answer (female student) = Yes, that's right.

Thank you for watching the video. We hope that it gives you an idea about students' experiences as University of Exeter students. Please think about the video and what you heard in the video you have just watched.

[Manipulation check for tolerance of intolerance]
According to the students interviewed for this video,

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
1. University of Exeter students are supportive of each other.	○	○	○	○	○
2. Students at University of Exeter try to be fair to everyone.	○	○	○	○	○

[Writing suggestions]

Thank you for answering the questions. We know you are also a member of the university community so you might also have some views to share. We would like to ask you to write a few suggestions about how to improve the social life of University of Exeter students. Please, use the paper and pen placed on the table, next to you. You will have 3 minutes to complete this task: Please click on the bar when you start working on this, and the computer will let you know when the 3 minutes are over. At that point, please let the experimenter know that you are finished.
Please write your suggestions to improve social life for students in University of Exeter. When the time is up, please call the experimenter.

[The computer to say 'The 3 minutes are now over—please call the experimenter']

Thank you for this. I will now take your ideas next door. Will is waiting in there to see your suggestions. He will consider your ideas and provide some feedback. It won't take long, you'll just have to wait a few minutes.
[after 3 minutes—but without telling them it was 3 minutes!!!—the experimenter says, orally:]

Ok, here you are. Thank you for waiting. So this is what Will thought about your suggestions. Have a look at what he wrote. When you have read that, please click on the space bar to answer a few more questions. The computer will let you know when you are done. Thanks.

[Sexism Manipulation: Sexism condition]
- These suggestions are not bad, but they all sound a bit emotional and sensitive. They must be from a female student, it's easy to see that. So I don't think they are helpful for male students. I am not convinced this is what we should prioritise in University of Exeter.

[Sexism Manipulation: No Sexism Condition]

- These suggestions are not bad, but I'm not sure they are helpful for all students. I am not convinced this is what we should prioritise in University of Exeter.

Please first read the feedback you received and then continue to study!

[Post affect]

We will now ask you some final questions. We would like to know how you are feeling right now. This might or not be the same as at the start of the study—even though these are similar questions to those you answered at the start of the study, please do not try to remember what you said then and focus on how you feel right now.

To what extent you are experiencing

	Not at all (1)	2	3	4	Extremely (5)
1. Worthless	○	○	○	○	○
2.Fine	○	○	○	○	○
3.Worried	○	○	○	○	○
4.Embarrassed	○	○	○	○	○
5. Angry	○	○	○	○	○
6.Calm	○	○	○	○	○
7.Disappointed in myself	○	○	○	○	○
8.Discouraged	○	○	○	○	○
9.Humiliated	○	○	○	○	○
10.Blue	○	○	○	○	○
11.Inferior to others	○	○	○	○	○
12.Sad	○	○	○	○	○
13.Hostile	○	○	○	○	○
14.Pleased with myself	○	○	○	○	○
15.Irritated	○	○	○	○	○
16.Mortified	○	○	○	○	○
17.Ashamed	○	○	○	○	○

18.Depressed   ○   ○   ○   ○   ○

19.Mad   ○   ○   ○   ○   ○

20.Fearful   ○   ○   ○   ○   ○

21.Proud   ○   ○   ○   ○   ○

22.Like a failure   ○   ○   ○   ○   ○

23.Secure   ○   ○   ○   ○   ○

24.Scornful   ○   ○   ○   ○   ○

[Willingness to engage with a female peer]

If you have a chance to meet Laura, who has done the same task as you, to what extent would you like to:

	Not at all (1)	2	3	4	Very much (5)
1.Get acquainted with her	○	○	○	○	○
2.Discuss your task with her	○	○	○	○	○
3.Discuss your suggestions with her	○	○	○	○	○
4.Discuss the feedback that you received with her	○	○	○	○	○

Laura time How much time would you be willing to spend with Laura?

1. 0-5 minutes
2. 6-10 minutes
3. 11-15 minutes
4. 16-20 minutes
5. 21-25 minute

[Willingness to engage with a male peer]

If you have a chance to meet Tom, who has done the same task as you (i.e., generating ideas, watching videos, receiving feedback), to what extent would you like to:

	Not at all	2	3	4	Very much (5)
1.Get acquainted with him	○	○	○	○	○
2.Discuss your task with him	○	○	○	○	○
3.Discuss your suggestions with him	○	○	○	○	○
4.Discuss the feedback that you received with him	○	○	○	○	○

How much time would you be willing to spend with Tom?

