

Quotas and affirmative action: Understanding group-based outcomes and attitudes

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Abstract

More and more countries are adopting quotas to increase group-based equality in the boardroom and the political sphere. Nevertheless, affirmative action in general, and quotas in particular, remain a highly controversial subject – eliciting negative reactions from privileged groups, while support among minority and lower-status groups is generally higher. Focusing on gender, we take a broad approach to the topic and discuss (a) the effects of quotas and affirmative action on the underrepresentation of minority groups and on perceptions of their competence, (b) the effects of quotas and affirmative action on organisational performance, and (c) predictors of attitudes towards affirmative action and quotas. We conclude that the benefits of quotas outweigh their costs and that they are an effective way of tackling group-based inequality. We also discuss strategies that can be used to elicit more support among those groups that are particularly critical of quotas.

Keywords: Quotas, affirmative action, gender equality, stigma of incompetence, attitudes towards quotas

Over the past decades there have been visible changes to educational and workplace equality. In relation to gender, in most Western countries approximately half of all higher education students are women (European Commission, 2013; Kena et al., 2015), as are half the workforce (European Commission, 2013; United States Department of Labor, 2015). However, despite these gains, women remain clearly under-represented in many highly paid and prestigious professions, such as surgery (ACS Health Policy Research Institute, 2010) or law (National Association of Law Professionals, 2015) as well as in positions of influence and power such as politics (Bergh, 2009) or executive leadership (Sealy, Doldor, & Vinnicombe, 2016).

It thus appears that something more than current anti-discrimination policies is needed to bring about change. It is clear that it is not just a matter of time before individuals from minority groups trickle through the pipeline. Rather, due to bias and discrimination, and not unrelatedly, personal decisions, members of minority groups and women continue to “leak” from the pipeline at all levels (e.g., Chesler, Barabino, Bhatia, & Richards-Kortum, 2010; Sheltzer & Smith, 2014). Many argue that the solution to this persistent inequality is the introduction of strong and proactive affirmative action policies such as quotas (Blackhurst, 2014; Chan, 2014; Gill, 2014), that is, setting numerical requirements (usually between 20% and 50%) regarding the representation of minorities in hiring, promotion, university admittance, or political representation.

However, affirmative action in general, and quotas in particular, are an incredibly controversial subject. While some argue that quotas are the most effective way to overcome the underrepresentation of minority groups (e.g., Blackhurst, 2014; Chan, 2014; Gill, 2014), others – in particular those in position of power (e.g., Whites, men, those with high socio-economic status) – fear that affirmative action policies will (a) provide unfair advantages to minority groups (e.g., Bonde, 2011; Tuffy, 2011), (b) result in lower organisational performance (e.g., Bonde, 2011), and (c) cause further stigmatisation of those benefitting from such policy (e.g., Cullen, 2015). All of these effects could, it is argued, lead to negative long-term effects and *worsen*, rather than improve, intergroup relations and equality.

Arguably one of the most rigorous policies to date is the Norwegian gender quota law. In 2003 Norway became the first country to introduce sanctions against publicly listed companies that failed to have women (or indeed men) make up at least 40% of board members within five years. Despite initial backlash from business representatives, the proportion of women on the boards of Norway's publicly listed companies increased from 12 per cent in 2005 to 40 per cent in 2009 (Storvik & Teigen, 2010). Today, the initiative is generally seen as very successful and is widely supported in Norway, even by former critics. An extension of the law to other types of companies is being discussed.

Despite this apparent success, there is still opposition to quotas, primarily on the basis of a lack of meritocracy and state intervention (see Harrison, Kravitz, Mayer, Leslie, & Lev-Arey, 2006). Thus, it is important to consider the empirical evidence on the effects of quotas on (a) the representation of minority groups, (b) those thought to benefit most directly (minority group members), and (c) the organisation implementing the policy. It is also important to understand when and why the resistance to quotas arises.

In this paper, we will shed light on these questions in turn. While we are primarily interested in the effects of quotas, we believe that much can be learned from focusing on affirmative action more broadly. We will therefore discuss evidence from politics, education, and the workplace and incorporate findings not only on group-based quotas themselves, but also on more general affirmative action interventions. In the first part of this paper we will review research on the effects of quotas and other affirmative action policies. The second part will be dedicated to exploring factors that may influence group-based attitudes towards quotas. We will end by discussing the practical implications of the research and future research directions.

The Effects of Quotas and Affirmative Action

Any discussion about quotas and affirmative action policies should be based on a thorough understanding of the effects these policies have, both on those thought to benefit from the policies as well as the organisation as a whole. We will examine each of these groups in turn.

Do Quotas and Affirmative Action Change Representation?

Quotas and other affirmative action policies aim to address the underrepresentation of minority groups. Thus, the first and most important question is whether affirmative action initiatives are effective in reaching such goals. The short answer to this is: Yes, they are. An abundance of studies demonstrate that quotas and other affirmative action policies are effective in increasing (a) the number of women holding political office in a variety of countries (e.g., Bonomi et al., 2013; Darhour & Dahlerup, 2013; De Paola et al., 2010; Jones, 2008; Meier, 2004; Paxton et al. 2010; Tripp & Kang, 2007), (b) the proportion of women on company boards (e.g., Storvik & Teigen, 2010; Sabatier, 2015; Wang & Kelan, 2013), (c) the number of ethnic minorities in higher education (e.g., Alon & Malamud, 2014; Bowen & Bok, 1998; Crosby, Iyer, Clayton, & Downing, 2003; Fischer & Massey, 2007), and even, (d) the number of men opting to take paternity leave (Arnalds, Eydal, & Gíslason, 2013; Brandth & Kvande, 2009).

The longer answer is that the relative success of any given initiative is likely to be more complex and include direct effects of the policies themselves as well as indirect effects, for example, of the increased availability of role models. We will consider both of these effects in turn.

Direct effects of quotas and voluntary targets on representation. Studies demonstrate that the effectiveness of quotas and more voluntary targets, set by organizations themselves, is dependent on a number of factors. For example, although voluntary targets can increase the number of women in political offices (Davidson-Schmich, 2006), targets become much less effective if not enforced by sanctions. For example, Storvik and Teigen (2010) argue that it was the extreme sanctions, including forced dissolution of the company, associated with the Norwegian quota law that made it so effective. Similarly, a number of studies from the political domain demonstrate that voluntary targets do not necessarily increase the number of women holding political office (Gray, 2003; Miguel, 2008). Nevertheless, voluntary targets can be effective under certain circumstances. Studies from politics suggest that voluntary targets are generally most effective when the party who

sets them is liberal rather than conservative, when the area is urban rather than rural, when the area is predominantly non-Catholic, and when the country in question is not post-communist (Bonomi et al., 2013; Davidson-Schmich, 2006; Fallon et al., 2012). In other words, where people are more likely to be supportive of affirmative action in general, voluntary targets work better.

