The Norms Associated with Climate Change: Understanding Social Norms through Acts of Interpersonal Activism

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Keywords: climate change; social change; morality; social norms; persuasion/social influence; interpersonal activism

Highlights :

- Little is known of relationships between climate norms and social interactions
- We experimentally examined responses to acts of interpersonal activism
- Those interpersonally confronting disregard of climate change faced social costs
- These various social costs did not befall those who confronted racial prejudice
- Confrontation costs reflect the morally ambivalent normative status of climate change

Abstract:

A growing body of research points to the role social norms may play in both maintaining carbon intensive lifestyles and soliciting changes towards more sustainable ways of living. However, despite highlighting the importance of pro-environmental social norms, such literature has said far less about the processes by which such norms might develop. We present a new approach to conceptualising social norms that focuses on understanding their dynamics within social interaction, by positioning interpersonal confrontation as a potential mechanism of change. We examine the normative dynamics of environmentalism by comparing the costs of interpersonally confronting climate change disregard with those associated with confronting racism. In two experimental studies, we presented participants with scenarios describing a person confronting (versus not confronting) contentious comments in each domain. We identified social costs to interpersonal confrontation of climate change disregard but not racism, as indicated by reduced ratings of perceived warmth of and closeness to the confronter (Study 1), and this effect was mediated by the perceived morality of the issue in question (Study 2). Our findings highlight how wider social constructions of (im)morality around climate change impact upon social interactions in ways that have important implications for processes of social (and ultimately environmental) change.

1. Introduction

Despite widespread belief in human-caused climate change and high levels of concern about its impacts in many Western nations (Capstick et al., 2015; Leiserowitz et al., 2013; Park et al., 2012), the majority of people in such nations continue to live carbon intensive lifestyles. World leaders have recently agreed that global temperature rise must be kept below 2˚C to avoid most severe consequences of a changing climate (United Nations, 2015). Achieving this ambitious target will require every nation drastically reduce their greenhouse gas emissions in coming decades. Low carbon economies, cities and households need to become 'the norm', and must do so in a short space of time. It thus becomes essential to understand the social dynamics that might encourage or inhibit social change towards widespread adoption of sustainable lifestyles. We present here a novel approach to examining social norms that focuses on what is arguably the very essence of the most powerful forms of normative processes: expressed social disapproval of particular actions. We argue that an absence of expressions of social disapproval (confrontation) regarding carbon intensive lifestyles is symptomatic of the lack of moral status currently attributed to the issue. Furthermore, a collective unwillingness to engage in such acts of interpersonal activism may be an inhibitor of widespread social change towards less carbon intensive ways of living. Despite having received ample attention in the context of discrimination (e.g. 'saying no to' racism/sexism), such acts have received relatively little attention in the environmental domain.

1.1. Climate change engagement and social normative processes

The climate change policy literature is replete with calls for engaging the public more in the policy making process (Lorenzoni et al., 2007; Pidgeon, 2012; Whitmarsh et al., 2013). Pidgeon (2012) recently suggested that policy makers should improve their efforts to consider the norms and beliefs of the public when designing and communicating climate change

interventions. Similarly, Whitmarsh et al. (2013) argue that current efforts to engage the public require innovative changes adopting more bottom-up approaches that are arguably more effective and currently underrepresented relative to top-down governmental campaigns. Stoknes (2014) also suggests that policy makers should try to harness the power of social norms and their effects on environmental decisions via the "use of social networks" (p. 6). However, Markowitz and Shariff (2012) also draw attention to the possible *negative* impact of social norms. People can be influenced by both norms encouraging environmental action and norms that might conflict with sustainable lifestyles, such as the expectation of car ownership.

Social norms can therefore clearly act as both a barrier to as well as the basis of interventions to promote pro-environmental behaviour. Indeed Gifford (2011) simultaneously lists comparisons with others as one of the "seven dragons of inaction" (p. 290) while also arguing that social norms are a crucial factor in promoting many proenviornmental decisions. While exposure to different social norms can both promote and undermine engagement with climate change, Gifford points out that a carbon intensive lifestyle is *currently* the dominant norm (in the West) and therefore social norms probably currently hinder environmental actions more than they promote them. Some support for such a position can be gleaned from qualitative studies in which participants' justifications of their own carbon intensive lifestyles turn on references to conforming to expectations of the social environment (see Kurz et al., 2005; Lorenzoni et al., 2007). As a result, if norm research is going to be useful in this domain, it needs to have processes of change front and centre.

1.2. The psychology of social norms

A vast body of psychological literature has highlighted the consequences of social norms for individual action. Information about what others think one should do (injunctive norms) and what they actually do (descriptive norms) has been shown to crucially influence

individuals' decisions to think and/or behave in particular ways, not least in the domain of energy consumption (Goldstein et al., 2008; Schultz et al., 2007). Moreover, perceived discrepancies between injunctive and descriptive norms has been shown to undermine behaviour change (Smith and Louis, 2009). Such findings help explain the commonly observed self-perpetuating cycle of people not adopting pro-environmental actions because nobody else is perceived to be making such changes, despite clear injunctive norms that suggest people 'should'. Despite maintained efforts to promote environmental actions, motivated by serious environmental problems such as climate change, current evidence shows that pro-environmental behavioural interventions struggle to generate widespread change (Reckien et al., 2014).

The current state of the art regarding social norms within psychology provides a compelling account of the maintenance of the environmentally unsustainable status quo. However, the issue of how social norms actually *change* remains under-examined. In recent interdisciplinary philosophical work, Bicchieri and Mercier (2014) attempt to shed light on the pathways that might lead to a change in social norms. These theoretical pathways range from top-down policy measures, organised opportunities for deliberation (e.g. community meetings) and naturally occurring sanctions by individuals who want to change the status quo. What all these strategies have in common is that the change in social norms can only be realised and maintained if the normative expectations of others' behaviour is supported by the behavioural display of the newly normative action and (most importantly) visible sanctions of violations of this new norm. Thus, we are still left with a need to understand the dynamics that govern the processes by which norms cross over normative tipping points.

Social norms are traditionally measured and theorised in rather static ways, for example by explicitly assessing the social acceptability of particular attitudes or actions (Bamberg et al., 2007; Cialdini et al., 1990). Despite often being measured and

conceptualised in this way, social norms are more than perceptions. They are actually what is actively approved or disapproved of within the social environment (Elster, 1989), a recognition of which brings into focus the intrinsically interactional nature of social norms.

