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Autochthony Belief and Making Amends to Indigenous Peoples: The Role of Collective Moral Emotions

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Abstract

Intergroup relations in settler societies have been defined by historical conflict over territorial ownership between indigenous peoples and settler majorities. However, the indigenous groups were there first, and first arrival is an important principle for assigning ownership to a group. In two studies among Australians of Anglo-Celtic origin ($N=322$ and $N=475$), we argued and found that the general belief in entitlements for first comers (i.e. autochthony) is related to more support for reparations in terms of apology and instrumental compensation for Aborigines, as well as to less topic avoidance. We further proposed that the group-based emotions of collective guilt, moral shame and image shame account for these associations. We found that majority members who endorsed autochthony belief experienced more guilt (Study 1 and 2), moral shame (Study2) and image shame (Study 2). In turn, guilt and moral shame were related to more support for reparations and less topic avoidance, whereas image shame was related to more topic avoidance, thereby partially suppressing the negative association between autochthony belief and topic avoidance. Our research points at the importance of considering autochthony belief and different types of moral emotions in research on past transgressions and current attempts to restore social justice for indigenous peoples.

Keywords Autochthony · Reparations · Apology · Group-based emotions · Indigenous groups

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Introduction

In the same way that being the first one to possess an object is generally seen as a valid claim to ownership (Friedman, Van de Vondervoort, Defeyter, & Neary, 2013), people tend to see the original occupants of a territory as owning the land because they were "there first". In the anthropological literature, this general belief in entitlements for first comers is called autochthony belief (Ceuppens & Geschiere, 2005) and first arrival is seen as an 'historical right' for claiming ownership of a territory (Gans, 2001). Deriving entitlements from first arrival is often taken as self-evident and natural (Geschiere, 2009), and even children perceive first comers to own the land more than those who arrived later (Verkuyten, Sierksma, & Martinović, 2015). Furthermore, experimental research has shown that people not only assign territorial ownership based on first arrival, they even transfer ownership to an out-group (at the expense of the in-group) when this out-group is presented as the primo-occupant (Martinović, Verkuyten, Jetten, Bobowik, & Kros, 2020).

Autochthony belief presents territorially established groups with the possibility of excluding groups that arrived later (Ceuppens, 2011; Garbutt, 2006). Anthropological research has shown that autochthony is used by the far-right party in the Flemish part of Belgium to exclude francophone Belgians (Ceuppens, 2011), as well as to exclude non-autochthonous others in Côte d'Ivoire, Cameroon and the Democratic Republic of the Congo (Ceuppens and Geschiere, 2005). Furthermore, social psychological studies in Europe show that endorsement of autochthony belief among native majority members is associated with prejudice towards immigrants (Martinović & Verkuyten, 2013) as well as collective action against refugees (Hasbún López et al., 2019). However, previous research has not examined the role of autochthony belief in societies where the dominant group is not autochthonous, such as settler societies. These societies are formed by colonialism, where the original (indigenous) inhabitants have often lost most of their lands to the settlers. Rather than being an ideology that justifies majority ownership, in such contexts, autochthony belief might instead undermine it because the settler majority cannot lay claims to primo-occupancy against indigenous peoples.

The main aim of the current research is to examine how endorsement of autochthony belief among a settler majority relates to the willingness to make amends to indigenous peoples. We studied this among the Anglo-Celtic majority in relation to Aborigines in Australia, and we considered the intermediate role of moral emotions. In studying the willingness to make amends, we examine support for reparations while simultaneously considering the opposing desire to avoid the topic. Even though it is up to the government and leaders to make decisions about reparations, it is important to examine majority attitudes, as research has shown that public opinion can have a substantive impact on public policy (Burstein, 2016).

Autochthony Belief and Making Amends to Indigenous Peoples

Indigenous peoples in settler societies often occupy marginalized positions and have in many cases lost most of their lands to the colonizers and their descendants. Appeals to autochthony ("we were here first") have frequently been utilized by these indigenous groups as part of their struggles for rights and sovereignty (Gagné & Salaün, 2012) and against wrongful dispossession (Meisels, 2003). Though marginalized primo-occupant peoples are called "indigenous" rather than "autochthonous", both terms refer to first comers (the former is derived from Latin and the latter from Greek) and the primary distinction is that "autochthonous" is generally used to refer to primo-occupant peoples who are dominant in a given territory (Zenker, 2011). We define autochthony belief as the general ideological principle that the primo-occupants of any given territory are the ones who are most entitled to that land, irrespective of context or specific groups involved. As a general principle, autochthony belief can be used to attribute ownership to first comers across a range of contexts, including Aborigines in Australia.