It is also important to ask whether quotas can have additional effects. For example, can gender quotas at board level facilitate gender equality throughout the company hierarchy? In Norway, Wang and Kelan (2013) found that the quota led to an increase of women in the most senior leadership positions of board chair and CEO – positions that were not directly targeted by the law. In addition, a critical mass of women on boards (i.e., at least three women) was in turn positively associated with the appointment of a female board chair or CEO. The latter point demonstrates that it is important to aim high when it comes to quotas. If women are only “tokens” – meaning the presence of only one or two women on a board – women may have a difficult time breaking the glass ceiling.

Seierstad and Opsahl (2010), however, argue that while the Norwegian quota has helped women break the glass ceiling, this is true mainly for a small number of women who serve on multiple boards and possess high levels of social capital. The authors do, however, concede that this may be a temporal, short-term effect of the law and that with time more women may be able to follow in the footsteps of these so-called “Golden Skirts”. Similarly, Bertrand, Black, Jensen, and Lleras-Muney (2014) suggest that while Norway’s quota has had some positive effects – such as reducing the gender pay gap within boards and leading to more qualified women being appointed to boards – the overall impact on women in business was rather insignificant. They find no evidence of the greater representation of women on boards “trickling down” to other management levels or having an impact on the gender wage gap more generally. The authors also find little evidence that the quota led to more women enrolling in business degrees, despite the fact that women are aware of the law and believe it will give them a better chance at success.

Another important issue is whether the positive effects of quotas and affirmative action

policies are temporary or whether increased representation remains once the policy is removed. Evidence from Italy, where a gender quota of 33% women on all political party lists was in place for only two years (1993-1995), demonstrates that the increased representation of women can last more than ten years after quotas have been removed (De Paola et al., 2010). Beaman, Chattopadhyay, Duflo, Pande, and Topalova (2009) found similar results in India, where voting districts that had been randomly assigned to being mandated to have a female leader for ten years were more likely to vote for a female leader in the following election compared to districts with no such mandate. This persistence is especially important as it suggests that quotas can be used as a temporary intervention to instil long-term cultural change.

However, there is also evidence demonstrating that the representation of minority group members may decrease immediately after the cessation of affirmative action policies. For example, Garces (2013) investigated the effects of US higher education affirmative action bans – either through voter-approved referenda or executive decision – on the number of ethnic minority students. They concluded that banning affirmative action policies immediately decreased the number of minority group members in higher education, particularly in STEM fields.

The extent to which the effects of quotas and affirmative action policies last beyond their immediate implementation may depend on the way in which they are removed. The banning of policies through a voter referendum implies strong opposition – a political stance that may go hand in hand with higher levels of prejudice, as we will discuss below. Other factors influencing the long-term effectiveness of quotas may include whether the policy targets entrance into a field or more senior positions within a field, which are more visible and may have additional beneficial long-term effects via more indirect routes such as role modelling.

Quotas and role models. The increased number of members of minority groups in certain positions (e.g., women in leadership positions) increases the availability of role models which can in turn translate into motivational outcomes (e.g., Blanton et al., 2000; Lockwood, 2006; Morgenroth, Ryan, & Peters, 2015). One study directly demonstrating this effect comes from India,

where Beaman, Duflo, Pande, and Topalova (2012) examined the effect of quotas on girls' aspirations and educational attainment. In districts which had quota-appointed female leaders, girls had higher aspirations and better educational outcomes compared to districts with no quota law in place (and the leader was male). Similarly, Gilardi (2015) found that the presence of a female candidate in Swiss municipal elections encouraged other women to run for office. However, this is particularly the case the first time a woman runs for office in a given area, suggesting that role models might be of particular relevance when they serve as trailblazers who demonstrate that a goal is indeed attainable for members of one's group.

However, the role model literature more broadly indicates that female role models will not automatically inspire other women to follow in their footsteps. A range of factors, such as the attainability of the role model, affect how effective they are in increasing motivation and changing goals (see Morgenroth et al., 2015). Indeed, research indicates that role models that are dissimilar, and whose success likely seems less attainable, can *deflate* role aspirants' career goals (Asgari, Dasgupta, & Stout, 2012). What is seen as attainable and similar will of course vary between role aspirants and thus a small group of highly successful women is unlikely to inspire all women. Particularly role aspirants with intersecting minority identities such as women of colour or women from low socioeconomic backgrounds are less likely to benefit from female leaders, as their identities are less likely to be represented.

Quotas have the potential to change this issue in two ways. First, they increase the numbers of women in leadership, making diversity among them more likely. Additionally, quotas could target multiple underrepresented groups such as women *and* people of colour. However, the literature on intersectional invisibility indicates that women with intersecting identities, such as women of colour, might be overlooked nevertheless, with one policy increasing the number of white women and the other increasing the number of men of colour as they are more prototypical of their respective groups (i.e., Purdie-Vaughns & Eibach, 2008). Research by Seierstad and Opsahl (2010) supports this claim by showing that quotas may (at least initially) only benefit a very small,

elite group of women. Thus, while quotas have the potential to increase the number of role models for women, it is unlikely that they will benefit *all* women equally, unless steps are taken to ensure diversity of female leaders.

It is important to note that quotas might affect the effectiveness of role models as they are only when these women are seen as having achieved their success through effort and skill, rather than through luck or the actions of others (McIntyre, Paulson, Taylor, Morin, & Lord, 2010). Thus, women are unlikely to be motivated or inspired by female leaders if they believe they only got to where they are because of preferential treatment.

Summary of section. Quotas and other affirmative action policies are demonstrably effective in increasing the representation of minority group members. However, the effectiveness of quotas, and the persistence of this effect, depend on whether they are voluntary, the nature of the sanctions, as well as cultural factors. In general, factors that are positively associated with stronger support for affirmative action policies are positively associated with their effectiveness.

While the primary purpose of quotas and affirmative action policies is an increase in numbers, are such policies also beneficial for those for whom quotas are designed to help? Or are there unintended consequences as some fear, either for beneficiaries or organisational performance? Evidence on these questions is also mixed.

Do Quotas and Affirmative Action Have Unintended Negative Consequences for Their Beneficiaries?

One of the arguments frequently made against quotas is that they unintentionally lead to beneficiaries being perceived as less competent, both by others as well as by themselves, an outcome termed the “stigma of incompetence” (Heilman, Block, & Lucas, 1992). For example, Garcia and colleagues (1981) presented White participants with information about a male applicant for a graduate program at a US university. All information about the applicant's qualifications was held constant, but he was described as being Hispanic (or not) and the university was described as

being committed to an affirmative action policy or no such policy was mentioned. While university support for affirmative action had no effect on perceptions of the White applicant, it did alter perceptions of the Hispanic applicant, such that when the university was committed to affirmative action, he was perceived as less qualified (see also Heilman, 1994; Heilman & Blader, 2001; Heilman, Block, & Lucas, 1992). However, evidence from field studies in which much more information about members of minority groups is available demonstrates that beneficiaries are not necessarily differentiated from their majority group counterparts (Kerevel & Atkeson, 2013; Zetterberg, 2008).