1.3. Interpersonal confrontation as a normative process

If social norms and their violation are thought of as something that becomes operationalized within social interaction then one must consider the ways in which they are interpersonally policed. Such an approach has some antecedents within the domain of discrimination (e.g. sexism, racism). Blanchard, Lilly, and Vaughn (1991) proposed what they later (Blanchard et al., 1994) designated as "the social context approach". This advocates the idea that the lack of social regulation of everyday racist incidents encourages the perpetuation of racism, predicated on the notion that social regulations greatly affect people's attitudes. Thus, social displays of one's opinion can increase related opinion in others (e.g., egalitarianism) and the failure to publically express one's opinion can give room for undesired opinions or actions (e.g., racism). Similar to literature on normative messages, this approach highlights the strong effect of normative influence on personal attitudes and actions. However, what is crucially important about the social context approach is that it accentuates the interpersonal nature of social norms, arguing that everyday interactions create opportunities to encourage or discourage specific actions. The literature on confrontation of prejudice highlights the effects and costs of interpersonally confronting another person and the role it plays in enforcing norms. It has shown that the desire for change and the belief in change act as strong motivators for people to confront others (Kaiser and Miller, 2004; Rattan and Dweck, 2010; Swim and Hyers, 1999), and that being confronted can act as a reminder to align actions with prevalent social norms (Czopp et al., 2006). Furthermore, studies have also shown that reactions to confrontation reflect the extent to which the behaviour that is being confronted is rooted in strong social norms (Czopp and Monteith, 2003). These findings

highlight that while confrontation is a process that might change actions or individual attitudes, the reactions towards and perceptions of a confrontation might also reflect the prevailing norms related to the confronted position.

Taken together, the accumulated findings on interpersonal confrontation in the domain of discrimination suggests that strong interpersonal reactions to norm-violating incidents (e.g. racism) are necessary for norms to be enforced within the social environment. Furthermore, the question arises whether expressing dissatisfaction about an incident might not only be important for enforcing (already widely accepted) social norms (e.g. in the context of racism), but might also play a role in changing social norms (e.g. in the context of climate change). Researchers have recently begun to examine confrontation in the context of (non)environmental actions, delivering initial evidence that receiving negative reactions towards non-environmental behaviour may result in individuals changing their future behaviours to be more sustainable. Swim and Bloodhart (2013) showed that direct social disapproval for energy-consuming behaviour (i.e., taking the elevator versus the stairs) not only influenced subsequent choices in the same domain but also spilled over to increase other environmental behaviours. Recent work by Czopp (2013) has also shown that (non)confrontation between one dyad can affect the attitudes and behaviors of onlookers. Participants exposed to an environmental activist, who failed to confront anti-recycling opinions subsequently reported reduced pro-recycling attitudes.

Such findings suggest that confrontation of environmentally undesirable behaviors represents a key process through which behavioural inertia might be broken. However, despite the potential power of confrontation to elicit change, questions remain about how likely it is that such confrontational behaviour will occur in naturalistic settings. We also do not know the degree to which confrontation of disregard for issues like climate change carries costs for the confronter, independent of any positive effect it might have on the behavior of

others (e.g. Swim and Bloodhart, 2013). Work by Nolan (2013) shows that confrontation of environmental disregard is uncommon, suggesting that this may be seen as a controversial social act (see Kaiser and Major, 2006 for a review in the context of racism). In comparison to the environmental domain, prior research has shown that confronters of racist comments are generally perceived positively both by members of their own group (Kaiser et al., 2009) and by perpetrators (Czopp and Monteith, 2003). These positive reactions might reflect the fact that norms of racial equality are so pervasive and widely endorsed, at least at an explicit level (e.g., Gaertner and Dovidio, 1986), that confrontational behavior in that domain is no longer anti-normative and thus not controversial.

The acceptability of explicit social confrontation both reflects social norms and has implications for their alteration. In the environmental domain one could argue that the very social process that might catalyse necessary changes to social norms (i.e., interpersonal confrontations) may be curtailed by norms that mitigate against such processes (i.e., the anti-normative status of environmental confrontation). The current research represents an attempt to unpack this conundrum by comparing the social acceptance of confrontation in the context of climate change with the social acceptance of confronting racism, with the aim of identifying differences that stem from the different normative status of the two issues.

1.4. The role of morality of climate change

One aspect that needs to be considered in relation to normative change is the degree of morality commonly ascribed to the issue in question and the actions associated with it. People generally strive to be moral and to be seen as moral by others (Haidt, 2007). As a consequence, norms that are understood in moral terms have been argued to be more influential than norms that are framed in non-moral terms (Bratanova et al., 2012; Ellemers et al., 2008). If morality is key to normative strength, then the more an issue is perceived in moral terms the stronger reactions to anti-normative behavior should be. Moreover, these

strong reactions should be perceived as more socially acceptable. For example, strong norms against racism in western societies (Hodson et al., 2004) have led people to avoid being seen as racist, to strongly avoid seeing themselves as racist (Monin and Miller, 2001) and to feel guilty when that unwittingly happens (Czopp and Monteith, 2003). Thus, racial equality has clearly achieved the status of being a moral norm. However, (Markowitz and Shariff, 2012) have argued that norms against climate change disregard seem far less morally tinged.

In the context of racism there is a clearly-defined human victim of acts or comments, which may highlight the direct moral implications at play. Although there is scientific consensus that the consequences of climate change will also affect significant numbers of 'climate change victims' (Popovski and Mundy, 2011) there are many psychological barriers to perceiving climate change as a moral issue. Markowitz and Shariff (2012) identified a range of reasons why humans may struggle to define climate change as a moral imperative, including the abstractness of the issue and the self-defensive biases triggered by guilt. As with other issues, failing to categorize climate change as a moral issue makes it less likely that people will consistently act to reduce carbon emissions (e.g. Bamberg et al., 2007). Moreover, Markowitz (2012) shows that perceptions of issue morality can mediate the link between belief in climate change and individual environmental actions. Thus, personal ascriptions of moral valance to environmental issues does appear to produce effects at the level of individual cognition. However, we would argue that where morality really achieves maximum purchase is at the level of social interaction. We can all 'know' what we 'should' (morally) do but still easily fail to do it. On the other hand, being socially confronted about one's conduct within social interaction, in a domain that can be morally construed, may represent a far more powerful mechanism for change. In the present research we consider the implications of this for social interactions relating to climate change. We investigate the potentially different ways in which attempts to confront potentially socially undesirable

conduct across different domains are perceived and explore the role of morality in producing these differences. Study 1 examines how participants perceive a person confronting (versus not) the expression of either climate change disregard or racism. We then directly assess in Study 2 the concept of issue morality as a possible explanation for differential reactions to confrontation in climate change versus racial domains and also explore politeness of the confrontation as a possible moderator.

2. Study 1: Social evaluation of interpersonal climate activism

In our first experimental study, we examined how participants evaluate an individual who confronts (versus fails to confront) a conversational partner for a comment that is potentially either racist or expressing disregard for climate change. In so doing, we sought to examine the relative social costs that might befall confronters of each of these important social issues.

It should be noted that the confrontational reaction used was intentionally formulated to be very confrontational. This was done to create a situation in which the norm 'to be polite' stands in conflict with the potential urge to maintain or enforce a norm that may have been broken by the comment maker. We compared this very confrontational reaction to a reaction that expressed disagreement with the comment but did not form a personal attack on the comment maker or make any suggestion that their comment said anything negative about them or their conduct. This was to avoid a situation where participants might perceive the non-confrontational reaction as actually expressing agreement with the comment maker (even if only through their silence).