The British at the time justified the colonization of Australia and the claiming of territory by arguing that Australia was *terra nullius* ("no one's land") and therefore not owned by Indigenous Australians (Banner, 2005). The impact of Indigenous Australians' autochthony claims on current Australian society is illustrated by the repeal of the doctrine of *terra nullius* in 1992 (Banner, 2005). This repeal is part of a larger reconciliation process in Australia and represented an important change in the Australian ownership conflict between indigenous peoples and the settler majority. The repeal officially acknowledged that the land was not empty when the settlers arrived, that the taking of Aboriginal lands was illegitimate and that indigenous peoples should have certain entitlements as Australia's first occupants (Attwood, 2005). The official repeal also resulted in the acknowledgement of "native title", the recognition that Indigenous Australians can make claims to territory based on their primo-occupancy. Since then there have been over 40.000 indigenous land claims just in the state of New South Wales in Australia (Brown, 2016).

The conflict over territory has shaped the relationships between indigenous peoples and majority populations in settler societies (Alfred & Corntassel, 2005), and processes of reparation have been a main feature of attempts to improve relations between the settler majority and Indigenous Australians. Reparations can take a symbolic (e.g. institutional apologies) and instrumental form (e.g. financial compensation). Apologies aim to restore justice by condemning past harms, while compensation aims to restore justice by repairing those harms. Apologies are a way for perpetrator groups to take responsibility for events in the past and to express remorse for those events (Doosje, Branscombe, Spears, & Manstead, 2006) and can help improve intergroup relations and promote intergroup forgiveness (Auerbach, 2004). Official government apologies may or may not include offers of (financial) compensation (Blatz, Schumann, & Ross, 2009), and research suggests that reparations are most effective at improving intergroup relations and promoting reconciliation when they combine apologies and compensation (Okimoto & Tyler, 2016; Philpot, Balvin, Mellor, & Bretherton, 2013).

However, while some research has found that majority people in settler societies tend to be supportive of compensation (Halloran, 2007; Gomersall, Davidson, & Ho, 2000) and institutional apologies (McGarty et al., 2005), these remain controversial issues (Pettigrove, 2003; Moses, 2011). Consequently, people may also react defensively to reminders of in-group wrongdoing (Peetz, Gunn, & Wilson, 2010) and wish to avoid the topic altogether (Gausel, Leach, Vignoles, & Brown, 2012), which could be detrimental for processes of reconciliation. Therefore, in this paper we examine the desire to avoid the topic in addition to support for both symbolic and instrumental reparations. Just as the repeal of *terra nullius* forced the Australian government to address reparations, we expect that White majority's endorsement of autochthony belief will be related to more support for institutional apologies and instrumental compensation, and to less desire to avoid talking about the past transgressions. We argue that moral emotions play a role in these relationships, as we discuss below.

The Role of Moral Emotions

To the extent that settler majority members believe that primo-occupancy is a relevant basis for claiming ownership, they might perceive the appropriation of indigenous lands as having been illegitimate and in conflict with the moral values of their in-group. That is, the appropriation of Aboriginal lands by British colonizers can be construed as a wrongdoing committed by the in-group. According to social identity and self-categorization theories (Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), group memberships and their associated category attributes can become internalized into an individual's self-concept, and intergroup emotions theory (Mackie, Devos, & Smith, 2000) proposes that emotions can derive from self-categorization as a member of a social group. Therefore, the actions of other in-group members, including one's ancestors, can have affective implications for that individual and generate feelings of "vicarious" remorse or regret (Lickel, Schmader, Curtis, Scarnier, & Ames, 2005) as well as shame and guilt (Wohl, Branscombe, & Klar, 2006). Thus, wrongdoings committed by the in-group may evoke collective emotional responses regardless of one's personal involvement in these events (Branscombe & Doosje, 2004), because the self can be linked to the wrongdoings through a shared group identity (Tajfel & Turner, 1979). In this paper, we consider guilt, moral shame and image shame, which, respectively, derive from viewing the in-groups' wrongdoing (1) as a failure of the group's *behaviour* ("we did something wrong"), (2) as a failure of the group's *moral standing* ("we are bad people") and (3) as harmful to the *image* of the group in the eyes of others ("we are seen by others as bad people"). We expect that settler majority support for autochthony belief will be related to stronger experience of guilt, moral shame and also image shame.

Self-conscious moral emotions originating from a (real or perceived) wrongdoing by the in-group are aversive (Branscombe & Doosje, 2004; Tangney, Stuewig, & Mashek, 2007) and therefore motivate behaviour aimed at reducing these feelings through seeking out positive affect and avoiding negative affect (Schmader &

Lickel, 2006). In other words, moral emotions could motivate support for institutional apologies and instrumental compensation (Halloran, 2007; Gomersall et al., 2000; McGarty et al., 2005), as well as the desire to avoid the topic (Gausel et al., 2012), but this will depend on the type of emotion, as we argue below.

