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#### REVIEW ARTICLE

## WILEY

## Animalizing women and feminizing (vegan) men: The psychological intersections of sexism, speciesism, meat, and masculinity

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#### Abstract

Images of sexualized women depicted as animals or alongside meat are routinely used in advertising in Western culture. Philosophers and feminist scholars have long theorized that such imagery reflects the lower status of both women and animals (vs. men) in society and argued that prejudiced attitudes towards women (i.e., sexism) and animals (i.e., speciesism) are interconnected, with meat-eating as a core symbol of masculinity. Addressing these key ideas from ecofeminist theory, we review the psychological evidence on the associations between sexism, speciesism, meat, and masculinity. Research on the animalistic dehumanization of women provides evidence that sexism and speciesism are psychologically entangled and rooted in desires for group-based dominance and inequality. Furthermore, research on the symbolic value of meat corroborates its masculine value expressing dominance and power, and suggests that men who abstain from meat consumption (e.g., vegans) are feminized and devalued, particularly by those higher in sexism. We conclude that a greater recognition of the interconnected nature of patriarchal gender relations and practices of animal exploitation, including meat-eating, can help in efforts to improve the status of both women and animals.

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KEYWORDS

dehumanization, masculinity, meat consumption, sexism, speciesism

[...] The way gender politics is structured into our world is related to how we view animals, especially animals who are consumed. [...] "Real" men don't eat quiche. It's not only an issue of privilege, it's an issue of symbolism. Manhood is constructed in our culture, in part, by access to meat and control of other bodies.

#### (Adams, 2015, pp. xxvi-xxvii)

The idea that meat is manly is engrained in society and permeates pop-culture and advertising. Meat advertisements often target men by praising the masculinity of eating meat or by portraying sexualized women alongside meat (Adams, 2020), implying that both women and (non-human) animals<sup>1</sup> are consumption products for men. As illustrated in the opening quote, Adams (1990, 2015) and other ecofeminists argue that patriarchal systems oppress and degrade women, animals, and nature, and that meat acts as a symbol of these power dynamics (MacKinnon, 1989, 2004; Wyckoff, 2014). Such ideas have long been confined to philosophical and sociological literatures. However, in recent years, and with the growing popularity of plant-based diets, psychological scientists have also started to develop an interest in the intertwined nature of gender biases and attitudes towards animals, meat, and masculinity. In this article, we integrate social-psychological theory with ecofeminist theory and review the empirical literature to evaluate, from a psychological perspective, two key claims of ecofeminist theory.

Firstly, in one of the seminal works of ecofeminist theory, "The Sexual Politics of Meat," Adams (1990, 2015) argues that the subordination of women and the subordination of animals in society are meaningfully linked. One key argument of ecofeminist theory is that women's relatively lower status in society is justified through viewing them as less mature and rational than men and reducing them to their reproductive functions, thereby effectively dehumanizing them (Adams, 1990, 2015). Thus, women can be attributed a lower moral status and viewed as objects for consumption similar to how animals are objectified by being reduced to their function as meat for human consumption (Adams, 1990, 2015, 2020; see also Opotow, 1993). In Section 1 of this article, we review relevant evidence and theorizing to evaluate the claim that oppressive attitudes towards women (i.e., sexism) and towards animals (i.e., speciesism) are interconnected, and that women are animalized to justify their lower status (relative to men) in society.

Secondly, according to ecofeminist theory, meat is a symbol of patriarchy, power, dominance, and masculinity (Adams, 1990, 2015). Theoretically, the meat-masculinity link is thought to stem from gendered divisions of labor in humanity's hunter-gatherer origin. Those who were able to provide meat were granted more power and higher status than those who were not (Chan & Zlatevska, 2019). Given that hunting was by and large a male activity, this applied mainly to men (Allen & Baines, 2002). In human history, meat was not only selectively provided by men, but also to them: When meat was scarce, it was given to men rather than women (Adams, 1990, 2015; Ruby & Heine, 2011). These factors are thought to have contributed to the symbolic value of meat representing masculinity, strength, and domination over nature (Allen & Baines, 2002). Consequently, men who do not consume meat fail to adhere to a crucial part of the masculine gender role, and are thus devalued (Adams, 1990, 2015). In Section 2, we evaluate the claim that meat-eating and notions of masculinity and virility are interconnected, and that men who abstain from meat consumption (i.e., vegetarians and vegans) are feminized and devalued.