2.1. Method

2.1.1 Participants and design.

We recruited 71 British university students for the study (44 women; M_{age}= 20.80 years, *SD*= 1.82). The study followed a 2 (issue: climate change disregard vs. racial prejudice) X 2 (reaction: confrontation vs. no confrontation) between-participants design, with participants randomly allocated to condition.

2.1.2 Procedure.

Participants were recruited around the campus of the University of Exeter. They were asked to imagine themselves as being part of a social scenario in which one person, 'Sam', made a comment either expressing climate change disregard or disregard for racial equality. The scenario read as follows (prejudiced condition between brackets):

> It is the end of the term. You and three other students just gave a presentation about a project you were working on during the whole term…After the presentation you decide to go to the pub together to celebrate the completion of the course and the good work. In the pub the four of you chat about all sorts of things and you are having a good time. At one point the conversation turns to the issue of climate change [racial equality] and one of your group members, Sam, says:
> "I really couldn't give a damn about climate change [racial equality]. To be honest, I intentionally go out of my way to do as many environmentally damaging things as I can [be as rude as I can to immigrants from other countries]"

The comment was selected to be deliberately extreme to ensure that the majority of participants would, themselves, *disagree* with the statement to a similar extent in both conditions.

Following the anti-environmental or racist comment made (by Sam), a second person (Alex) reacted to this comment in a way that either did or did not directly confront Sam, as depicted in the following extract (no confrontation and racial prejudice conditions between square brackets):

> Alex seems shocked and responds: "How can you even think something like that? I can't believe that you just made such a stupid comment." ["Really? That's interesting. What makes you say that?"]
>
> One of the other group members overhears pieces of the conversation and asks them what they are talking about. Alex answers: "We were just talking about climate change [racial equality], but I will not repeat what Sam just said about it [and are about to hear more about Sam's position on this topic.]"

2.1.3 Dependent measures.

Having read the scenario, participants indicated how close they felt to the responder (Alex) of the disregarding comment and how warm they perceived Alex to be. Closeness was measured on a 7-point Likert scale (from 1= *strongly disagree* to 7= *strongly agree*) in terms of agreement with each of four statements: "I would like to work with Alex on the next group project", "I would like to get to know Alex outside university", "I feel that Alex and I could become friends", and "I would avoid spending time with Alex in the future" (reverse coded). Participants indicated perceived warmth of the confronter on 4 items that measured the extent to which they felt Alex was good-natured, warm, trustworthy, and friendly (responses on a 5-point scale, from 1= *not at all* to 5= *extremely*), following (Fiske et al., 2002).

An exploratory factor analysis on the seven social perception items with Direct Oblimin rotation demonstrated that the items used to measure closeness and the items used to measure perceived warmth loaded on two different factors (all loadings > .68) and explained

67.26 % of variance in total. Both scales proved to be reliable measures (closeness α= .86; warmth α= .77).

To test the extent to which each response (by Alex) was perceived to communicate disagreement (with Sam), participants were asked to indicate to what extent they thought Alex disagreed or agreed with Sam's position on the topic (1= *strongly disagrees* to 7= *agrees).*

Additionally, we measured participants' agreement with the initial disregarding comment by asking participants to indicate to what extent they disagreed or agreed with Sam's position on the topic (1= *strongly disagree* to 7= *strongly agree.*) Finally, demographic information was collected and participants were debriefed and thanked for their participation.

2.2. Results and Discussion

2.2.1 Preliminary analyses: Participants' agreement and perceptions of actors' agreement with the initial comment

We first performed a 2 (issue: climate change disregard vs. racism) x 2 (reaction: confrontation vs. no confrontation) ANOVA with agreement with the initial comment as the dependent variable. Results indicated that there was no main effect of issue $F(1, 67)= 0.56$ $p= .456$, $\eta_p^2= .008$ and a marginal main effect of reaction, $F(1, 67)= 3.31$, $p= .073$, $\eta_p^2= .047$, which was qualified by a significant interaction between issue and reaction on the agreement with the initial comment $F(1, 67)= 7.35$, $p= .009$, $\eta_p^2= .099$.

Pairwise comparisons showed that the type of reaction affected participants' agreement with the initial comment when the disregarded issue was climate change disregard, $F(1, 67)= 10.70$, $p= .002$, $\eta_p^2= .138$, but not when the issue was racial prejudice $F(1, 67)= 0.38$, $p= .539$, $\eta_p^2= .006$. Participants strongly disagreed with the climate change disregarding comment when this comment was not confronted ($M= 1.20$, $SE= 0.26$), but (somewhat counterintuitively) this disagreement was less pronounced when the comment

triggered a confronting reaction by Alex (*M*= 2.47, *SE*= 0.29). In other words, confrontation of climate change disregard actually *increased* onlookers' agreement with this anti-environmental comment, while the agreement with the racist comment was not adjusted based on the social reaction to that comment (confrontation: *M*= 1.50, *SE*= .28; no confrontation: *M*= 1.75, *SE*= 0.29).

Furthermore it is important to note that, in line with our intentions, both mean agreement values were significantly lower than the midpoint of the scale (4) indicating that people strongly disagreed with both the climate change disregarding comment, $t(36)= -11.64$, $p< .001$, $d= -2.22$ and the racist comment, $t(33)= -10.3$, $p< .001$, $d= -2.38$.

A 2 (issue: climate change disregard vs. racial prejudice) x 2 (reaction: confrontation vs. no confrontation) ANOVA on perceived agreement of the reacting person (Alex) with the comment maker (Sam) revealed no main effect of issue, $F(1,66)= 2.69$, $p= .106$, $\eta_p^{2=} .039$, but a significant effect of reaction, $F(1, 66)= 11.05$, $p= .001$, $\eta_p^2= .143$. Consistent with the intention of the manipulation, participants perceived the confrontational reaction as communicating higher disagreement (*M*= 1.82, *SD*= 0.25) than the non-confrontational reaction (*M*= 2.97, *SD*= 0.25). This was not affected by the specific domain of the comments, as evidenced by the absence of a significant interaction, $F(1,66)= 2.13$, $p= .149$, $\eta_p^{2=} .031$. Crucially, however, *both* scores were significantly lower than the midpoint of the 7-point scale (no confrontation: $t(34)= -7.40$, $p< .001$, $d= 2.53$ confrontation: $t(34)= -6.77$, $p< .001$, $d= 2.32$). In line with our intentions, all scenarios were perceived as involving disagreement with the comment maker by the responder, with the degree of disagreement enhanced by the presence of explicit confrontation.