First, the appraisal that one's group is responsible for the wrongdoings committed against another group can elicit feelings of collective guilt (Doosje, Branscombe, Spears, & Manstead, 1998; Iyer, Schmader, & Lickel, 2007). Because feeling guilty originates from feeling responsible for specific *acts* and how this has affected the victims (Baumeister, Stillwel, & Heatherton, 1994; Iyer, Leach, & Pedersen, 2004), guilt motivates seeking forgiveness, taking responsibility and compensating for the specific wrongdoing. At the same time, guilt is considered an approach-oriented emotion (Schmader & Lickel, 2006), and avoiding the topic should not directly help reduce feelings of guilt (but note that research on this is still limited). Instead, apologies allow perpetrator groups to take responsibility, express feelings of guilt and seek forgiveness for the wrongdoing (Iyer et al., 2004), and offering compensation allows perpetrator groups to attempt to repair the damage caused (Doosje et al., 2006). Research has indeed found that guilt is associated with increased support for institutional apologies (Schmader & Lickel, 2006; Haidt, 2003) and compensation (Brown & Cehajic, 2008; Gunn & Wilson, 2011; Halloran, 2007; Schmader & Lickel 2006). We therefore expect that collective guilt will be associated with greater support for offering apologies and instrumental compensation, as well as a lower desire to avoid the topic.

Second, people have a need to see their group as moral (Leach, Ellemers, & Barreto, 2007), and immoral behaviour by the in-group, past or present, undermines this self-image (Branscombe, Ellemers, Spears, & Doosje, 1999), which can lead to feelings of collective moral shame (Allpress, Brown, Giner-Sorolla, Deonna, & Teroni, 2014). Consequently, moral shame should motivate behaviour that helps restore the self-perceived morality of the group. This includes offering apologies whereby one expresses their respect for morality (Barlow et al., 2015), but also acts of instrumental compensation that are consistent with the group's moral values (Ding et al., 2016; Jordan, Mullen, & Murnighan, 2011). However, we also expect that moral shame would discourage topic avoidance, because self-perceived morality can only be restored by acting more moral in the present, and avoiding the topic is not moral behaviour. In previous research, moral shame has indeed been shown to be associated with a greater willingness to compensate and apologize, as well as a lower desire for self-defensive behaviour (Silfver-Kuhalampi, Figueiredo, Sortheix, & Fontaine, 2015; Allpress et al., 2014; Gausel et al., 2012). We therefore expect that moral shame will be associated with greater support for offering apologies and compensation and a lower desire to avoid the topic.

Third, the real or imagined public exposure of the wrongdoing and the perception that one is (or will be) judged by others for the wrongdoing can be experienced as a threat to the image of the group (Gausel and Leach 2011), which can lead to feelings of collective image shame (Allpress et al., 2014). Image shame is therefore associated with behaviour aimed at reducing the perception that one's group is judged by others. Offering institutional apologies and instrumental compensation, all of which are public acts, could therefore help perpetrator groups restore their damaged social

image (Benoit & Drew, 1997; Brown, González, Zagefka, Manzi, & Cehajic, 2008). However, research suggests that these may not be the most likely consequences of experiencing image shame. In many cases, the restoration of the (perceived) social image in the eyes of others is most easily and least costly achieved through self-defensive behaviour in the hopes that the issue will simply be forgotten (Rees, Allpress, & Brown, 2013; Lickel et al., 2005; Allpress et al., 2014). We therefore expect that image shame will be associated with more support for apologies and reparations, but at the same time we expect it to be particularly associated with a greater desire to avoid the topic.

Bringing together the reasoning on autochthony, moral emotions and reparations, we expect that the positive associations between autochthony and apology and instrumental compensation will be accounted for primarily by guilt and moral shame, and to a lesser degree by image shame. Furthermore, we expect the negative association between autochthony and topic avoidance to be accounted for by guilt and moral shame, while being suppressed by image shame. We tested our propositions in two studies using samples of Australians of Anglo-Celtic (English, Irish, Scottish, Welsh) descent. In Study 1, we only considered the associations between autochthony, guilt and instrumental compensation, whereas in Study 2 we also examined moral and image shame, as well as apologies and topic avoidance. The data and analysis code are available at https://osf.io/efqxk/.

Study 1

Our main aim in Study 1 was to establish the relationship between endorsement of autochthony as a general ideological belief and support for reparations for Aborigines. In particular, we examined support for instrumental compensation, and we focused on the intermediate role of collective guilt, as this is the most likely moral emotion with regard to support for reparations (e.g. Doosje et al., 1998; Halloran, 2007).