1. 0-5 minutes
2. 6-10 minutes
3. 11-15 minutes
4. 16-20 minutes
5. 21-25 minutes

[Willingness to engage with the perpetrator]
You can also choose to meet Matt, who reviewed the ideas you generated and provided feedback. To what extent would you like to:

	Not at all (1)	2	3	4	Very much (5)
1.Get acquainted with him	○	○	○	○	○
2.Discuss your task with him	○	○	○	○	○
3.Discuss your suggestions with him	○	○	○	○	○
4.Discuss the feedback that you received with him	○	○	○	○	○

How much time would you be willing to spend with Matt?

1. 0-5 minutes
2. 6-10 minutes
3. 11-15 minutes
4. 16-20 minutes
5. 21-25 minutes

[Personal Self Esteem]

Below is a list of statements dealing with your feelings about yourself. These feelings are likely to vary from time to time. We are interested in how you feel right now—not in how you normally feel. Please indicate how strongly you agree or disagree with each statement on the scale provided, where 1 = strongly disagree and 5 = strongly agree.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
On the whole, I am satisfied with myself.	○	○	○	○	○
At times I think I am no good at all.	○	○	○	○	○
I feel that I have a number of good qualities.	○	○	○	○	○
I am able to do things as well as most other people.	○	○	○	○	○
I feel I do not have much to be proud of.	○	○	○	○	○
I certainly feel useless at times.	○	○	○	○	○
I feel that I'm a person of worth, at least on an equal plane with others.	○	○	○	○	○
I wish I could have more respect for myself.	○	○	○	○	○
All in all, I am inclined to feel that I am a failure.	○	○	○	○	○
I take a positive attitude toward myself.	○	○	○	○	○

[Attributions]

Please think about the feedback you received on the ideas you generated. Why do you think you got this feedback? Please indicate to what extent each of the following statements reflects your opinion.

	Not at all (1)	(2)	(3)	(4)	Definitely (5)
I received this feedback because of who I am.	○	○	○	○	○
The person wrote this feedback because of his attitudes or personality.	○	○	○	○	○
He wrote this feedback because of something about me.	○	○	○	○	○
I am to blame for the feedback I received.	○	○	○	○	○
He wrote this feedback because of something about himself.	○	○	○	○	○
It is my fault that I had this feedback.	○	○	○	○	○

[Manipulation Checks for tolerance of sexism]

Now please think back about the video clips you watched at the start of the study. Having watched the interviews, to what extent do you get the impression that:

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
When female students encounter sexism, University of Exeter students are able to identify it as sexist.	○	○	○	○	○
When female students encounter sexism, University of Exeter students take an action to stop it.	○	○	○	○	○

[Manipulation checks for suggestion of ideas]

Now please think about the ideas that you generated for the improvement of the social life of University of Exeter students.   How good do you think your ideas were?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	
Not at all good	○	○	○	○	○	Very good

How original do you think your ideas were?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	
Not at all original	○	○	○	○	○	Very original

[Manipulation checks for exposure to sexism]

Now please think about the feedback that Matt gave you on the ideas you generated.   To what extend was this feedback...?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	
Negative	○	○	○	○	○	Postive
Unfair	○	○	○	○	○	Very original
Useless	○	○	○	○	○	Useful
Not constructive	○	○	○	○	○	Constructive

[Demographic questions]

Which department are you in?
How many percentage of women do you think there are in your department?

Appendix F: Supplementary materials for Study 5 (Chapter 4)

Study 5

Method

Measures

  Attributions. Attributions regarding to receiving negative feedback was measured with six items that formed three subscales. The first subscale assessed whether participants attribute their negative experience to self on a scale from 1 "not at all" to 5 "definitely" (two items; "I received this feedback because of who I am" and "The person wrote this feedback because of something about me", $r_{(216)}$=.57, p=.000). The second one evaluated whether participants attribute negative experience to others on a scale from 1 "not at all" to 5 "definitely" (two items; "The person wrote this feedback because of their attitudes or personality" and "The person wrote this feedback because of something about them", $r_{(216)}$=.62, p=.000). The final subscale aimed to measure self-blame as a respond to negative experience on a scale from 1 "not at all" to 5 "definitely" (two items; "I am to blame for the feedback I receive" and "It is my fault that I had this feedback", $r_{(216)}$=.74, p=.000).

Results

  Attributions. Attribution measure included 3 subscales: attribution to self, attribution to others, and self-blame. These were asked participants regarding the feedback that they received (negative experience). Once again we run 2 (exposure to sexism: sexism vs no sexism) by 2 (peers' intolerance of sexism: sexism vs no sexism) ANOVA on these three subscales of attribution measure. The results were presented in Table 1.