Self-perceptions of incompetence can also be seen in beneficiaries of affirmative action themselves (Heilman, Battle, Keller, & Lee, 1998; Heilman, Rivero, & Brett, 1991; O'Brien Garcia, Crandall, & Kordys, 2010), but such perceptions only arise under very specific circumstances. Minority group members who are told that they were selected for a position because of an affirmative action policy see themselves as less competent (see Heilman, et al., 1998). However, this effect disappears in ambiguous situations, for example, for White women who are told that an affirmative action policy exists, but not that they personally were selected because of it. Indeed, they, like their male White counterparts, see themselves as *more* competent when they believe that a quota policy is in place (Unzueta, Gutiérrez & Ghavami, 2010; Unzueta, Lowery, Knowles, 2008), most likely because they believe that the beneficiaries of the policy are women of colour and that they were selected *despite*, rather than because of, the policy.

Evidence further suggests that the negative effects on beneficiaries' self-perceptions of their abilities disappears in situations where more information about one's own qualifications is present – which is generally the case in the world outside the laboratory (see Crosby, Iyer, & Sincharoen, 2006). An interview study with women from Germany and India suggests that quotas can increase women's expectations of succeeding and their motivation and ambition (Geissel & Hust, 2006). This is important as minority group members will only attempt to enter a domain if they feel motivated to do so (Eccles & Wigfield, 2002) – and they are less likely to feel this way if they

anticipate failure. Quotas and other affirmative action policies can positively influence minority members' expectations of success and hence not only increase their numbers in target positions, but also in the pool of applicants.

Do Quotas and Affirmative Action Affect Performance?

Another important issue is the effect quotas and other affirmative action policies have on the performance, both of companies and of those selected on the basis of the policy. Norwegian studies point towards both positive and negative effects of quotas. On the negative side, the law has led to boards of directors being younger and less experienced (Ahern & Dittmar, 2011) and a higher number of independent directors with no previous ties to the organisation (Bøhren and Staubo, 2015). These changes were associated with poorer company performance measured in terms of Return on Assets (Bøhren & Staubo, 2015), and short-term profit (Matsa & Miller, 2012). Ahern and Dittmar (2011) also demonstrate a unique drop in stock price and Tobin's Q (a stock-based measure of performance) in reaction to the official announcement of the law, but it should be noted that this is neither a reaction to the actual appointment of women through quotas nor a reflection of company performance. Moreover, the effects of the actual appointment of women due to the law were particularly negative for companies with a low number of women on their boards before the law was introduced and thus had to make substantial changes to their boards. It seems likely that such an effect is only temporal, as these changes are only required once. Whether these effects persist over time remains to be seen.

The same is of course true for the positive effects of quotas. Positive effects include fewer work-force reductions (Matsa & Miller, 2012) and enhanced firm innovation, which is likely to increase company performance in the long-run, in Norway (Torchia et al., 2011) and an increase in company performance found in France (Sabatier, 2015), where a 40% female board member quota law was passed in 2011.

Studies of the qualifications of female politicians elected under a quota law in Italy suggests

that those selected are not less qualified. Indeed, “quota woman” were *more* qualified than other politicians in terms of experience and more committed, indicated by lower rates of absenteeism (Weeks & Baldez, 2014), and more highly educated (Baltrunaite, Bello, Casarico, & Profeta, 2012). Similarly, data from Sweden suggest that quotas lead to more competent politicians being elected and that this effect is driven by mediocre men being replaced by highly competent women (Besley, Folke, Persson, & Rickne, 2017).

Looking at affirmative action more broadly, studies show that affirmative action policies are positively related to stock performance (Bellinger & Hillman, 2000; Wright, Ferris, Hiller, & Kroll, 1995). These findings are particularly interesting in light of the findings by Ahern and Dittmar (2011) reported above. Organisations may benefit from voluntarily adopting targets and affirmative action policies while quotas mandated by law may be less beneficial, at least short-term and in relation to their stock performance.

Taken together, these findings suggest that the most problematic consequences of mandatory quotas on company boards is a potential drop in stock prices and stock-related measures of company performance – although the evidence is mixed. However, two questions remain. First, is this effect due to the board’s actual performance or due to outwards perception? If the former were the case, we would expect an equal effect on accountancy-based measures (see for example Haslam et al., 2010). While we do see this to some extent, it seems to be the case primarily for companies that made extreme board changes in a short time period. We further argue that attitudes towards gender diversity in general, as well as towards quotas and other affirmative action policies in particular, are an important determinant of investor reactions to the appointment of women to boards. The next section examines the predictors of attitudes towards quotas and other affirmative action policies and how these may be influenced.

What Predicts Attitudes Towards Quotas and Affirmative Action?

As we noted above, softer affirmative action policies are more effective when attitudes

towards them are generally positive. Unfortunately, in many countries this is not the case (e.g., Allen & Dean, 2008; Harrison et al. 2006). Nevertheless, attitudes towards quotas vary systematically between different groups and based on different variables.

Attitudes and Group Membership

Perhaps the most obvious influence on attitudes towards affirmative action is group membership – whether or not one belongs to the group who will benefit. Research demonstrates two distinct findings. First, those who don't benefit from the affirmative action policy (e.g., men, Whites) are less supportive of the policy (Harrison et al., 2006; Kane & Whipkey, 2009; Levi & Fried, 2008; Lowery, Unzueta, Knowles, & Goff, 2006; Moscoso et al., 2012; O'Brien et al., 2010; Oh, Choi, Neville, Anderson, & Landrum-Brown, 2010). This makes intuitive sense, as these policies can be perceived to harm one's own group. Indeed, evidence suggests that the anticipated effects for those from groups not targeted may be more important than those who are. For example, Lowery and colleagues (2006) found that the attitudes of White participants were dependent on whether they thought an affirmative action policy would have negative consequences for their own group, particularly for those highly identified with their race. Similarly, O'Brien and colleagues (2010) found that majority group members were more likely to voice “concerns” about the minority group being stigmatised by the policy when it was framed as negatively affecting their own group, compared to when it was framed as having no consequences. The framing had no effect on the degree to which they voiced objections based on fairness or meritocracy. These findings indicate that such “concerns” for the targets of quotas and other affirmative action policies should be evaluated critically when coming from members of advantaged group.