Data and Participants

Participants for Study 1 ($N = 326$) were recruited in Australia from a nationally representative sample in terms of age, gender and socio-economic status. The participants were recruited in March 2016 through an Australian research consultancy company (Taverner Research) that maintains a panel of people who can be approached for a survey. The target group was adults with at least one parent of Anglo-Celtic origin (English, Welsh, Scottish or Irish)—295 participants (90%) had two parents of Anglo-Celtic origin. Of the participants with one Anglo-Celtic origin parent, the second parent had other European roots (e.g. Italian).[1] Due to concerns about the potential sample size in the panel, foreign-born Australians of Anglo-Celtic descent

[1] There was only one participant with a parent of non-European origin (Indian). We kept this person in the analytic sample.

were also approached, and 106 of the participants (32.5%) were not born in Australia. We excluded three participants who happened to be younger than 18, and one participant aged 112,[2] for a final sample size of 322. After excluding those participants, the mean age was 46.7 ($SD = 18.3$), the youngest participant was 18, the oldest was 89 and 52% of participants were female.

Measures

Unless otherwise indicated, all variables were measured using a seven-point scale ranging from 1 (*Completely disagree*) to 7 (*Completely agree*), so that higher scores on the items indicated stronger support.

We used five items to assess the degree to which participants in general endorsed *autochthony belief*, based on Martinović and Verkuyten (2013). The items were: (1) "The earliest inhabitants of a country are more entitled than newcomers to decide about important national matters", (2) "Every country belongs primarily to its first inhabitants", (3) "The earliest inhabitants of a country should have the most right to define the rules of the game", (4) "The ones who arrived first in a country can be considered more rightful owners of the country than those who arrived later" and (5) "'We were here first' is an important principle for determining who decides on what happens in a country".

We measured *collective guilt* with two items (Branscombe, Slugoski, & Kappen, 2004; Doosje et al., 1998), with higher values denoting greater feelings of collective guilt about the appropriation of Aboriginal peoples' land. The items used were: (1) "I feel bad when I think about how Anglo-Celtic conquerors dealt with the Aboriginal people and the land that was at that time rightfully theirs" and (2) "I feel guilty when I reflect on the harm inflicted on Aboriginal people by Anglo-Celtic conquerors". These items were part of a larger set of questions on moral emotions (6 in total), and for theoretical reasons we excluded those that did not directly measure collective guilt. Two tapped appraisals about the act, namely that one's group is responsible for the wrongdoing (Iyer et al., 2007), "Due to my Anglo-Celtic descent I somehow feel accountable for the violent ways in which my ancestors confiscated the Aboriginal people's land", and the appraisal that the act was illegitimate "The land that was taken away from Aborigines by my ancestors was often rightfully conquered (reversed)". The other two items tapped shame and regret, "I am ashamed of the fact that my ancestors forcibly removed Aboriginal children (the so-called Stolen Generations) from their families, their communities, and the land on which they were born", "I regret the fact that my Anglo-Celtic ancestors deprived Aborigines of their land rights". The main results were, however, not substantively different when using the full 6-item factor (see Table A1, Online Appendix A).

Support for *instrumental compensation* was measured with 6 items based on Swim and Miller (1999) (1) "I believe that the damage caused to Aborigines by my

[2] As of January 2015, only one verified supercentenarian lived in Australia, but she died on December 2015 (Gerontology Research Group, 2015).

ethnic group should be repaired.", (2) "Aborigines should receive entitlements such as affirmative action and other forms of compensation for the past injustices committed by Anglo-Celtic immigrants in Australia.", (3) "A certain quota of Aboriginal students, even if not all are qualified, should be admitted to universities.", (4) "I am against policies such as affirmative action that give preference to Aboriginal people (reversed).", (5) "Aboriginal culture should not receive any form of protection (reversed)." and (6) "Aboriginal people's spiritual interest regarding land use should always matter more than any industrial or commercial interests advocated by Australian businesses, regardless of how lucrative these may be for the Australian economy".

We controlled for four standard demographic characteristics: *gender* (0 = *male*, 1 = *female*), *age* (in years), *educational level* (*year 10 or less*; *year 12*; *certificate or diploma*; *bachelor level*; *postgraduate level*), and the often used *political self-placement* scale (ranging from 1 (*strongly left*), to 5 (*strongly right*) (Jost, 2006), which have been linked to support for reparations (González, Manzi, & Noor, 2011) as well as to collective guilt in Australia (McGarty et al., 2005). We anticipated that participants who were not born in Australia, or who have only one Anglo-Celtic parent, might experience less collective guilt and may also differ in their support for compensation. We therefore controlled for the effects of *country of birth* (0 = *born abroad*, 1 = *born in Australia*) and *parents' ethnicity* (0 = *one Anglo-Celtic parent* 1 = *both parents Anglo-Celtic*) on collective guilt and support for instrumental compensation. We additionally controlled for the association between feelings towards Aborigines and support for instrumental compensation, so that we could differentiate between behaving positively towards an out-group because one evaluates them positively, and doing so because of a moral imperative (Lalljee, Tam, Hewstone, Laham, & Lee, 2009). The variable *feelings towards Aborigines* was assessed with a "feeling thermometer", which is commonly used in research on intergroup relations (e.g. Ward & Masgoret, 2008; Haddock, Zanna, & Esses, 1993), including research on attitudes towards Aborigines and other minorities in Australia (Islam & Jahjah, 2001). Participants were asked to indicate how warm their feelings were towards Aborigines on an 11-point scale (ranging from 0° to 100°) and were instructed that scores of 50° indicate neutral feelings.