#### 1 | LINKED OPPRESSION: ANIMALISTIC DEHUMANIZATION AND INTERSECTIONS OF ATTITUDES TOWARDS ANIMALS AND WOMEN

Ecofeminist theory proposes that the animalistic dehumanization of women underpins much of the disproportionate level of discrimination and victimization they experience as a group (Adams, 1990, 2015; Opotow, 1993). Animal-

## WILEY

3 of 14

istic dehumanization (Haslam, 2006; Haslam et al., 2005) refers to the perception of groups or individuals as more "animal-like" and less human, for instance by ascribing them fewer mental capacities that are often considered to be uniquely human (e.g., intellect or secondary emotions, but see De Waal, 2016). This psychological process of dehumanization can serve to justify the attribution of a lower moral status to other groups or excluding them from moral worthiness, and is linked to outgroup derogation and greater acceptance of aggression towards other groups (e.g., Castano & Giner-Sorolla, 2006; Hodson et al., 2020; Kteily et al., 2015).

Arguably, and as outlined by the Interspecies Model of Prejudice, likening others to animals is only derogatory if animals are perceived as morally inferior relative to humans in the first place (Costello & Hodson, 2010, 2014a; Hodson et al., 2020). Several studies showed that those with stronger beliefs in the inferiority of animals (or human supremacy) are not only more likely to exclude animals from moral consideration (Krings et al., 2021; Leite et al., 2019), they are also more inclined to dehumanize human outgroups, which, in turn, is associated with stronger outgroup prejudice (Costello & Hodson, 2010, 2014a, 2014b; Hodson et al., 2020). These findings add to the growing body of evidence demonstrating the connections between different types of biases, such that views of animals as morally inferior and instrumental to human desires (i.e., speciesism) are positively associated with prejudices towards human outgroups (e.g., ethnic prejudice, homophobia; Caviola et al., 2019, Dhont et al., 2014, 2016; Jackson, 2019). Two key social-psychological theories address how and why women specifically might be denied full humanness: objectification theory (Fredrickson & Roberts, 1997) and ambivalent sexism theory (Glick & Fiske, 1996).

#### 1.1 | Objectification and its relationship with dehumanization

Objectification theory (Fredrickson & Roberts, 1997) focuses on the effects of being a woman in a culture that objectifies the female body, both through media images and social interactions. Within this theory, objectification is defined as "the experience of being treated as a body (or collection of body parts) valued predominantly for its use to (or consumption by) others" (Fredrickson & Roberts, 1997, p. 174). Objectification research commonly assumes that the objectification of women is dehumanizing because it associates women with inanimate objects (e.g., Bernard et al., 2012). Along similar lines, Haslam (2006) referred to mechanistic dehumanization when groups or individuals are viewed as object-like, rather than animal-like, and tend to be denied traits that people view as essential but not necessarily unique to human nature (e.g., emotionality and curiosity, which are also often attributed to non-human animals). However, evidence shows that objectified women can also be associated with animals (e.g., Vaes et al., 2011).

Morris and Goldenberg (2015) proposed that the type of dehumanization depends on the way in which women are objectified. Specifically, sex-based objectification, reduces women to the reproductive parts of their body. This promotes a view of women as animal-like rather than object-like because people associate sexuality with humans' animal nature (Goldenberg et al., 2002). Thus, it should reduce the attribution of traits viewed as uniquely human to women (e.g., refined emotions and higher order cognition). On the other hand, beauty-based objectification reduces women to decorative objects through a focus on their appearance. This promotes a view of women as objects rather than animals, thus reducing the attribution of traits viewed as essential to human nature (e.g., warmth and emotionality). Consistent with these ideas, Morris et al. (2018) found that participants rated a woman lower on uniquely human traits (e.g., *competent, refined*) when she was portrayed in a sexualized way than when the focus was on her appearance without a sexualized angle or when she was depicted in a neutral way. Conversely, she was rated lower on human nature traits (e.g., *emotional, curious*) in the appearance-focus condition relative to the sexualized and control condition. Other studies corroborate that sexually objectified women are viewed as more animal-like than women who are not sexually objectified (e.g., Bongiorno et al., 2013; Puvia & Vaes, 2013; Vaes et al., 2011). Thus, evidence suggests that the ubiquitous sexualized portrayal of women in media images could contribute to views of women as more animal-like.