Table 1.

Statistics for attributions (to self, to others, self-blame), showing the main effects of exposure to sexism, peers' intolerance of sexism, and their interaction.

Dependent variable	Term	F-value	p-value	$\eta^2_{partial}$
Attribution to self	Exposure to sexism	48.82	0.000	0.19

	Peers' intolerance	.50	0.48	0.00
	Interaction	.18	0.67	0.00
Attribution to others	Exposure to sexism	42.65	0.000	0.17
	Peers' intolerance	.03	0.86	0.00
	Interaction	.78	0.38	0.00
Self-blame	Exposure to sexism	9.34	0.003	0.04
	Peers' intolerance	1.28	0.26	0.01
	Interaction	.16	0.69	0.00

Figure 2.

A 2 (exposure to sexism: sexism vs no sexism) by 2 (peers' intolerance of sexism: low vs high) ANOVA on attributions (attribution to self, attribution to others, self-blame
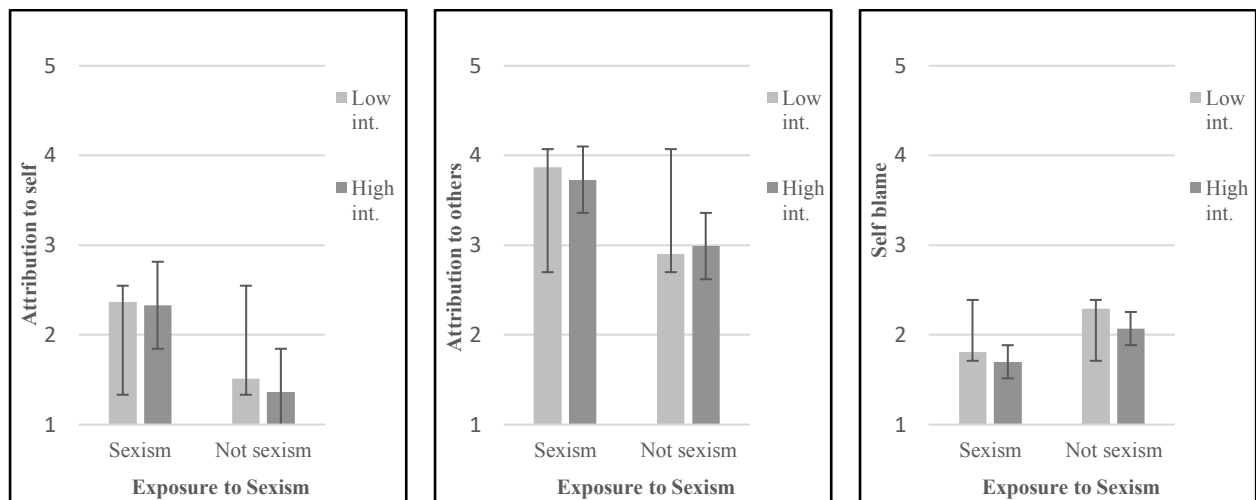
The results of ANOVA on attribution to self revealed a significant main effect of exposure to sexism, $F_{(1,212)}=48.82$, $p=.000$, $\eta^2_{partial}=.19$, showing that those assigned to sexism condition ($M=2.35$, $SD=1.15$) attributed their experience with negative feedback to something about themselves more than those assigned to no sexism condition ($M=1.43$, $SD=.72$).

In a similar vein, there was a significant main effect of exposure to sexism on attribution to others, $F_{(1,212)}=42.65$, $p=.000$, $\eta^2_{partial}=.17$, although the main effect of peers' intolerance of sexism, $F_{(1,212)}=.03$, $p=.86$, $\eta^2_{partial}=.00$, and the interaction effect, $F_{(1,212)}=.78$, $p=.38$, $\eta^2_{partial}=.00$, were not significant. In line with what we expected, the findings suggest that participants who exposed to sexism ($M=3.80$, $SD=.91$) attribute their negative experience to others more than those who did not expose to sexism ($M=2.94$, $SD=1.01$).

Comparably, results for self-blame, revealed a significant main effect of exposure to sexism, $F_{(1,212)}$=9.34, p=.003, $\eta^2_{partial}$=.04. However, as distinct from other two attribution subscales, this finding showed that those experienced sexism (M=1.75, SD=.95) were *less* likely to blame themselves for the negative experience than those experienced no sexism (M=2.18, SD=1.09)..

The   results   regarding   attribution   are   plotted   in   Figure   1.