Results

Measurement Model

We performed a confirmatory factor analysis in Mplus (version 8) to test whether the latent factors *autochthony belief*, *collective guilt* and *instrumental compensation* were empirically distinct constructs. This initial model showed that the two reverse-coded items from the compensation factor loaded poorly and had low explained variance (4: "I am against policies such as affirmative action…" $R^2 = 0.16$; 5: "Aboriginal culture should not receive any form of protection" $R^2 = 0.11$), whereas all other items had an $R^2 > 0.45$. Excluding these two items resulted in an acceptable model fit ($\chi^2(41,\ N = 322) = 117.17,\ p < 0.001$, RMSEA = 0.076 [90% CI 0.060, 0.092],

Table 1 Correlations, means/proportions, standard deviations and scale reliabilities of the main constructs (Study 1, $N = 322$)

	1	2	3	4	5	6	7	8		Range	*M*/*p*	SD	ρ
1. *Autochthony belief*	–									1–7	3.86	1.49	.94
2. *Collective guilt*	.59***	–								1–7	4.58	1.66	.78
3. *Instrumental compensation*	.62***	.80***	–							1–7	4.24	1.73	.87
4. Gender (ref. male)	.16**	.22***	.15*	–						0/1	.48	–	–
5. Age (years)	−.22***	−.09	−.06	.08	–					18–89	46.44	18.30	–
6. Educational attainment	−.02	.06	.06	−.02	−.10†	–				1–5	3.11	1.13	–
7. Political orientation	−.19**	−.29***	−.25***	−.06	.14*	−.13*	–			1–5	2.91	0.91	–
8. Born in Australia (vs born abroad)	.01	.01	.00	.00	−.29***	.14*	.02	–		0/1	0.68	–	–
9. Both parents Anglo-Celtic (vs. one)	−.16**	−.07	−.06	.03	.04	.01	.06	−.02	–	0/1	0.90	–	–
10. Feelings towards aborigines	.29***	.31***	.37***	.22***	.09†	.02	−.01	.05	.05	0–10	7.24	2.74	–

†$p < .1$; *$p < .05$; **$p < .01$; ***$p < .001$ (2-tailed). Latent variable names are italicized. Indicated means for dichotomous variables are the proportions

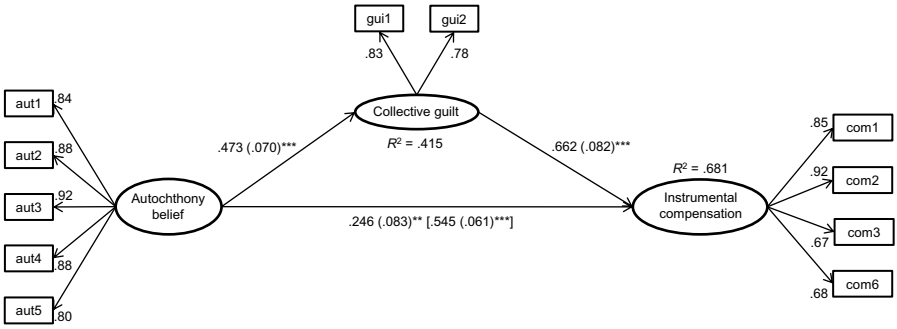

Fig. 1 Structural equation model Study 1 with standardized coefficients, controlling for gender, age, educational attainment, political orientation, parents' ethnicity and whether participants were born in Australia. Note: Control variables omitted from the figure. The total relationship between autochthony and compensation is displayed between square brackets. $^{**}p < .01$; $^{***}p < .001$ (2-tailed)

CFI = 0.951, TLI 0.934, SRMR = 0.036). We estimated several alternative models to verify that the factors represented distinct constructs. Because we used the MLR estimator in Mplus, the models are compared using the Satorra–Bentler scaled Chi-square difference test. All alternative factor specifications yielded a worse fit (see Table A2, Online Appendix A), which indicates that the proposed model provides the best representation of the data.