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#### **1.2** | Ambivalent sexism and its relationship with dehumanization

Ambivalent sexism theory (Glick & Fiske, 1996, 2001) posits that sexism is different from other types of prejudice because gender relations constitute a unique intergroup context: No other two groups are as intimately connected as men and women (Fiske & Stevens, 1993). Sexism, from this perspective, is not a unidimensional construct, but encompasses both *hostile sexist views* reflected in antipathy and contempt towards women, *and benevolent sexist views* reflected in subjectively positive views of women which yet portray them as weak, in need of male protection, and essential to fulfilling men's desires. Both sexism dimensions are thought to work together to maintain the patriarchal status quo where women (vs. men) disproportionately inhabit positions of lower power (e.g., caring for the home and family; Glick & Fiske, 2001). Both are also argued to be partly rooted in the role women play in natural reproduction, and therefore in their association with animals and nature, yet in distinct ways (Glick & Fiske, 1996, 2001).

Hostile sexism is thought to partly stem from men's dependency on women, with heterosexual men needing women in order to satisfy their sexual needs and bear their children, which grants women a certain power over them (Guttentag & Secord, 1983). According to the theory, this dependency fuels sexist views among men, who resent women for their ostensible power to use their sexual attractiveness to manipulate and control men (Glick & Fiske, 2001). Ambivalent sexism theory thereby supports the idea that highlighting women's sexuality triggers their animalistic dehumanization (Morris et al., 2018; Morris & Goldenberg, 2015). For instance, animalistic metaphors of women describe them as predators (e.g., cougars, vixens) to portray them as being sexually aggressive, and exposure to these animal metaphors increases hostile sexism (Tipler & Ruscher, 2019).

Corroborating the link between animalistic dehumanization and hostile sexism, our research showed that animalistically dehumanizing women, both through denying them uniquely human traits and through explicitly viewing them as not fully evolved, is associated with hostile sexist views (Salmen & Dhont, 2021). Animalistic dehumanization of women also predicts greater acceptance of rape myths, which downplay, justify, and deny male sexual assault against women (Salmen & Dhont, 2021). Taken together, these findings are consistent with ecofeminist theorizing that dehumanizing women may serve to enhance and preserve gender inequality through hostile sexist ideologies and justify the disproportionate amount of sexual violence women face in society. Importantly, however, research has yet to establish the causal direction of the association between dehumanization and sexist attitudes. Empirical evidence is currently lacking as to whether dehumanization forms the basis of women's lower status in society or whether it indeed serves the function of justifying it (or both).

While the dehumanization of women has been researched extensively, less attention has been given to stereotypical views of women as connected to nature, which might be more closely related to benevolent rather than hostile sexism. Ecofeminist theorists have argued that people tend to view women, as opposed to men, as part of nature rather than culture without denying them full humanness (MacKinnon, 2004; Ortner, 1972). From this perspective, women are viewed as more connected to and in tune with nature than men. Indeed, both laypeople and media representations associate women, more so than men, with nature (Liu et al., 2019; Reynolds & Haslam, 2011), and women (vs. men) who associate themselves with nature are evaluated more positively than women who do not (Reynolds & Haslam, 2011).

Despite these positive connotations, women's perceived connection with nature might constitute a source of their subordination in society (Ortner, 1972; see also de Beauvoir, 1974). Theoretically, perceiving women as closely connected to nature in ways that portray them as weak and in need of protection may fuel benevolent sexist beliefs and the idea that they are fundamentally inferior to men (Salmen & Dhont, 2021). Feminine metaphors of nature also mirror some of these stereotypes of women, such as the metaphor of "Mother Nature," characterizing nature as nurturing and life-giving (Dunayer, 1995; Jelinski, 2011; Roach, 2003; Sacchi et al., 2013). Corroborating this idea, we demonstrated that people who viewed women (vs. men) as more strongly connected to nature also held stronger benevolently sexist beliefs (Salmen & Dhont, 2021). Stronger beliefs in the women-nature connection were also

## WILEY - 5 of 14

indirectly associated with stronger endorsement of policies that restrict pregnant women's freedom (e.g., a ban on selling alcohol to visibly pregnant women) through benevolent sexism. Sexist attitudes towards women are thus associated with desires to control and protect their reproductive functions. Overall, viewing women as part of nature, and therefore as delicate, nurturing, and in need of protection, seems to constitute a legitimizing belief justifying women's relatively lower status in society (Glick & Fiske, 1996, 2001; Hopkins-Doyle et al., 2019; Salmen & Dhont, 2021).