Second, research demonstrates that being a member of a disadvantaged group can determine attitudes towards quotas and affirmative action policies targeting *other* disadvantaged groups. Kane and Whipkey (2009) demonstrated that support for gender-based affirmative action is not only predicted by gender, but also by being an ethnic minority or being of lower education (see also

Faniko, Faniko, Lorenzi-Cioldi, Buschini, & Chatard, 2012), such that minority group members are more likely to report supportive attitudes. These differences are particularly pronounced for strong policies such as quotas (see Harrison et al., 2006). These findings are important, as those who have the power and opportunity to shape affirmative action policies (i.e., the highly educated, men, and ethnic majorities) are the least likely to support them, especially those policies that are the most effective in addressing the underrepresentation of stigmatised groups: quotas.

Sexism, Racism, and Guilt

A number of studies show, perhaps unsurprisingly, that negative attitudes towards affirmative action are associated with more general sexist attitudes (Harrison et al., 2006; Tougas, Crosby, Joly, & Pelchat, 1995) and racist attitudes (Harrison et al., 2006; James, Brief, Dietz, & Cohen, 2001; Mack, Johnson, Green, Parisi, & Thomas, 2002; Shteynberg, Leslie, Knight, & Mayer, 2011), particularly for modern forms of sexism and racism. For example, Shteynberg and colleagues (2011) demonstrated that White US participants high on modern racism (i.e., the belief that racial minorities are not disadvantaged in society) also had more negative attitudes towards race-based affirmative action. This association was partly explained by the extent to which individuals perceived such policies as fair. In relation to gender, Kane and Whipkey (2009) found that modern sexism (i.e., the belief that women don't face discrimination) predicted negative attitudes towards gender-based affirmative action. Interestingly, more old-fashioned forms of sexism (e.g. whether women were seen to be unsuited for politics) did not predict negative attitudes. These exemplary results were confirmed in a meta-analysis by Harrison and colleagues (2006).

Group-based guilt on the other hand, seems to be positively related to support for affirmative action policies. Iyer and colleagues (2003) demonstrated that feelings of White guilt predicted the endorsement of “compensatory policies” such as quotas for African American students in higher education. Support for “equal opportunity policies” such as sending more representatives of universities to schools with a high number of African American students, however, was not

predicted by guilt, but by group-based sympathy.

Meritocratic Beliefs

As noted above, one of the arguments most often cited in opposition of affirmative action policies and quotas is the claim that they give *unfair* advantages to minority groups, despite evidence that they may actually increase meritocracy (Besley et al. 2017). Studies demonstrate that attitudes towards affirmative action policy are influenced by the degree to which one believes that the world is meritocratic (i.e., the belief that individuals get what they have worked for) as well as the importance placed on meritocratic procedures (Islam & Zilenovsky, 2011; Kane & Whipkey, 2009; Meier, 2008). Meier demonstrated that even a decade after gender quotas had been implemented in the Flemish political system, men were still strongly opposed to them. This opposition was partly due to explanations of the underrepresentation of women. While most women believed that women got fewer chances in politics, men disagreed with this statement. In line with meritocratic beliefs, men believed that women were underrepresented in politics because they didn't fight hard enough for their positions, while the majority of women did not agree with this statement.

Evidence from experimental studies back up this claim. Faniko and colleagues (2011) demonstrated that those who were highly educated demonstrated stronger support for a system in which everyone gets rewarded according to their individual performance (the importance of meritocracy), which in turn increased their opposition to the policy. Similar effects have been found for constructs closely related to meritocratic beliefs such as stratification beliefs (i.e., beliefs that wealth and power is distributed because of the actions of individuals or because of structural mechanisms; Kane & Whipkey, 2009) and system justification beliefs (i.e., the belief that the current system is fair; Phelan & Rudman, 2011).

Other studies suggest that meritocracy is also an important factor in determining how those who may benefit from affirmative action policies react to their implementation. For example, Islam and Zilenovsky (2011) found that when women believed that a gender affirmative action policy was

in place they expressed less desire to lead. However, this was only the case for those who perceived the policy as unfair and unmeritocratic.

Taken together, affirmative action policies, particularly strict ones such as quotas, are often seen as the antithesis of meritocratic principles, particularly by those who believe in a just world. For those potentially benefitting from the affirmative action policy the effect goes beyond feelings of unfairness, such that it may negatively impact on their attitudes towards the domain in question. We would add, that such objections often presume that existing practices, under which minority groups continue to be underrepresented, are meritocratic, an assumption with which we would vehemently disagree. Indeed, Crosby and colleagues (2003), argue that affirmative action actually promotes meritocratic, fair procedures – an argument which we will come back to when discussing practical implications.

Future Research Directions

We have discussed a variety of important findings regarding quotas and affirmative action more broadly. However, there are questions which remain unanswered and to which future research should attend. First, it is important to investigate the long-term effects of quotas, both on organisational performance and on the representation of members of minority groups. Evidence is mixed and the conditions under which quotas result in the best performance and sustained representation are unclear. This is particularly the case for boardroom quotas, which are relatively new, but which more and more countries are implementing. Longitudinal studies would be ideal to track their developments over time.

Moreover, we have argued that broad support is essential, not only from those who benefit from affirmative action policies, but from those who have the power to implement them. In the next section, we recommend different strategies to increase support for quotas, but research should investigate whether these strategies are indeed effective. This should be done using both experimental research and field studies.

Lastly, issues of intersectionality have largely been ignored in the literature affirmative

action. Future research should investigate how individuals with intersecting identities are affected by quotas. For example, are the benefits of gender quotas limited to white, middle- and upper-class, heterosexual, able-bodied women? Does the stigma of incompetence affect women of colour more than white women as they, theoretically, tick multiple “quota boxes”? These issues need to receive more attention.

Practical Implications and Conclusion

Taken together, our review of the research suggests that while quotas and other affirmative action policies are broadly effective at achieving their aim of increased equality, their effectiveness is contextual and their implementation may result in unintended consequences. Thus, when designing and implementing affirmative action policies, policy makers should consider a number of important points based on the evidence.

First, policy makers need to establish which outcomes they value the most. The appropriateness of a given policy depends on its aim. For example, when the primary goal is to increase the representation of a particular group quickly and effectively, mandatory quotas are without doubt the best option. On the other hand, when trying to avoid negative outcomes such as the resistance to the initiative itself, “softer” forms of affirmative action might be more appropriate. Moreover, when strict policies such as quotas are chosen, specific percentages need to be decided. It is important that minorities become more than just “tokens” (Kanter, 1977). For stereotypes and prejudice to change – and for quotas to become redundant – minority group members need to make up a substantial number in any given context. Similarly, the positive effects of role models can only be realised if a diverse group of potential role models is available (see Morgenroth et al. 2015). This also means that it may be beneficial to target not only the most senior positions but also to ensure that role aspirants have role models at all career stages.