Descriptive Findings

Bivariate correlations, means/proportions and standard deviations are presented in Table 1, and so are composite scale reliabilities (ρ, see Raykov, 2017), which are superior to the more commonly reported Cronbach's alpha that does not account for measurement error. All correlations between the main variables were significant and in the expected directions. The mean scores show that, on average, support for instrumental compensation (Wald(1) = 8.22, $p = 0.0041$) and collective guilt (Wald(1) = 38.76, $p < 0.001$) were significantly higher than the neutral mid-point of the scales, while autochthony belief did not significantly differ from the neutral mid-point (Wald(1) = 3.760, $p = 0.0525$).

Support for Instrumental Compensation

We estimated a structural equation model with latent constructs in which we regressed instrumental compensation on collective guilt and autochthony belief, and we additionally regressed collective guilt on autochthony. We controlled for gender, age, educational level, political orientation, parents' ethnicity, whether participants were born in Australia, and feelings towards Aborigines, as manifest variables, in relation to both guilt and instrumental reparations. Missing values were accounted

Table 2 Structural equation model predicting support for instrumental compensation by autochthony belief, mediated by collective guilt (Study 1, $N = 322$)

	Collective guilt		Support for instrumental compensation	
	B	SE	*B*	SE
Direct relationships				
Autochthony belief	.66***	(.08)	.25**	(.09)
Collective guilt			.64***	(.09)
Indirect relationship				
Autochthony belief → collective guilt →			.42***	(.08)
Total relationship				
Autochthony belief			.67***	(.07)
Direct relationships				
Autochthony belief	.53***	(.08)	.27**	(.09)
Collective guilt			.62***	(.09)
Indirect relationship				
Autochthony belief → collective guilt →			.33***	(.07)
Total relationship				
Autochthony belief			.60***	(.07)
Control variables				
Gender (ref = male)	.30†	(.16)	− .17	(.13)
Age	.00	(.01)	.01	(.00)
Educational level	.04	(.07)	.05	(.06)
Left–right orientation	− .27*	(.11)	− .07	(.08)
Born in Australia (ref = born abroad)	− .05	(.18)	.01	(.14)
Both parents Anglo-Celtic (ref = 1 parent)	− .08	(.23)	.11	(.19)
Feelings towards Aborigines	.14***	(.04)	.03	(.03)

†$p < .1$; *$p < .05$; **$p < .01$; ***$p < .001$ (2-tailed). Reported coefficients are unstandardized

for using full information maximum likelihood (FIML). We tested indirect effects by means of the significance of all individual coefficients (also known as the joint-significance test), as well as bootstrapping procedures with 10,000 samples (Preacher & Hayes, 2008; Yzerbyt, Muller, Batailler, & Judd, 2018). Significance of both coefficients and a 95% confidence interval (CI), which does not include 0, indicate a significant indirect effect.

The structural equation model had an acceptable fit ($\chi^2(112, N = 322) = 271.98$, $p < 0.001$, RMSEA = 0.067 [90% CI 0.057, 0.077], CFI = 0.922, TLI = 0.908,

SRMR = 0.058).[3] Figure 1 shows the standardized coefficients for the model, including control variables, and Table 2 shows the unstandardized coefficients and indirect relationships. In addition, in Table 2 we also show the results of the model without the control variables, as a robustness check.

As expected, the total association between autochthony belief and support for instrumental compensation was significant and positive: participants who more strongly endorsed autochthony belief also tended to more strongly support instrumental compensation. Furthermore, stronger support for autochthony belief was significantly related to higher levels of collective guilt, which was in turn related to more support for instrumental compensation. Autochthony belief was thus indirectly related to more support for instrumental compensation through collective guilt, and this indirect association was significant, unstandardized 95% CI [0.21, 0.52]. Finally, there was a remaining positive direct association between endorsement of autochthony belief and support for instrumental compensation. Table 2 also shows that the findings were relatively unaffected by the control variables, as the main relationships are very similar in a model without control variables.

Discussion

We provided evidence for the predicted positive relationship between settler endorsement of autochthony as a general ideological belief and support for instrumental compensation for the indigenous group. Specifically, stronger support for autochthony belief by Anglo-Celtic Australians was related to greater support for instrumental compensation of Aborigines, and this relationship was accounted for by collective guilt. These relationships were robust while controlling for gender, age, educational level, political orientation and feelings towards Aborigines.

Study 2

In Study 2, we considered a wider array of outcomes and emotions, which allowed us to examine whether autochthony belief is overall related not only to stronger support for instrumental reparations for Aborigines, but also to support for institutional apologies and a lower willingness to avoid the topic of land appropriation. At the same time, we tested whether autochthony belief is also related to higher topic avoidance through image shame, to gain a better understanding of the overall

[3] Using pwrSEM (Wang and Rhemtulla in press), we performed a power analysis to determine the power of our model to detect small effect sizes (0.3) for each path coefficient. We utilized the observed factor loadings, residual (co)variances, and total variance and performed 1000 simulations using the real sample size ($N = 322$). Based on this analysis, we had 99% power to detect small effects, which is above the commonly accepted threshold of 80%.

relevance of autochthony belief for support for reparations. Therefore, in addition to collective guilt, we included measures tapping the emotions of collective moral shame and image shame. Furthermore, we adjusted our measurement of collective guilt to focus explicitly on collective guilt about land appropriation and to differentiate it clearly from the other moral emotions. Both the broader investigation of reparations and the differentiation between three different moral emotions allow for the development of a more fine-grained picture of the relationship between autochthony belief and support for reparations.