2.2.2 Main analyses: Reactions to (lack of) confrontation

A 2 (issue: climate change disregard vs. racial prejudice) x 2 (reaction: confrontation vs. no confrontation) ANOVA on *closeness* revealed no significant main effects of issue, , or

reaction. However, the expected interaction between reaction and issue was significant (see Table 1).

Table 1. ANOVA results with issue (climate change disregard vs. racism) and reaction (confrontation vs. no confrontation) as independent variables

	n	***df***	***F***	***p***	η_p^2
Closeness					
Issue	67	1	1.14	.289	.017
Reaction	67	1	0.39	.53	.006
Issue X Reaction[1]	67	1	8.36	.005	.11
Perceived warmth					
Issue	67	1	5.14	.027	.071
Reaction	67	1	1.99	.163	.029
Issue X Reaction[2]	67	1	4.12	.039	.062

[1] Entering agreement with Issue as a covariate did not change the pattern of the results, $F(1,67)= 6.63$, $p= .006$, $\eta_p^2 = .11$

[2] Entering agreement with Issue as a covariate did not change the pattern of the results, $F(1,67)= 4.34$, $p= .04$, $\eta_p^2 = .06$

Pairwise comparisons revealed that participants felt closer to the person who *did not* confront climate change disregard ($M= 5.24$, $SE= 0.20$) than the person who did confront the issue ($M= 4.48$, $SE= 0.22$), $F(1, 67)= 6.45$, $p= .013$, $\eta_p^2= .088$, $0.16 \leq \mu_{nc} - \mu_c \leq 1.36$, whereas confrontation did not shape closeness in the context of racial prejudice, $F(1, 67)= 2.47$, $p= .12$, $\eta_p^2= .036$, $-1.11 \leq \mu_{nc} - \mu_c \leq 0.13$, with the trend actually being in the opposite direction for this issue (see Figure 1). Put simply, confronting racism did not negatively affect the extent to which an onlooker felt socially close to the confronter, however the confrontation of climate change disregard lead onlookers to socially distance themselves from the confronter.

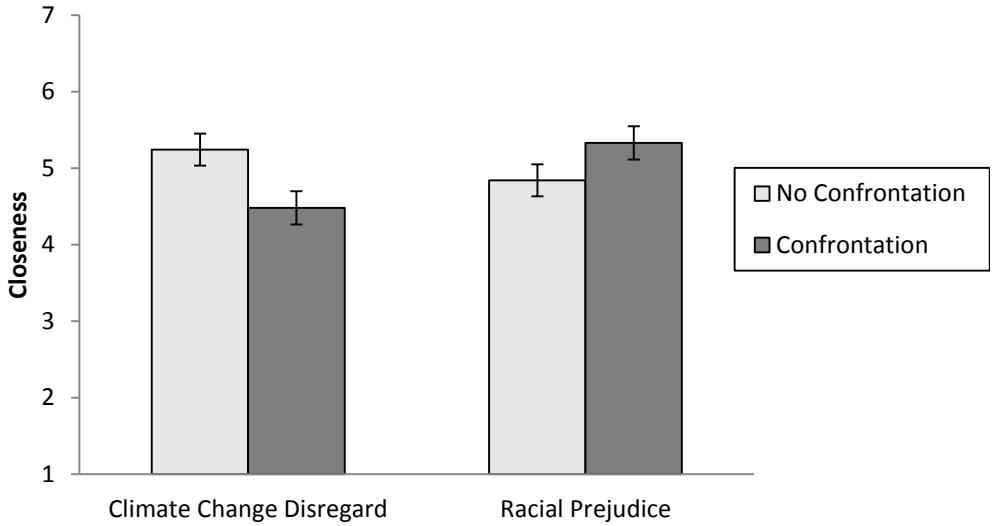

Figure 1. Participants' perceived closeness to the responder as a function of the issue being discussed and the type of reaction displayed.

The same analysis on the perceived *warmth* of the confronter revealed no main effect of reaction, but a significant main effect of issue, which was qualified by a significant two-way interaction between reaction and issue (see Table 1). Again, pairwise comparisons indicated that participants rated the confronter of climate change disregard as less warm (M= 3.18, SE= 0.13) than the person who did not confront this same comment (M= 3.65, SE= 0.13), $F(1, 67)= 6.42$, $p= .014$, $\eta_p^2= .087$, $0.10 \leq \mu_{nc} - \mu_c \leq 0.83$. However, again in line with results observed for closeness, the type of reaction did not alter the perceived warmth of the person reacting to the racist comment, $F(1, 67)= 0.23$, $p= .633$, $\eta_p^2= .003$, $-0.47 \leq \mu_{nc} - \mu_c \leq 0.29$ (see Figure 2).

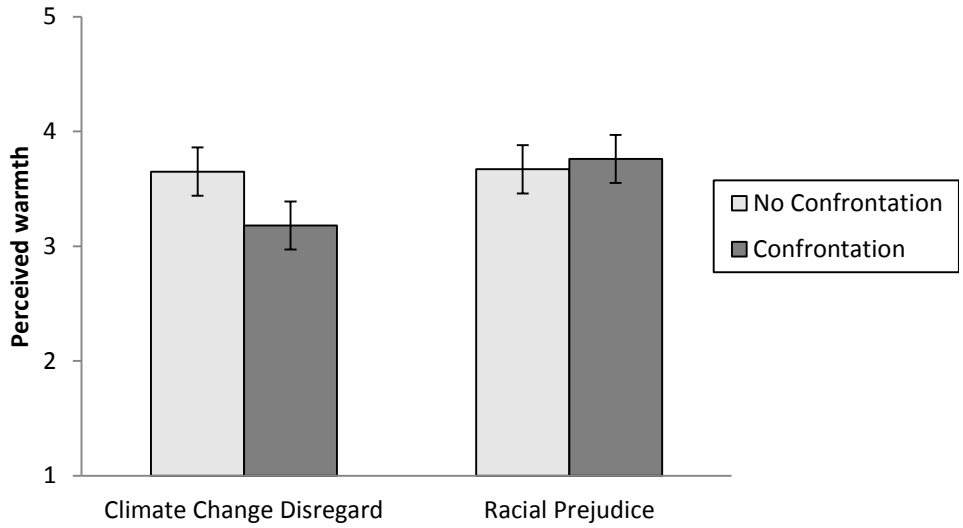

Figure 2. Participants' perceived warmth of the responder as a function of the issue being discussed and the type of reaction displayed.

These results show that acts of interpersonal activism, operationalised through the expressed disapproval of climate change disregard, resulted in more negative perceptions of the person communicating that disapproval (i.e., less closeness and lower perceived warmth) than when disapproval was not voiced. This pattern was not observed however in the context of racism where, if anything, confrontation was perceived more positively than non-confrontation. Thus, it was not the case that participants simply disliked an 'impolite confronter' *per se*. These patterns speak to the different normative status of climate change and racial equality as social issues, as evidenced by the existence of social costs associated with confronting that were only observed in the context of climate change. Furthermore, the negative consequences of confronting climate change disregard do not seem to be limited to the evaluation of the person engaging in the confrontation. Indeed, observers of the confrontation even tended to side more with the original comment maker's position, at least more so than they did when the comment passed without social disapproval. One might suggest that this occurred as a result of a 'spill-over' effect of participants' desire to socially

distance themselves from the confronter's expressed confrontation of the original comment (i.e. "Steady on, it wasn't *that* bad!").