#### 1.3 | Common ideological roots of sexism and speciesism

Expressions of animalistic dehumanization of women constitute one way of how prejudicial attitudes towards animals and women intersect. Further direct evidence for these intersections comes from research showing that those higher in sexism tend to hold greater beliefs in human supremacy over animals and nature and find it more morally acceptable to use animals however humans want to, including for entertainment and medical experiments (Caviola et al., 2019; Dhont et al., 2020; Salmen & Dhont, 2021). Those higher in sexism also express stronger support for killing and eating animals and are more likely to engage in strategies to justify meat consumption such as denying that animals can suffer (Allcorn & Ogletree, 2018; Monteiro et al., 2017). Such findings suggest that both sexism and speciesism are not only positively correlated but are also underpinned by group-dominance motives, consistent with ecofeminist theorizing highlighting the role of patriarchal values of domination underlying attitudes towards both women and animals (e.g., Bloodhart & Swim, 2010).

In psychological theorizing, the Social Dominance Human-Animal Relations Model (SD-HARM; Dhont et al., 2016) posits that social dominance orientation (SDO), a preference for group-based dominance and opposition to equality (Pratto et al., 1994), is the key underlying ideological factor explaining why prejudicial human intergroup and human-animal attitudes are significantly related. In support of this model, research has shown that those higher on SDO not only express more prejudices towards a range of human outgroups (Kteily et al., 2012; Meeusen & Dhont, 2015; Sidanius & Pratto, 1999), they also tend to be more speciesist (Caviola et al., 2019; Dhont et al., 2014, 2016; Dhont & Hodson, 2014; Graça et al., 2018). Critically, after accounting for SDO, the positive associations between human outgroup prejudices (i.e., ethnic and gender-based prejudice) and speciesist attitudes become weaker or non-significant (Dhont et al., 2014, 2016; Salmen & Dhont, 2021). In other words, in line with ecofeminist theory, preferences for dominance and inequality underpin both sexism and speciesism, partly explaining the entanglement of these exploitative belief systems on the psychological level.

#### 2 | MEAT IS MANLY

#### 2.1 | The psychological links between meat, men, and masculinity

One implication of the interconnected nature of patriarchal gender structures and systems of animal exploitation is the perception that meat consumption symbolizes strength, masculinity, and power (e.g., Adams, 1990, 2015). For instance, people are quicker to pair meat-related words with male names than with female names, and quicker to pair vegetable-related words with female names than with male names (Rozin et al., 2012). The meat-masculinity link is also reflected in the construction of language: In 20 languages that have gendered nouns, meat-related words are assigned male gender in 66% of cases (Rozin et al., 2012). Along similar lines, meat dishes are rated as more male than female and considered more masculine than vegetarian dishes (Cavazza et al., 2015a, 2015b; Rozin et al., 2012).

Similar findings have been obtained when comparing regular meat with plant-based meat alternatives that imitate the texture, flavor, and appearance of meat. Plant-based meat alternatives tend to be more sustainable to produce than regular meat (Hashempour-Baltork et al., 2020; Kumar et al., 2017), and could support efforts to

reduce global meat consumption (e.g., Dagevos & Voordouw, 2013; de Bakker & Dagevos, 2011). However, consumer acceptance of these products is relatively low (e.g., van Loo et al., 2020), and research suggests that this is partly because plant-based meat is considered less masculine than regular meat. Indeed, we found that meat-eaters rated identical meat dishes presented in pictures as less masculine, and evaluated them lower in appeal, taste, and smell, when labeled as plant-based compared to regular meat (Salmen et al., 2019). Masculinity, thus, appears to be a valued characteristic of meat. Even meat dishes labeled as "clean meat," which is structurally identical to traditional meat but cultured in a laboratory rather than coming from butchered animals, were rated as significantly less masculine than traditional meat (Salmen et al., 2019). In line with Adams's (1990, 2015) ideas, meat seems to in part obtain its masculine value from the dominance over, and killing of, animals.