Data and Participants

Participants for Study 2 were recruited in 2018 through an international research consultancy company (Qualtrics), which used panel aggregation of 45 Australian panels. The target group was again people with at least one parent of Anglo-Celtic origin (English, Welsh, Scottish, or Irish). Twenty participants indicated that they had some indigenous ancestry and were therefore removed from the sample, which left a remaining sample of 475. Approximately two-thirds of the participants (65.2%) had two parents with Anglo-Celtic ancestry. Of those with one Anglo-Celtic origin parent, the second parent had other European roots in the majority of cases.[4] As in Study 1, foreign-born Australians of Anglo-Celtic descent were also approached, due to concerns about the potential sample size in the panel. Approximately half (49.7%) of the participants were men, and ages ranged from 18 to 85 ($M = 41.32$, SD = 16.03). Seventy-three participants (15.3%) were not born in Australia. We controlled for country of birth and parents' ethnicity to determine whether this affected the results.

Measurements

All variables were measured using seven-point scales ranging from 1 (*Completely disagree*) to 7 (*Completely agree*) unless otherwise stated, with higher values indicating stronger support. Each of the latent variables was measured using 3 items, unless otherwise specified.

The three items for *autochthony belief* were based on those used in Study 1:[5] (1) "Every territory belongs primarily to its first inhabitants", (2) "Those who arrived first in a territory are its owners" and (3) "'We were here first' is a good argument for determining who owns the territory".

The items for *collective guilt* were (1) "I feel guilty that my Anglo-Celtic Ancestors deprived Aborigines of their land rights", (2) "Due to my Anglo-Celtic descent

[4] Of those with non-European roots, 22 had Asian heritage, 6 African, 4 South American and 8 had other ancestry.

[5] The reliability of the autochthony factor in Study 1 was very high ($\rho = .94$), so due to space constraints we included only three of the items in Study 2.

I somehow feel guilty that my ancestors confiscated Aboriginal peoples' land" and (3) "I feel guilty when I think about how Anglo-Celtic settlers dealt with Aboriginal peoples and the land that was theirs".

Next, we measured two types of shame with items adapted from previous research on these emotions (e.g. Allpress et al., 2014; Rees et al., 2013; Brown et al., 2008). *Collective moral shame* was measured with the following items: (1) "Our treatment of Aboriginal peoples' land rights makes me doubt the moral character of Anglo-Celtic Australians", (2) "Anglo-Celtic Australians' appropriation of Aboriginal peoples' land makes me less proud of what it means to be Australian" and (3) "I feel ashamed about being Anglo-Celtic Australian because of the way in which my Anglo-Celtic Ancestors deprived Aborigines of their land rights". *Collective image shame* was captured with the items: (1) "It bothers me that other nations might think of Anglo-Celtic Australians negatively because of the way Anglo-Celtic conquerors dealt with Aboriginal peoples' and the land that was theirs", (2) "I am concerned that the confiscation of Aboriginal lands by Anglo-Celtic Australians might create a bad image of Anglo-Celtic Australians in the eyes of the world" and (3) "I worry about the negative image that the international community might have of Anglo-Celtic Australians because my Anglo-Celtic ancestors deprived Aborigines of their land rights".

We measured three constructs relating to support for reparations as latent factors. *Support for institutional apologies* was measured with the following three items adapted from Allpress, Barlow, Brown, and Louis (2010) and McGarty et al. (2005): (1) "I believe the government of Australia was right to apologize to the Indigenous Australians for the past harmful actions committed by Anglo-Celtic Australians", (2) "I think that the Australian government should apologize for the appropriation of Indigenous Australians' lands in the past" and (3) "We should recognize more explicitly the appropriation of Indigenous Australians' lands on National Sorry Day". Support for *instrumental compensation* was measured with questions adapted from Swim and Miller (1999): (1) "A certain quota of Indigenous Australian students should be admitted to higher education", (2) "In case of equal skills and qualifications, companies should give preference to Indigenous Australian applicants" and (3) "Indigenous Australians should receive entitlements, such as affirmative action and other forms of financial compensation". *Topic avoidance* was measured with the following items adapted from Gausel et al. (2012): (1) "I think we have talked enough about land appropriation in this country", (2) "When we talk about the relations between Indigenous Australians and Anglo-Celtic Australians we should not focus on the past so much" and (3) "It would be better to put this negative past behind us".