3. Study 2: Understanding the roots of social costs associated with interpersonal activism

In our first study, we demonstrated that the confrontation of climate change disregard is associated with more social costs than the confrontation of racial prejudice. The question that remained hitherto unanswered, however, is which specific process might underlie our observed differences in responses to confrontation across these two domains. In advancing our hypotheses, we have argued that these differences reflect the different normative status of racial equality and environmental regard. That is, racial equality is a firmly established social norm, and even though not everyone may be motivated by this norm to the same degree, behavior that contravenes the expectation of racial equality is quickly identified as deviant and punished. Environmental concern relating to issues like climate change, though widely expressed, has not yet achieved the status of being a consensual social norm. As such, behavior that contravenes or questions such concern remains morally ambiguous, and indeed confrontations of this behavior may risk being perceived as less appropriate than the behavior itself. Along these lines, the perceived morality of the issue might offer a potential explanation of the different reactions to confrontation within each domain. Although the patterns we have observed in the previous study are consistent with this reasoning, these studies did not directly test the role of moral perceptions in guiding responses to confrontation. Filling this remaining gap was the primary goal of our second study.

A further issue that we explored in this study was the specific form taken by the act of interpersonal activism. While the previous study demonstrated that confrontation came at a social cost to the confronter of climate change disregard, it did not consider the level of

politeness utilized by the confronter in the interaction. The degree to which a confronter adheres to conversational norms of politeness would appear potentially important in this context given that confronting another's opinion/behavior is, in itself, conversationally non-normative (Czopp et al., 2006). One might postulate that if a conversational actor is going to violate politeness norms by openly challenging another's conduct then they will be perceived negatively, *unless* the conduct they are confronting is regarded as sufficiently norm-violating as to warrant this departure from norms of conversational politeness. If the above reasoning about the normative strength of racial equality versus environmental concern is accurate then one might also expect that the differential costs of confronting these issues should be amplified when greater impoliteness is displayed in the conversational act of confrontation, and attenuated by displays of politeness. In this study we directly manipulated politeness of confrontation as an independent variable to test these theoretical propositions.

3.1. Method

3.1.1 Participants and design

One-hundred and sixty two British students (117 female, M_{age}= 20.67, *SD* =2.18) of the University of Exeter completed the study, which involved a 2 (issue: climate change disregard vs. racial prejudice) X 3 (reaction: no confrontation vs. polite confrontation vs. impolite confrontation) between-participants design.

3.1.2 Procedure

Participants were approached on campus in the same way as in the first study. Participants read part of what was, in reality, a fictional transcript of a focus group conversation. However, they were informed that this discussion had been held a couple of weeks prior with students of the same University and that the researchers were interested in their perceptions of the people involved in the (anonymised) transcribed discussion. The

topic of the putative conversation was either “Climate change and the reduction of greenhouse gas emissions” or “Tolerance towards other cultures and their integration into our society”.

The depicted discussion began with one person (Sam) making a similar comment as used in the previous study either expressing climate change disregard or racial prejudice, which was then followed by the reaction of a second person (Alex). In the no confrontation condition and the polite confrontation condition the focus group moderator directly asked Alex to express their thoughts in response to Sam’s comment. In contrast, in the impolite manipulation the reacting person (Alex) *interrupted* the comment maker to condemn the comment made. In both confrontation conditions Alex was seen to say “How can you even think something like that? I can’t believe that you just made such a stupid comment.” Whereas in the no confrontation manipulation the reaction was: “Really? That’s interesting. What makes you say that?”

We created 4 items to assess the extent to which participants saw the confronted issues in moral terms *“Climate change/ racial prejudice is a moral issue*”, *“Climate change/ racial prejudice causes human suffering*”, “*In an ideal world there would be no greenhouse gas emission/ racial prejudice*” and “*I can accept that people have a different opinion on Climate change/ racial equality”* (reverse coded). All assessed morality items loaded on the same factor as verified by a Direct Oblimin rotated factor analysis. Together they explain 48.43 % of variance and have a reliability of $\alpha = .63$.

Closeness to the reacting person was assessed with the 4-item scale used in Study 1. To measure the perceived warmth, participants were asked “*How good natured/ cold (reversed)/ trustworthy/ sincere is Alex*”. Answers were indicated on a scale from *not at all* (1) to *extremely* (7).

An exploratory factor analysis with Direct Oblimin rotation revealed that the social perception items loaded on the intended two different factors (loadings > .47), and together explain 61.60% of variance. Both formed reliable scales (closeness: α = .86; warmth: α = .65).

3.2. Results

3.2.1 Main analysis: Reactions to the (lack of) confrontation

A 2 (issue: climate change disregard vs. racial prejudice) X 3 (reaction: no confrontation vs. polite confrontation vs. impolite confrontation) ANOVA on *closeness* to the confronter revealed a significant main effect of issue, and a marginal main effect of reaction, both of which were qualified by a significant interaction between reaction and issue (see Table 2).

Table 2. ANOVA results with issue (climate change disregard vs. racism) and reaction (confrontation vs. no confrontation) as independent variables.

	n	***df***	***F***	***p***	η_p^2
Closeness					
Issue	172	1	11.61	.001	.063
Reaction	172	2	2.65	.074	.030
Issue X Reaction[1]	172	2	3.43	.035	.038
Perceived warmth					
Issue	172	1	2.55	.035	.026
Reaction	172	2	4.03	.020	.045
Issue X Reaction[2]	172	2	1.77	.174	.020

[1] Entering agreement with Issue as covariate did not change the pattern of the results, $F(2,172)= 3.11$, $p= .04$, $\eta_p^2 = .04$

[2] Entering agreement with Issue as covariate did not change the pattern of the results, $F(2,172)= 1.69$, $p= .19$, $\eta_p^2 = .02$

Replicating results of Study 1, type of reaction affected closeness for climate change disregard, $F(2, 172)= 6.25$, $p= .002$, $\eta_p^2= .068$, $-0.03 \leq \mu_{nc} - \mu_{pc} \leq 1.07$, $0.43 \leq \mu_{nc} - \mu_{ic} \leq$

1.53, but not for racial prejudice, $F(2, 172)= 0.33$, $p= .721$, $\eta_p^2= .004$, $-0.42 \leq \mu_{nc} - \mu_{pc} \leq 0.74$, $-0.67 \leq \mu_{nc} - \mu_{ic} \leq 0.52$ (see Figure 3).