6 of 14

WILEY

Closely related to the meat-masculinity link is the observation across time and cultures that men report eating more meat than women (Pfeiler & Egloff, 2018; Rosenfeld, 2018; Ruby, 2012). Men also express more positive attitudes towards meat and a stronger emotional attachment to meat (e.g., Graça et al., 2015; Rosenfeld, 2018; Rothgerber, 2013). Furthermore, men are less likely to be (or to self-identify as) vegan or vegetarian (Ruby, 2012; Trocchia & Janda, 2003) and show a stronger resistance to reducing meat consumption (Nakagawa & Hart, 2019; Rosenfeld, 2018), whereas women report more positive attitudes towards quitting or reducing meat consumption, and express stronger disgust towards meat (Kubberød, Ueland, Rødbotten et al., 2002; Kubberød, Ueland, Tronstad et al., 2002; Rosenfeld, 2018). Meat-eating men and women also tend to differ in the way they justify meat consumption. Rothgerber (2013) found that men used more direct, unapologetic justifications, such as the idea that humans are superior to animals and are meant to eat meat, whereas women used more indirect, apologetic strategies, such as dissociating meat from animals. Thus, women who eat meat seem to be more uncomfortable with their meat consumption than men.

Overall, the meat-masculinity link is evident in the way people think and talk about meat as well as in gender differences in meat consumption and meat-related attitudes and beliefs.

#### 2.2 | Precarious masculinity and perceptions of veganism versus meat consumption

The meat-masculinity association has implications for people's perceptions of vegetarian or vegan men. For instance, several studies showed that men who follow a vegetarian or vegan diet are perceived as less masculine than omnivorous men (Ruby & Heine, 2011; Salmen et al., 2021). Thomas (2016) further found that especially vegan men who are vegan out of choice (vs. necessity such as health issues) are perceived as less masculine. Hence, choosing to abstain from meat consumption, a traditionally masculine behavior, and the consumption of other animal products may strip men of their masculinity. This, in turn, can shape negative attitudes towards them and lead to social exclusion and lower perceived attractiveness (MacInnis & Hodson, 2017; Salmen et al., 2021; Timeo & Suitner, 2018). Moreover, we found that people who perceived vegan men as less masculine were particularly more inclined to evaluate them more negatively when they held stronger sexist (vs. egalitarian) gender role beliefs (Salmen et al., 2021).

Such findings are in line with the idea that manhood needs to be earned and proven (Vandello & Bosson, 2013). According to this perspective, men are thus incentivized to adhere to masculine social roles. Therefore, men may consume meat strategically to convey a gender-congruent (i.e., masculine) image of themselves. For instance, in an imagined dining scenario, male participants chose more meat-based dishes for themselves than for a female partner, yet even more so among men who more strongly endorsed gender stereotypes about vegetarianism (Timeo & Suitner, 2018). Specifically, the more men associated vegetarianism with femininity, the stronger their preference was for meat dishes, which points to the importance of gender-norm beliefs in food choices. Furthermore, men who feel threatened (vs. affirmed) in their masculinity are more likely to agree that they need meat to feel full and less likely to consider adopting a vegetarian diet (Nakagawa & Hart, 2019). Moreover, men who worry that they do not live up to traditional masculine gender norms are more likely to believe that consuming meat enhances their masculinity

7 of 14

and express greater intentions to purchase meat (Mesler et al., 2021). These findings highlight the social function of meat consumption for impression-management strategies or as compensatory behavior and indicate that men may consume meat to display gender-conforming behavior.

#### 3 | CONCLUSION AND INTEGRATION

We reviewed psychological research on the interconnected nature of attitudes towards women and animals, and the interconnected nature of meat and masculinity, which speaks to two key tenets of ecofeminist theory. First, the empirical evidence indicates that gender-based and species-based prejudice are psychologically entangled, notably through the dehumanization of women. In keeping with the interspecies model of prejudice (Costello & Hodson, 2010, 2014a), through dehumanization, women are placed on a lower status than men because they are associated with animals, "perhaps the quintessential low-status outgroup" (Dhont et al., 2016, p. 508). Hence, the animalistic dehumanization of women fundamentally depends on the low status of animals in society, and oppressive attitudes towards both women and animals are underpinned by ideological desires for group-based dominance and inequality.