It is also important to take support for the policy into consideration. While members of majority groups might object, we argue that this should certainly not justify the status quo. Indeed, this resistance may be precisely a protest against losing privilege. However, it is important to keep

in mind that negative attitudes towards the policy might also negatively impact the targeted group. It is therefore beneficial to gain support before implementing a policy. A number of studies examine how support can be garnered and negative outcomes reduced. First, the framing of the policy plays an important role. Awad (2013) demonstrates that the same policy can lead to quite different reactions based on whether it is labelled as “affirmative action” or as “promoting diversity”. When the latter was the case, African Americans were stigmatised less by others, particularly by White men and conservative participants – whose support may be hardest to gain in the first place. Similarly, Murray (2014) argues it might be beneficial to frame quota-like policies as focussing on men’s overrepresentation and the consequence of relying on a talent pool that is too narrow.

It is also important to make structural discrimination visible to alter beliefs in a just world (e.g., Kane & Whipkey, 2009; Phelan & Rudman, 2011). Son Hing, Bobocel, and Zanna (2002) demonstrated that providing information about ways in which minority group members were often discriminated against increased support for an affirmative action policy among participants with a high preference for merit-principles. However, Harrison and colleagues (2006) showed that resistance to such policies was only reduced when the underrepresentation was attributed to discrimination. It should also be kept in mind that making discrimination visible can negatively affect targets’ ability beliefs and well-being, particularly when this discrimination is perceived as widespread and unlikely to change (Schmitt, Branscombe, & Postmes, 2003; Stroebe, Dovidio, Barreto, Ellemers, & John, 2011).

Another potential way to gain the support is to highlight ways in which the policy still relies on, and – more importantly – fosters meritocratic decisions. People generally dislike the idea of others being selected solely based on their group membership (e.g., Crosby et al., 2003). However, most affirmative action policies do include merit as an important factor (e.g., to hire a woman only if a female and a male candidate are equally qualified) and are thus compatible with the ideal of merit-based assessment (Crosby et al., 2003). However, if these merit-based criteria are not emphasised, people overlook them, leading to negative outcomes such as stigmatisation of the

targets of the affirmative action policy (Heilman et al., 1998).

It can also be argued that affirmative action policies actually increase the fairness of decisions. Crosby and colleagues (2003) argue that decisions made without affirmative action policies in place are never completely objective. These decisions are affected by biases and prejudice and therefore often result in unfair decisions. Moreover, minority group members often face additional barriers such as stereotype threat (Steele & Aronson, 1995), meaning that even the score of standardised, “objective” test-scores does not necessarily reflect skills and ability of majority and minority members in the same way. Only policies which explicitly take these factors into consideration can therefore be considered fair and meritocratic.

Based on the evidence reviewed in this paper, we argue that the benefits of affirmative action policies far outweigh their negative effects. We suggest that quotas and other affirmative action policies should be seen as a first mandatory step to catalyst voluntary, lasting change, not only in the representation of minority group members but also in intergroup culture, prejudice, and attitudes.

References

- ACS Health Policy Research Institute (2010). *The surgery workforce in the United States: Profile and recent trends*. Retrieved from:
http://www.acshpri.org/documents/ACSHPRI_Surgical_Workforce_in_US_apr2010.pdf
- Ahern, K. R., & Dittmar, A. K. (2012). The changing of the boards: The impact on firm valuation of mandated female board representation. *Quarterly Journal of Economics*, *127*, 137-197. doi:
<http://dx.doi.org/10.2139/ssrn.1364470>
- Allen, N., & Dean, J. (2008). No (Parliamentary) Gender gap please, we're British. *The Political Quarterly*, *79*, 212-220. doi: 10.1111/j.1467-923X.2008.00924.x
- Alon, S., & Malamud, O. (2014). The impact of Israel's class-based affirmative action policy on admission and academic outcomes. *Economics of Education Review*, *40*, 123-139. doi:
<http://dx.doi.org/10.1016/j.econedurev.2014.02.004>
- Arnalds, Á., Eydal, G. B. and Gíslason, I. V. (2013). Equal rights to paid parental leave and caring fathers - the case of Iceland. *Stjórnmal og stjórnsýsla*, *9*, 323-344. doi:
<http://dx.doi.org/10.13177/irpa.a.2013.9.2.4>
- Asgari, S., Dasgupta, N., & Stout, J. G. (2012). When do counterstereotypic ingroup members inspire versus deflate? The effect of successful professional women on young women's leadership self-concept. *Personality and Social Psychology Bulletin*, *38*(3), 370-383. doi:
10.1177/0146167211431968
- Awad, G. H. (2013). Does policy name matter? The effect of framing on the evaluations of African American applicants. *Journal of Applied Social Psychology*, *43*(Suppl 2), E379-E387.
doi:10.1111/jasp.12026
- Baltrunaite, A., Bello, P., Casarico, A., & Profeta, P. (2014). Gender quotas and the quality of politicians. *Journal of Public Economics*, *118*, 62-74. doi:
<http://dx.doi.org/10.1016/j.jpubeco.2014.06.008>
- Beaman, L., Chattopadhyay, R., Duflo, E., Pande, R., & Topalova, P., (2009). Powerful women:

- Does exposure reduce bias? *Quarterly Journal of Economics*, 124, 1497-1540. doi: <https://doi.org/10.1162/qjec.2009.124.4.1497>
- Beaman, L., Duflo, E., Pande, R., & Topalova, P. (2012). Female leadership raises aspirations and educational attainment for girls: A policy experiment in India. *Science*, 335, 582-586. doi: 10.1126/science.1212382
- Bellinger, L., & Hillman, A. J. (2000). Does tolerance lead to better partnering? The relationship between diversity management and M&A success. *Business and Society*, 39, 323-337. doi: 10.1177/000765030003900305
- Bergh, J. (2009). Public opinion and representation of women in national legislatures: An analysis of cause and effect. *Journal of Legislative Studies*, 15, 53-70. doi: <http://dx.doi.org/10.1080/13572330802666794>
- Bertrand, M., Black, S. E., Jensen, S., & Lleras-Muney, A., (2014). *Breaking the glass ceiling? The effect of board quotas on female labor market outcomes in Norway* (NBER Working Paper No. 20256). The National Bureau of Economic Research. doi: 10.3386/w20256
- Besley, Timothy and Folke, Olle and Persson, Torsten and Rickne, Johanna (2017) Gender quotas and the crisis of the mediocre man: theory and evidence from Sweden. *American Economic Review*, 107, 2204-2242. doi: 10.1257/aer.20160080
- Blackhurst, C. (2014, January 28). While men are in charge, gender quotas are the only way to increase the number of women in boardrooms. *The Independent*. Retrieved from <http://www.independent.co.uk/voices/comment/while-men-are-in-charge-gender-quotas-are-the-only-way-to-increase-the-number-of-women-in-boardrooms-9091582.html>
- Blanton, H., Crocker, J., & Miller, D. T. (2000). The effects of in-group versus out-group social comparison on self-esteem in the context of a negative stereotype. *Journal of Experimental Social Psychology*, 36, 519-530. doi: 10.1006/jesp.2000.1425
- Bøhren, Ø., & Staubo, S. (2015). Mandatory gender balance and board independence. *European Financial Management*, 22, 3-30. doi: 10.1111/eufm.12060