In the climate change disregard condition participants indicated greater closeness to the target when their reaction was non-confrontational (*M*= 4.79, *SE*= 0.20) than when they confronted politely (*M*= 4.27, *SE*= 0.19) or impolitely (*M*= 3.81, *SE*= 0.19). Polynomial contrasts demonstrated that this pattern of the climate change disregard conditions followed a linear trend, *p*= .001, SE= .21, 95% CI [-1.11, -0.28] (racial equality *p*= .78, SE= .20, 95% CI [-0.34, 0.44]). In sum, a confrontation of climate change disregard led to the confronter being socially distanced relative to someone who failed to confront, especially when the confrontation was impolite, whereas the presence of confrontation and its specific form had no consequences when the issue was racial prejudice.

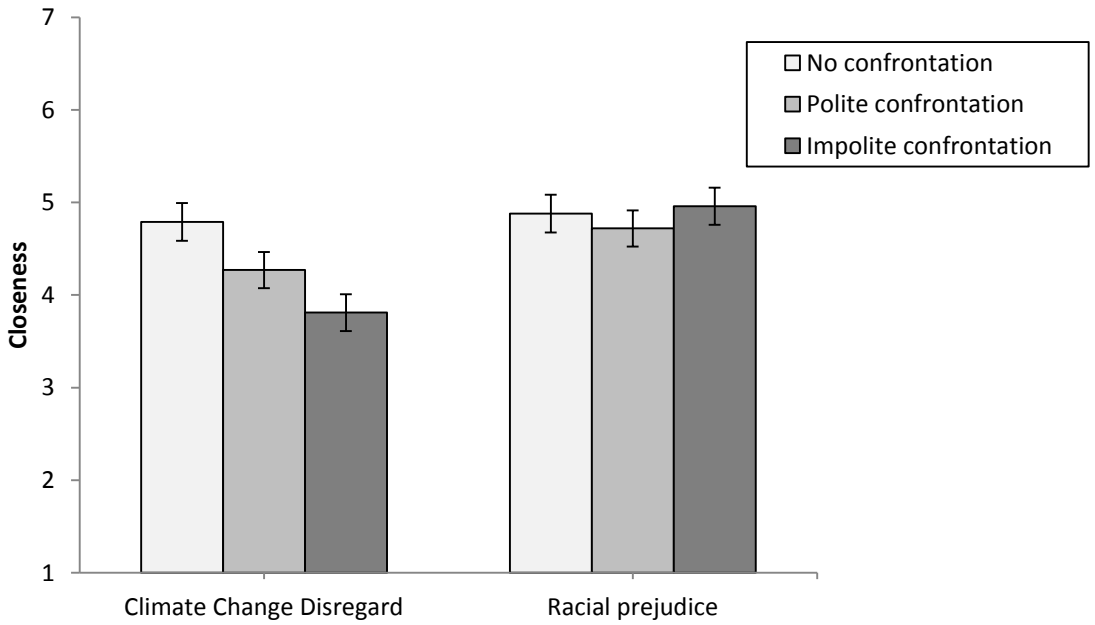

Figure 3. Participants feeling of closeness to the responder, showing a linear trend for the effect of reaction on closeness when the issue was climate change disregard.

The same analysis on perceived warmth revealed a significant main effect of issue (see Table 2). Consistent with previous findings, the person reacting to the racist comment was evaluated as being warmer (*M*= 4.62, *SE*= 0.08) than the person reacting to climate change disregard (*M*= 4.38, *SE*= 0.08), regardless of the type of reaction. Additionally, there was a significant main effect of reaction, such that the person reacting without confrontation was perceived as being more warm (*M*= 4.71, *SE*= 0.10) than the polite confronter (*M*= 4.48, *SE*= 0.10) and the impolite confronter (*M*= 4.31, *SE*= 0.10). Although there was no further significant interaction between the variables, the pattern in the climate change disregard condition was identical to that observed for closeness and the linear trend of the three reaction conditions was also significant, *p*=.001 .001, SE= .13, 95% CI [-0.72, -0.21], whereas the simple effect of reaction was not significant in the context of racial prejudice, *p*=.514, SE= .15, 95% CI [-0.41, 0.21], see Figure 4.

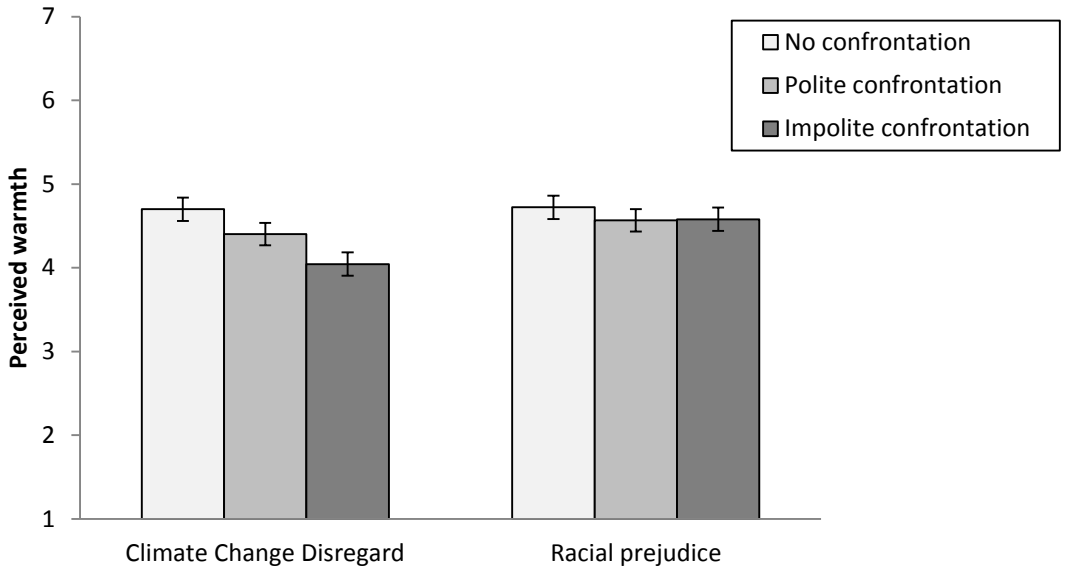

Figure 4. Participants perceived warmth of the responder, showing a linear trend for the effect of reaction on closeness when the issue was climate change disregard.

A final ANOVA examined the combined effects of issue and reaction on the morality measure. Here, as predicted, there was a significant main effect of issue, $F(1, 171)= 88.67$, $p< .001$, $\eta_p^2= .341$. Participants in the climate change disregard condition indicated that the issue was less of a moral issue to them ($M= 4.24$, $SE= 0.09$) than participants in the racial prejudice condition ($M= 5.49$, $SE= 0.10$). Perceptions of morality were not further shaped by reaction, either independently, $F(1, 171)= 1.84$, $p= .16$, $\eta_p^2= .021$, or in interaction with issue, $F(1, 171)= 0.32$, $p= .73$, $\eta_p^2= .004$.