Second, the empirical evidence suggests a robust link between meat and masculinity. Accordingly, masculinity perceptions and gender role beliefs also play a crucial role in the stigma associated with vegetarian and vegan men particularly. The gendered nature of anti-vegan bias highlights further how the subjugation of women and animals are dynamically interconnected. Similar to how the animalistic dehumanization of women only has derogatory power if animals are devalued, the "feminization" of men who abstain from animal exploitation is only derogatory if the feminine is devalued, as is inherent to patriarchal societies where the masculine is viewed as "hegemonic" (Connell, 2005; Connell & Messerschmidt, 2005). Hence, the derogation of women and animals may fundamentally depend on each other, which could have wider implications for efforts to improve women's and animals' status.

#### 4 | FUTURE DIRECTIONS AND POSSIBLE IMPLICATIONS

Despite research overall supporting key tenets of ecofeminist theory, several avenues of research require further research.

#### 4.1 | Underlying mechanisms

There is currently little evidence pertaining to *why* women are associated with nature more so than men. While this is theorized to be due to their unique role in natural reproduction, this has not been tested directly. Future research could make salient women's greater role in reproduction to test whether this affects perceptions of their connection to nature more generally. Salmen and Dhont (2021) also found that the nature-woman association was correlated with beliefs that nature is fragile and in need of protection, which mirrors common feminine stereotypes (e.g., Glick & Fiske, 1996). Other scholars have argued that nature is commonly anthropomorphized as female to soften the dangerous aspects of nature and foster a sense of harmony with nature (Roach, 2003). It remains a question for future research whether nature stereotypes are applied to women or whether feminine stereotypes are applied to nature (or both). Moreover, future research could also test whether more negative perceptions of nature as hostile and dangerous are related to more hostile views of women, and therefore to hostile rather than benevolent sexism.

There are currently also few empirical investigations of why meat is associated with masculinity. Findings that meat is perceived as less masculine when produced from plant protein or in the lab rather than by slaughtering an

animal (Salmen et al., 2019) suggest that aggressive acts towards animals are a prerequisite for the symbolic masculine value of meat (see also Lupton, 1996). This is in line with the ecofeminist perspective that meat consumption is an expression of dominance, which is an inherent part of traditional masculinity (Adams, 1990, 2015) and plausible given that the traditional masculine gender role encourages displays of aggression (Bosson & Vandello, 2011; Cicone & Ruble, 1978; Eagly & Steffen, 1986; Pleck, 1983). However, systematic research testing under which conditions meat is perceived as more or less masculine is currently lacking.

#### 4.2 | Intersections with race

WILEY

8 of 14

Most research into the dehumanization of women does not consider race or ethnicity. However, women of color, and especially Black women, could be particularly affected, given that they can be dehumanized because of both their gender and ethnicity. Indeed, people associate Black people with animals (i.e., apes) to a greater extent than White people (Goff et al., 2008; see also Woods & Hare, 2020). However, from an intersectional perspective, the experience of Black women cannot be understood by simply adding the effects of gender and racial identity (Hancock, 2007). Multiple group identities intersect in qualitatively unique ways, so that Black women are stereotyped in ways that differ from both White women and Black men (Ghavami & Peplau, 2012; Hancock, 2007).

Moreover, media images of Black women are even more sexualized than images of White women (Emerson, 2002; Ward et al., 2013), and dehumanizing images of Black women as "Jezebels" portray them as promiscuous and sexually aggressive (Brown et al., 2013; West, 1995). The animalistic dehumanization of Black (vs. White) women may occur more frequently and in different ways, which could be tested in future research. Such research would also allow for considering intersections with a wider range of group identities and demographic or social characteristics, including sexual orientation.