- Bonde, H. (2011, August 22). Copenhagen gender policy is unfair. *University Post*. Retrieved from <http://universitypost.dk/article/comment-copenhagen-gender-policy-unfair>
- Bonomi, G., Brosio, G., & Di Tommaso, M. (2013). The impact of gender quotas on votes for women candidates: Evidence from Italy. *Feminist Economics*, *19*, 48-75. doi: 10.1080/13545701.2013.825375
- Bowen, W. G., & Bok, D. (1998). *The shape of the river: Long-term consequences of considering race in college and university admissions*. Princeton, NJ: Princeton University Press.
- Brammer, S., Millington, A., & Pavelin, S. (2007). Gender and ethnic diversity among UK corporate boards, *Corporate Governance: An International Review*, *15*, 393–403. doi: 10.1111/j.1467-8683.2007.00569.x
- Brandth, B., & Kvande, E. (2009). Gendered or gender-neutral care politics for fathers? *Annals of the American Academy of Political and Social Science*, *624*, 177-189. doi:10.1177/0002716209334119
- Burke, R. J. (2000) Company size, board size and the number of women directors. In R. J. Burke and M. C. Mattis (Eds.) *Women on corporate boards of directors: International challenges and opportunities* (pp. 157–167). The Netherlands: Kluwer Academic Publishers
- Campbell, K., & Mínguez-Vera, A. (2008). Gender diversity in the boardroom and firm financial performance. *Journal of Business Ethics*, *83*, 435-451. doi:10.1007/s10551-007-9630-y
- Chan, S. P. (2014, January 25). Quotas needed for women in executive roles. *The Telegraph*. Retrieved from <http://www.telegraph.co.uk/finance/financetopics/davos/10597233/Quotas-needed-for-women-in-executive-roles.html>
- Chapple, L., & Humphrey, J. E. (2014). Does board gender diversity have a financial impact? Evidence using stock portfolio performance. *Journal of Business Ethics*, *122*, 709-723. doi: 10.1007/s10551-013-1785-0
- Chesler, N., Barabino, G., Bhatia, S., & Richards-Kortum, R. (2010). The pipeline still leaks and more than you think: A status report on gender diversity in biomedical engineering. *Annals*

of Biomedical Engineering, 38, 1928-1935. doi: 10.1007/s10439-010-9958-9

Crosby, F. J., Iyer, A., & Sincharoen, S. (2006). Understanding affirmative action. *Annual Review of Psychology*, 57, 585-611. doi: 10.1146/annurev.psych.57.102904.190029

Crosby, F. J., Iyer, A., Clayton, S., & Downing, R. A. (2003). Affirmative action: Psychological data and the policy debates. *American Psychologist*, 58, 93-115.

Cullen, E. (2014, February 26). Gender politics are the least funny thing about comedy. *Irish Independent* retrieved from <http://www.independent.ie/blog/gender-politics-are-the-least-funny-thing-about-comedy-30044563.html>

Darhour, H., & Dahlerup, D. (2013). Sustainable representation of women through gender quotas: A decade's experience in Morocco. *Women's Studies International Forum*, 41(Part 2), 132-142. doi:10.1016/j.wsif.2013.04.008

Davidson-Schmich, L. K. (2006). Implementation of political party gender quotas: Evidence from the German Länder 1990–2000. *Party Politics*, 12, 211-232. doi 10.1177/1354068806061338

De Paola, M., Scoppa, V., & Lombardo, R. (2010). Can gender quotas break down negative stereotypes? Evidence from changes in electoral rules. *Journal of Public Economics*, 94, 344-353. doi: 10.1016/j.jpubeco.2010.02.004

Eccles, J., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53, 109-132. doi: 10.1146/annurev.psych.53.100901.135153

European Commission (2013). *European social statistics: 2013 edition*. Luxembourg: Publications Office of the European Union

Fallon, K. M., Swiss, L., & Viterna, J. (2012). Resolving the democracy paradox: Democratization and women's legislative representation in developing nations, 1975 to 2009. *American Sociological Review*, 77, 380-408. doi:10.1177/0003122412443365

Faniko, K., Lorenzi-Cioldi, F., Buschini, F., & Chatard, A. (2012). The influence of education on attitudes toward affirmative action: The role of the policy's strength. *Journal of Applied*

Social Psychology, 42, 387-413. doi:10.1111/j.1559-1816.2011.00892.x

Fischer, M. J., & Massey, D. S. (2007). The effects of affirmative action in higher education. *Social Science Research*, 36, 531-549. doi:10.1016/j.ssresearch.2006.04.004

Garces, L. M. (2013). Understanding the impact of affirmative action bans in different graduate fields of study. *American Educational Research Journal*, 50, 251-284.
doi:10.3102/0002831212470483

Garcia, L. T., Erskine, N., Hawn, K., & Casmay, S. R. (1981). The effect of affirmative action on attributions about minority group members. *Journal of Personality*, 49, 427-437.
doi:10.1111/j.1467-6494.1981.tb00224.x

Geissel, B., & Hust, E. (2005). Democratic mobilisation through quotas: Experiences in India and Germany. *Commonwealth And Comparative Politics (Formerly Called Journal Of Commonwealth & Comparative Politics)*, 43, 222-244. doi: 10.1080/14662040500151101

Gilardi, F. (2015). The temporary importance of role models for women's political representation. *American Journal of Political Science*, 59, 957-970. doi: 10.1111/ajps.12155

Gill, C. (2014, December 5). Why women in Europe need gender quotas. *World Finance*. Retrieved from <http://www.worldfinance.com/infrastructure-investment/government-policy/in-support-of-gender-quotas-why-women-in-europe-need-the-measure>

Gray, T. (2003). Electoral gender quotas: Lessons from Argentina and Chile. *Bulletin of Latin American Research*, 22, 52-78. doi: 10.1111/1470-9856.00064

Harrison, D. A., Kravitz, D. A., Mayer, D. M., Leslie, L. M., & Lev-Arey, D. (2006). Understanding attitudes toward affirmative action programs in employment: Summary and meta-analysis of 35 years of research. *Journal of Applied Psychology*, 91, 1013-1036.
doi:10.1037/0021-9010.91.5.1013

Haslam, S. A., Ryan, M. K., Kulich, C., Trojanowski, G., & Atkins, C. (2010). Investing with prejudice: The relationship between women's presence on company boards and objective and subjective measures of company performance. *British Journal of Management*, 21, 484-

497. doi: 10.1111/j.1467-8551.2009.00670.x

Heilman, M. E. (1994). Affirmative action: Some unintended consequences for working women.