3.2.2 Mediation analyses: Issue morality as potential mediator of social evaluation of confronters

Our argument is that part of the reason people respond differently to confrontation in relation to the climate change versus racial prejudice is because these domains are differentially perceived in terms of morality. The above analyses already demonstrate the differential perceptions of morality across domains and the different reactions to confrontation within them. To fully test our reasoning however, we explored the role of perceived issue morality in explaining differential reactions to confrontation across domains. Specifically, we tested whether the direct effect of issue on morality indirectly determines (and thereby explains) responses to confrontation. This model was tested using PROCESS (Hayes, 2012) Model 17, with 1000 bootstrap samples, in which the independent variable (issue), the mediator (morality), the interactions between the independent variable and moderator (confrontation condition) and between the mediator and moderator were used as predictors of confronter closeness and warmth. Conditional indirect effects between issue and outcome via morality as a function of confrontation condition were also examined. To perform this analysis, the three-level reaction variable was first recoded into two dummy variables that represented the contrast between the control and two confrontation conditions (dummy1: -.667, .33, .33) and the orthogonal contrast comparing the two confrontation

conditions to each other (dummy2: 0, -.5, .5), thereby permitting analysis of this multicategorical variable within the regression-based PROCESS framework (e.g. see Hayes and Preacher, 2013).

The analysis performed on closeness confirmed the effect of the issue (the IV) on morality (the mediator), b= -1.25, SE = .13, t =-9.39, $p < .001$, and revealed a significant interaction between this mediator and dummy1 (confrontation versus not), b = .45, SE = .20, t = 2.25, p = .03. Moreover, bootstrapping revealed a significant indirect pathway between issue and closeness via morality under conditions of confrontation, effect = -.53, SE = .16, 95%CIs [-.93, -.25], but not under conditions of non-confrontation, effect = .03, SE= .21, 95%CIs [-.30, .55]. Thus, the reason why participants socially distanced someone who confronted in the environmental (versus racial) domain is because this issue was perceived less strongly on the moral dimension.

In the analysis of closeness, there was also a marginally significant interaction between the independent variable (issue) and dummy2 (polite versus impolite confrontation), b = -.95, SE= .49, t = -1.94, p = .055. This reflects the fact that over and above the indirect effect of confrontation on closeness via morality, impoliteness was still perceived more negatively in the climate change context (i.e., there was a residual direct effect of issue unexplained by morality perceptions in response to impolite confrontation, b = -.61, SE= .32, t = -1.90, p = .058, but not polite confrontation or non-confrontation, ts < 1).

The analysis performed on warmth also confirmed the effect of issue on morality, b= -1.28, SE = .13, t = -9.82, $p < .001$, but in this analysis there were significant interactions between issue (the IV) and dummy2 (politeness versus impoliteness), b = -.36, SE= .16, t = -2.29, p = .02, and between morality (the mediator) and dummy2, b = -.78, SE= .34, t = -2.30, p = .02. Analysis of the indirect effects revealed a pathway between issue and warmth via morality only in response to polite confrontation, effect = -.39, SE= .16, 95%CIs

[-.70, -.11]. There was no indirect pathway via morality in response to impolite confrontation, effect = -01, SE= .15, 95%CIs [-.32, .31], nor was there any indirect pathway via morality in response to non-confrontation, effect = -.01, SE= .15, 95%CIs [-.32, .28]. Thus, the reason why people see a polite confronter as less warm in the context of climate change (versus racism) is that this issue is perceived less strongly in terms of morality.

However, as was the case for closeness, people apparently respond negatively to impolite confrontation in the climate change context for reasons other than morality, as evidenced by the significant issue x dummy 2 interaction reported above, and the residual direct effect of issue on warmth in response to impolite confrontation, b = -.49, SE= .22, t = -2.23, p = .03, but not polite confrontation or non-confrontation, ts < 1.

To summarise, these analyses show that the reason people feel less close to someone who is confronting climate change disregard (politely or impolitely), and the reason they perceive this person as less warm (at least when they engage in polite confrontation), is because climate change is not perceived to be sufficiently moral to permit such confrontation. People also respond negatively to impoliteness for reasons other than morality, however it is interesting that the additional costs of impoliteness are similarly limited to the climate change confrontation.

3.3. Discussion

This second study broadens our understanding of the social costs associated with confronting climate change disregard in three ways. Firstly, the results demonstrate that impolite responses in this domain result in even higher social costs than a polite confrontation. By contrast, evaluations of a person confronting racism were not sensitive to politeness concerns.

Importantly, this study showed that racial equality and climate change are indeed perceived as morally different, with racial equality being defined in more moral terms than is

climate change. Moreover, differences in perceived morality explained the differential reactions to confrontation as a function of issue. Interestingly, this pattern of indirect effects via morality was clearest for polite confrontation. Even more polite confrontation of environmental issues (versus racism) attracted sanctions in terms of closeness and warmth because this issue is not perceived as sufficiently moral to warrant such behavior. Impolite confrontations of climate change disregard attracted especially negative reactions, however the additional cost of impolite confrontation (over and above confrontation *per se*) was not explained by issue morality, especially when it came to ratings of target warmth.

Overall, this study suggests that when people perceive an issue to be sufficiently moral in nature they will be less inclined to socially distance themselves from someone who confronts another on that issue. Conversely, even polite confrontation of on the topic of climate change can attract social sanctions. Those sanctions are amplified when confrontational behavior breaks conversational norms of politeness, however this additional cost of impolite confrontation is not explained by issue morality alone.

4. General discussion

This research aimed to provide insight into the ways in which social norms associated with climate change affect the processes of interpersonal interaction that might empower or inhibit social change. More precisely, we focused on the acceptance of interpersonal activism (acts of interpersonal confrontation) associated with climate change to highlight the relevance of this interaction in reflecting and potentially changing the normative status of the issue.

Our approach reflected the idea that support for confrontation of anti-normative behavior is both an important step towards normative change and a reflection of the strength of existing norms. On the basis of the latter, we anticipated that there would be different consequences for an actor who confronted the normatively consensualized issue of racial

equality versus the less normatively consensual issue of environmentalism in the context of climate change. The studies reported here confirm that expectation by establishing that the confrontation of climate change disregard had consequences for how the person engaging in this act of interpersonal activism was perceived that did not apply in the racial equality context. While conversational politeness did attenuate negative reactions to confrontation relative to impoliteness, there were still costs associated with polite confrontation of climate change disregard that were not apparent in the context of racial equality. Importantly, our findings suggest that the social costs of confrontation in the context of climate change are explained by insufficient representations of this issue in moral terms.

4.1. Implications

These findings broaden our scarce understanding of the interactional process by which social norms around issues such as climate change might change, and the role of interpersonal activism in this process. Whereas the existing literature can tell us a great deal about how norm-manipulating messages, socially comparative feedback and norm-cueing social environments affect individual actions (Keizer et al., 2008; Schultz et al., 2007; Vossen et al., 2009), there remains a need to understand how current social norms play out in interpersonal interactions and the ways in which such processes might (or might not) meaningfully bring about changes in lifestyles.