#### 4.3 | Beyond meat

To date, research on the psychological factors associated with the consumption of animal products has predominantly focused on meat consumption, largely neglecting other animal products. Adams (1990, 2015) argued that, while meat is masculinized, eggs and dairy products are feminized because their production requires the reproductive functions of female animals. Indeed, Rozin et al. (2012) found that participants occasionally spontaneously associated dairy with femininity. Yet, in explicit, direct ratings, dairy and eggs were not perceived as more female than male, and women did not report preferring milk products more than men. Overall, research into the symbolic value of dairy and eggs is sparse. However, egg and dairy production have been linked to destructive environmental outcomes (e.g., Gerber et al., 2013; Hedenus et al., 2014) and involve levels of animal cruelty comparable to meat production (e.g., Foer, 2010). Thus, exploring how gender and gender role beliefs are associated with the consumption of and willingness to reduce animal products beyond meat is an important avenue for future research.

#### 4.4 | Reducing meat consumption in men

Evidence that vegan men are viewed as more effeminate than omnivorous men suggests that concerns about preserving their masculinity might deter men from exploring more plant-based diets (Markowski & Roxburgh, 2019). One avenue to promote more plant-based diets among men could be to promote veganism in ways that are compatible with masculine norms (e.g., Rothgerber, 2013). For example, the Netflix documentary "The Game Changers" follows plant-based athletes and seems to rely on traditional masculine stereotypes of strength and athleticism to combat the derogatory "soy boy" image portraying vegan men as effeminate and physically weak, which is prominent particularly

## WILEY - 9 of 14

in right-wing spheres. However, as Rosenfeld and Tomiyama (2021) noted, validating ideals of traditional masculinity could come with other unwanted consequences given that men's attempts to comply with traditional masculinity have been associated with countless aversive outcomes (Bosson et al., 2009; Weaver et al., 2013; Willer et al., 2013).

Instead, promoting a more inclusive and flexible masculinity that allows for behaviors commonly perceived as feminine could potentially help reduce meat consumption as well as other behaviors that are harmful to men and those around them. Indeed, the more men subscribe to this "new masculinity," the more positive their attitudes towards vegetarianism and the stronger their intentions to reduce their meat consumption in the future (de Backer et al., 2020). Research also found that beef consumption was no longer used as a response to masculinity threat when it was presented as a behavior that women engage in frequently (Mesler et al., 2021). This suggests that men are sensitive to reference group information when evaluating the masculine value of meat. Social norms interventions (Miller & Prentice, 2016) that highlight shifting norms among men away from meat consumption (or, more generally, away from traditional masculinity) could be a promising starting point. Future research should test whether appeals to traditional masculinity can indeed backfire, and how new masculinity and associated behavior shifts can be promoted.

#### 4.5 | Linking women's and animal liberation

Scholars have argued that, in order to effectively combat oppression, we need to understand the mutual interdependence of prejudice along different dimensions (Adams, 1990, 2015; Adams & Gruen, 2014; MacKinnon, 2004; Wyckoff, 2014). When animal rights activists use sexualized images of women to promote animal rights, they not only run the risk of "exploit[ing] one form of oppression to raise awareness for another" (Wyckoff, 2014, p. 722), but these campaigns could also backfire because the sexualization of women is a key factor underlying their dehumanization (Morris et al., 2018). Indeed, when people viewed animal rights campaign ads featuring sexualized images of women (relative to non-sexualized images), they dehumanized the women more by denying them uniquely human traits, and this was further associated with lower support for the animal rights organization (Bongiorno et al., 2013).

In a similar vein, as discussed above, interventions to reduce men's meat consumption by appealing to traditional masculinity might reinforce the very patriarchal gender structures that prohibit men from expressing compassion for animals. On the flipside, efforts to increase the societal status of animals could have positive downstream consequences for the status of women, and vice versa. Indeed, past research has shown that closing the perceived human-animal divide reduces outgroup dehumanization and, in turn, improves outgroup attitudes (Bastian et al., 2012; Costello & Hodson, 2010). Conversely, raising the status of femininity relative to masculinity might encourage men to explore plant-based diets even if they run the risk of appearing more feminine.

In sum, adopting a more holistic approach to animal and women's liberation, one that refuses to exploit one group to promote awareness for the other, could be particularly effective. As summed up by Adams (2015, p. xxvi): "[...] we cannot polarize human and animal suffering because they are interrelated."

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#### CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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## ENDNOTE

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<sup>1</sup> For the sake of brevity, we use the term "animals" to refer to non-human animals.

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