Research in Organizational Behavior, 16, 125–169.

Heilman, M. E., Battle, W. S., Keller, C. E., & Lee, R. A. (1998). Type of affirmative action policy:

A determinant of reactions to sex-based preferential selection? *Journal of Applied Psychology, 83*, 190–205.

Heilman, M. E., & Blader, S. L. (2001). Assuming preferential selection when the admissions

policy is unknown: The effects of gender rarity. *Journal of Applied Psychology, 86*, 188–193. doi: 10.1037/0021-9010.86.2.188

Heilman, M. E., Block, C. J., & Lucas, J. A. (1992). Presumed incompetent? Stigmatization and

affirmative action efforts. *Journal of Applied Psychology, 77*, 536–544. doi: 10.1037/0021-9010.77.4.536

Heilman, M. E., Rivero, J. C., & Brett, J. F. (1991). Skirting the competence issue: Effects of sex-

based preferential selection on task choices of women and men. *Journal of Applied Psychology, 76*, 99–105. doi: 10.1037/0021-9010.76.1.99

Hideg, I., Michela, J. L., & Ferris, D. (2011). Overcoming negative reactions of nonbeneficiaries to

employment equity: The effect of participation in policy formulation. *Journal of Applied Psychology, 96*, 363–376. doi:10.1037/a0020969

Islam, G., & Zilenovsky, S. S. (2011). Affirmative action and leadership attitudes in Brazilian

women managers: The moderating influence of justice perceptions. *Journal of Personnel Psychology, 10*, 139–143. doi:10.1027/1866-5888/a000039

Iyer, A., Leach, C. W., & Crosby, F. J. (2003). White guilt and racial compensation: The benefits

and limits of self-focus. *Personality and Social Psychology Bulletin, 29*, 117–129. doi: 10.1177/0146167202238377

James, E. H., Brief, A. P., Dietz, J., & Cohen, R. R. (2001). Prejudice matters: Understanding the

reactions of Whites to affirmative action programs targeted to benefit Blacks. *Journal of*

Applied Psychology, 86, 1120-1128. doi:10.1037/0021-9010.86.6.1120

Jones, M. (2009). Gender quotas, electoral laws, and the election of women. *Comparative Political Studies*, 42, 56-81. doi: 10.1177/0010414008324993

Kane, E. W., & Whipkey, K. J. (2009). Predictors of public support for gender-related affirmative action: Interests, gender attitudes, and stratification beliefs. *Public Opinion Quarterly*, 73, 233-254. doi:10.1093/poq/nfp019

Kanter, R. M. (1977). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology* 82, 965–990. doi: 10.1086/226425.

Kena, G., Musu-Gillette, L., Robinson, J., Wang, X., Rathbun, A., Zhang, J., Wilkinson-Flicker, S., Barner, A., & Dunlop Velez, E. (2015). *The Condition of Education 2015 (NCES 2015-144)*. Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved <https://nces.ed.gov/pubs2015/2015144.pdf>

Kerevel, Y. P., & Atkeson, L. (2013). Explaining the marginalization of women in legislative institutions. *The Journal of Politics*, 75, 980-992. doi:10.1017/S0022381613000960

Levi, A. S., & Fried, Y. (2008). Differences between African Americans and Whites in reactions to affirmative action programs in hiring, promotion, training, and layoffs. *Journal of Applied Psychology*, 93, 1118-1129. doi:10.1037/0021-9010.93.5.1118

Lockwood, P. (2006). "Someone like me can be successful": Do college students need same-gender role models? *Psychology of Women Quarterly*, 30, 36–46. doi: 10.1111/j.1471-6402.2006.00260.x

Lowery, B. S., Unzueta, M. M., Knowles, E. D., & Goff, P. (2006). Concern for the in-group and opposition to affirmative action. *Journal of Personality and Social Psychology*, 90, 961-974. doi:10.1037/0022-3514.90.6.961

Mack, D. A., Johnson, C. D., Green, T. D., Parisi, A. G., & Thomas, K. M. (2002). Motivation to control prejudice as a mediator of identity and affirmative action attitudes. *Journal of Applied Social Psychology*, 32, 934-64. doi: 10.1111/j.1559-1816.2002.tb00249.x

- Matsa, D., & Miller, A. (2013). A female style in corporate leadership? Evidence from quotas. *American Economic Journal: Applied Economics*, 5, 136-169. doi: 10.1257/app.5.3.136
- McIntyre, R. B., Paulson, R. M., Taylor, C. A., Morin, A. L., & Lord, C. G. (2010). Effects of role model deservingness on overcoming performance deficits induced by stereotype threat. *European Journal of Social Psychology*, 41, 301–311. doi: 10.1002/ejsp.774
- Meier, P. (2004). The mutual contagion effect of legal and party quotas: A Belgian perspective. *Party Politics*, 10, 583-600. doi: 10.1177/1354068804045389
- Meier, P. (2008). A gender gap not closed by quotas. *International Feminist Journal of Politics*, 10, 329-347. doi: 10.1080/14616740802185650
- Miguel, L. F. (2008). Political representation and gender in Brazil: Quotas for women and their impact. *Bulletin of Latin American Research*, 27, 197-214. doi: 10.1111/j.1470-9856.2008.00263.x
- Morgenroth, T., Ryan, M. K., & Peters, K. (2015). The motivational theory of role modelling: How role models influence role aspirants' goals. *Review of General Psychology*, 19, 465-483. doi: 10.1037/gpr0000059
- Moscoso, S., García-Izquierdo, A. L., & Bastida, M. (2012). A mediation model of individual differences in attitudes toward affirmative actions for women. *Psychological Reports*, 110, 764-780. doi:10.2466/01.07.17.PR0.110.3.764-780
- Murray, R. (2014). Quotas for men: Reframing gender quotas as a means of improving representation for all. *American Political Science Review*, 108, 520-532. doi: 0.1017/S0003055414000239
- National Association of Law Professionals. (2015). *Diversity numbers at law firms eke out small gains: Numbers for women associates edge up after four years of decline*. Retrieved from: <http://www.nalp.org/uploads/PressReleases/Feb2015WomenMinoritiesPressRelease.pdf>
- O'Brien, L. T., Garcia, D., Crandall, C. S., & Kordys, J. (2010). White Americans' opposition to affirmative action: Group interest and the harm to beneficiaries' objection. *British Journal of*