More recent literature on interpersonal confrontation has drawn attention to the role of social sanctioning processes in promoting environmental actions (Czopp et al., 2006; Swim and Bloodhart, 2013). However, extending these insights, our research identifies a potential problem with this strategy to change existing environmental norms. Given the diffuse normativeness of climate change concern versus the clear consensualised moral norm against racism, it might be hard for individual actors to interpersonally affect the kind of changes that lead these norms to shift in a more positive direction.

These findings are of practical importance for anyone who might seek to engage in interpersonal 'grass roots' activism to encourage more pro-environmental conduct within their social networks. One might suggest that while polite attempts to confront are met with less negative reactions than impolite confrontations, even those engaging in polite confrontation of climate change disregard might expect to attract social punishments that would not be metered out to confronters of racial prejudice (regardless of the level of impoliteness with which they might 'say no to racism'). Thus conversational strategies like being polite also seem insufficient for a would-be interpersonal activist to navigate the non-normative status of environmental confrontation. Another potential risk facing a confronter of climate change disregard appears to be the possibility that onlookers will actually sympathize with the position of the person who is confronted to a greater extent than they might have in the absence of such a confrontation, as we saw in Study 1.

The findings in relation to issue morality suggest that this is what needs to change for interpersonal confrontation of climate change disregard to be more acceptable (and effective), in line with some recent suggestions in the literature (Bratanova et al., 2012; Markowitz, 2012; Markowitz and Shariff, 2012). Climate change certainly has *the capacity* to be defined as moral issue due to it involving human responsibility for inflicted harm on other humans (Popovski and Mundy, 2011; Stern et al., 1985). However many psychological barriers make it difficult to identify climate change as a moral imperative (Markowitz and Shariff, 2012) and thus may interfere with attempts to reframe it as such. Further research is therefore needed to identify which exact aspects of morality determine how climate change, and behavior associated with it, is perceived within interpersonal interaction and how these perceptions might be changed.

4.2. Limitations and future directions

In addition to the need to examine the role of morality within interpersonal confrontation, other pressing questions arise from the current findings that we would like address alongside the limitations of the studies presented in this paper. Firstly, two potential criticisms of our methodology relate to a) our use of student samples, and b) our use of hypothetical scenarios or transcriptions of supposedly real interactions. While student samples are widely used, it is not always appropriate to draw conclusions about the wider population based on effects found in this subsample (Gordon et al., 1986). While we used scenario and transcript stimuli in order to maximise experimental control, clearly these stimuli both have their limitations in terms of their ability to reproduce directly the ways in which interactions would be observed naturally.

In regards to our sample, the key question though is whether one would expect our student sample to hold characteristics that might give reason to assume that the identified phenomenon is unique to this subsample. In the current situation, this would be the case if our participants would evaluate the confronter of climate change disregard more critically than we would expect from others. However, survey results on public perceptions of climate change deliver no indication that university students would be particularly sceptical of climate change confronters. Rather, UK surveys have identified that males without formal education were found to be most sceptical about climate change (Poortinga et al., 2011; Whitmarsh, 2011) and that higher education was found to be associated with higher engagement in environmental actions such as recycling (Berger, 1997; O'Connor et al., 1999). Therefore, we have no reason to assume that the social costs associated with confronting climate change disregard will be less pronounced in other parts of the (British) population compared to our student samples.

With regards to our use of scenarios and transcripts to present the interactions to observe we would follow others' arguments that more controlled experimental settings do potentially afford the examination of universalistic principles that might be difficult to identify in a situation that lack abstractness (Kruglanski, 1975). Under consideration of the exploratory nature of this line of research, we decided that it was crucial to first understand the basic principles of the interpersonal confrontation in this specific context of climate change. After developing a general theoretical understanding of the potential psychological dynamics of these processes, it might then make sense to examine interactions in a less controlled and more naturalistic setting. A challenge for future research could be to identify instances of publically available naturally-occurring discourse in which individuals might engage in confrontation of other's non-environmental behaviours to look at how such discursive manoeuvres are performed, responded to, and the consequences for the unfolding interaction that follows.

We would like to highlight that the main objective of our research was to broaden our understanding of the normative processes linked to the specific issue of climate change. However, it remains to be seen whether confrontation of other forms of environmental disregard, that do not mention of climate change would be met with identical evaluations to those identified in our studies. Previous research (Gifford, 2011; Markowitz and Shariff, 2012) might suggest that reference to climate change (as was adopted in our experimental manipulations) might potentially trigger more controversy than other environmental issues, perhaps due to the failure of scientific consensus to be reflected in media representations (O'Neill et al., 2015). This might be especially true in countries like the USA where climate change scepticism and polarization continues to affect the discourse around climate change (McCright and Dunlap, 2011).

However, we argue that the key issue in relation to climate change opinions and actions is that widespread concern about climate change does not seem to translate into its treatment within social interaction. In line with data on public perceptions of climate change, we identified in Study 1 that participants personally disagreed with climate change disregard to a very similar level as they disagreed with racial prejudice. Despite this, one issue was perceived differently than the other when it came to interpersonal confrontation. Whether or not other environmental issues or actions (without reference to climate change) are evaluated in a similarly conflicting way should be addressed in future studies.

To bridge our findings to literature on interpersonal confrontation and its effect on behavior (Czopp et al., 2006; Swim and Bloodhart, 2013), we also need to clarify how the social costs of confrontation affect individual pro-environmental actions, in terms of both willingness to confront such behavior and the actions of those exposed to confrontation. As Czopp, Monteith and Mark's (2006) findings in the context of racial prejudice suggest, it might be the case that despite people having negative evaluations of a confronter, witnessing a social confrontation of climate change disregard still alters people's future behavior. The social costs of confrontation do not, therefore, undermine the possibility that witnessing this can have positive effects. However, these costs might limit the willingness of individuals to confront problematic behavior in the first place (e.g., see Shelton & Stewart, 2004). Future studies should explore the effects of witnessing confrontation on onlooker's future behaviour as well as investigating whether witnesses of social confrontation of climate change disregard will be more or less likely to confront in a similar situation themselves.

4.3.Conclusion

Our findings represent an exploratory first step towards understanding the role of interpersonal confrontation in relation to the norms surrounding climate change. We have shown how this approach provides valuable insights into how social norms manifest in social

interactions and the extent to which socially constructed morality provides a crucial limiting factor to such processes acting as a vehicle for change in the context of issues like climate change. These findings open the door for future work exploring in more depth how interpersonal activism might promote, rather than impede, attempts to address environmental problems. Put simply, one might argue that the challenge before us is to ascertain how 'saying no to climate change disregard' in everyday social interaction might come to be seen as just as culturally logical and acceptable as 'saying no to racism'.

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