Social Psychology, 49, 895-903. doi:10.1348/014466610X518062

OECD (2008). *OECD Employment Outlook. Chapter 3: The Price of Prejudice: Labour Market Discrimination on the Grounds of Gender and Ethnicity*. OECD, Paris, 2008. Retrieved from <http://www.oecd.org/employment/emp/43244511.pdf>

Oh, E., Choi, C., Neville, H. A., Anderson, C. J., & Landrum-Brown, J. (2010). Beliefs about affirmative action: A test of the group self-interest and racism beliefs models. *Journal of Diversity in Higher Education*, 3, 163-176. doi:10.1037/a0019799

Paxton, P., Hughes, M. M., & Painter, M. A. (2010). Growth in women's political representation: A longitudinal exploration of democracy, electoral system and gender quotas. *European Journal of Political Research*, 49, 25-52. doi: 10.1111/j.1475-6765.2009.01886.x

Phelan, J. E., & Rudman, L. A. (2011). System justification beliefs, affirmative action, and resistance to equal opportunity organizations. *Social Cognition*, 29, 376-390. doi:10.1521/soco.2011.29.3.376

Purdie-Vaughns, V., & Eibach, R. P. (2008). Intersectional Invisibility: The distinctive advantages and disadvantages of multiple subordinate-group identities. *Sex Roles*, 59(5-6), 377-391. doi:10.1007/s11199-008-9424-4

Sabatier, M. (2015). A women's boom in the boardroom: effects on performance? *Applied Economics*, 47, 2717-2727. doi: 10.1080/00036846.2015.1008774

Schmitt, M. T., Branscombe, N. R., & Postmes, T. (2003). Women's emotional responses to the pervasiveness of gender discrimination. *European Journal of Social Psychology*, 33, 297-312. doi:10.1002/ejsp.147

Sealy R., Doldor E., & Vinnicombe, S. (2016). *Female FTSE Report 2016 - Women on Boards: Taking stock of where we are*. KPMG; Government Equalities Office, London, Cranfield School of Management

Seierstad, C., & Opsahl, T. (2011). For the few not the many? The effects of affirmative action on presence, prominence, and social capital of women directors in Norway. *Scandinavian*

Journal of Management, 27, 44-54. doi:10.1016/j.scaman.2010.10.002

Sheltzer, J. M., & Smith, J. C. (2014). Elite male faculty in the life sciences employ fewer women.

Proceedings of the National Academy of Sciences of the United States of America, 111, 10107-10112.

Shteynberg, G., Leslie, L. M., Knight, A. P., & Mayer, D. M. (2011). But affirmative action hurts us! Race-related beliefs shape perceptions of White disadvantage and policy unfairness.

Organizational Behavior and Human Decision Processes, 115, 1-12.

doi:10.1016/j.obhdp.2010.11.011

Smith, N., Smith, V., & Verner, M. (2006). Do women in top management affect firm performance?

A panel study of 2,500 Danish firms. *International Journal of Productivity & Performance Management*, 55, 569-593. doi: 10.1108/17410400610702160

Son Hing, L. S., Bobocel, D. R., & Zanna, M. P. (2002). Meritocracy and opposition to affirmative

action: making concessions in the face of discrimination. *Journal of Personality and Social Psychology*, 83, 493-509.

Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of

African Americans. *Journal of Personality and Social Psychology*, 69, 797-811.

Storvik, A., & Teigen, M. (2010). *Women on board: The Norwegian experience*. Berlin: Friedrich-Ebert-Stiftung.

Stroebe, K., Dovidio, J. F., Barreto, M., Ellemers, N., & John, M. (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. doi: 10.1348/014466610X523057

Torchia, M., Calabrò, A., & Huse, M. (2011). Women directors on corporate boards: From

tokenism to critical mass. *Journal of Business Ethics*, 102, 299-317. doi: 10.1007/s10551-011-0815-z

Tougas F., Crosby, F. J., Joly, S., & Pelchat, D. (1995). Men's attitudes toward affirmative action:

Justice and intergroup relations at the crossroads. *Social Justice Research*, 8, 57-71. doi:

10.1007/BF02334826

Tripp, A., & Kang, A. (2008). The global impact of quotas: On the fast track to increased female legislative representation. *Comparative Political Studies*, *41*, 338-361. doi:

10.1177/0010414006297342

Tuffy, J. (2011, November 23). Gender quotas do women no favours – and undermine democracy. *The Journal*. Retrieved from <http://www.thejournal.ie/readme/column-gender-quotas-do-women-no-favours-%E2%80%93-and-undermine-democracy-284733-Nov2011/>

United States Department of Labor (2015). *Facts over time*. Retrieved from:

https://www.dol.gov/wb/stats/facts_over_time.htm

Unzueta, M. M, Gutiérrez, A. S., & Ghavami, N. (2010). How believing in affirmative action quotas affects White women's self-image. *Journal of Experimental Social Psychology*, *46*, 120-126. doi: 10.1016/j.jesp.2009.08.017

Unzueta, M. M., Lowery, B. S., & Knowles, E. D. (2008). How believing in affirmative action quotas protects White men's self-esteem. *Organizational Behavior and Human Decision Processes*, *105*, 1–13. doi: 10.1016/j.obhdp.2007.05.001

Wang, M., & Kelan, E. (2013). The gender quota and female leadership: Effects of the Norwegian gender quota on board chairs and CEOs. *Journal of Business Ethics*, *117*, 449-466. doi: 10.1007/s10551-012-1546-5

Weeks, A. C. & Baldez, L. (2015). Quotas and qualifications: the impact of gender quota laws on the qualifications of legislators in the Italian parliament. *European Political Science Review*, *7*, 119-144. doi: 10.1017/S1755773914000095

Westphal, J. D. and Milton, L. P. (2000) How experience and network ties affect the influence of demographic minorities on corporate boards. *Administrative Science Quarterly*, *45*, 366–398. doi: 10.2307/2667075

Wilson-Kovacs, D., Ryan, M. K., Haslam, S. A., & Rabinovich, A. (2008). 'Just because you can get a wheelchair in the building doesn't necessarily mean that you can still participate':

barriers to the career advancement of disabled professionals. *Disability & Society*, 23(7), 705-717. doi: 10.1080/09687590802469198

Wright, P., Ferris, S. P., Hiller, J. S., & Kroll, M. (1995). Competitiveness through management of diversity: Effect on stock price valuation. *Academy of Management Journal*, 38, 272–287. doi: 10.2307/256736

Zetterberg, P. (2008). The downside of gender quotas? Institutional constraints on women in Mexican state legislatures. *Parliamentary Affairs*, 61, 442. doi: 10.1093/pa/gsn016