We controlled for the same variables as in Study 1 (*gender*, *age*, *educational attainment*, *political self-placement*, *born in Australia*, *parents' ethnicity*, and *feelings towards Aborigines*), and measured them in the same way in Study 2.

Results

Measurement Model

We performed a confirmatory factor analysis in Mplus (version 8) to test that the latent factors autochthony belief, collective guilt, moral shame, image shame, support for institutional apologies, instrumental compensation and topic avoidance were distinct constructs. This 7-factor model fit the data well ($\chi^2(168, N=475)=302.74$, $p<0.001$, RMSEA = 0.041 [90% CI 0.033, 0.048], CFI = 0.976, TLI = 0.970, SRMR = 0.036). Though the moral emotions collective guilt, moral shame and image shame were strongly positively correlated, multicollinearity was not a concern (guilt VIF 3.56; moral shame VIF 3.73; image shame VIF 2.12), and they each formed highly reliable scales (respectively, $\rho=0.92$; 0.91; 0.91). We estimated several alternative models where we combined any two factors in order to verify that they were distinct constructs, as well as a model where the three moral emotions were forced to load as a single factor (see Table A3 in Online Appendix A). The alternative models all fit worse, which supports our assertion that the constructs are empirically distinct (see Table A3).

Descriptive Results

The bivariate correlations are presented in Table 3, and means/proportions, standard deviations and composite reliability are presented in Table 4. All bivariate correlations between the main variables of interest were significant and in the expected directions. Compared to the neutral mid-point of their respective scales, support for autochthony belief was high (Wald(1) = 189.21, $p<0.001$). On average, participants were supportive of institutional apologies (Wald(1) = 208.844, $p<0.001$) and compensation (Wald(1) = 66.352, $p<0.001$), but support for avoiding the topic was also relatively high (Wald(1) = 342.206, $p<0.001$). Finally, participants on average experienced some collective guilt (Wald(1) = 107.314, $p<0.001$), moral shame (Wald(1) = 14.426, $p<0.001$) and image shame (Wald(1) = 48.457, $p<0.001$).

Attitudes Towards Reparations

We first ran a structural equation model with latent variables examining to what extent autochthony belief was associated with support for instrumental compensation by autochthony, through collective guilt, to see if we could replicate the results from Study 1. We controlled for the same manifest variables as in Study 1 in relation to guilt and instrumental compensation. The model fit was good ($\chi^2(79, N=475)=179.67$ $p<0.001$, RMSEA = 0.051 [90% CI 0.041 0.062], CFI = 0.958, TLI = 0.947, SRMR = 0.043), and the results were very similar to the first study. We again found that autochthony belief had a total positive relationship with -instrumental compensation ($B=0.57$, p-2s <0.001), that this was partially accounted for by collective guilt, unstandardized 95% CI [0.22, 0.41], and there was a leftover

direct relationship between autochthony and instrumental compensation ($B = 0.34$, p-2s < 0.001).

We then tested a full structural equation model in which we examined to what extent autochthony belief was related to support for institutional apologies, instrumental compensation as well as topic avoidance, through the three moral emotions. These constructs were all treated as latent variables. We furthermore controlled for the same variables as in the previous model. The unstandardized coefficients and indirect relationships are displayed in Table 5, and Fig. 2 shows the standardized coefficients of the main associations in the model. The model fit was good ($\chi^2(281, N = 475) = 554.27$ $p < 0.001$, RMSEA = 0.045 [90% CI 0.039 0.051], CFI = 0.960, TLI = 0.949, SRMR = 0.039).[6]

The results show that autochthony belief had a total positive relationship with support for apologizing and with support for compensation, and a total negative relationship with the desire to avoid the topic, in line with our expectations. Furthermore, autochthony belief was positively associated with collective guilt, moral shame and image shame, which was also in line with our expectations.

Looking at the paths between moral emotions and the reparations, we found that guilt was positively related to support for institutional apologies, as hypothesized. Guilt was furthermore also positively related to instrumental compensation, but this relationship, though still positive, was not significant anymore in the model with all three emotions included. The relationship between collective guilt and topic avoidance was not significant, which was not in line with expectations. Moral shame, however, was associated with higher support for apologies and compensation, as well as lower topic avoidance, in line with our expectations. Furthermore, image shame was not significantly associated with apologies and compensation, which was against our expectations. However, in line with our expectations, image shame was associated with a higher desire to avoid the topic of land deprivation.

Indirect paths show that support for autochthony belief was associated with greater support for institutional apologies through higher collective moral shame and guilt, as expected, but contrary to our hypothesis not through image shame, 95% CIs [0.05, 0.31], [0.18, 0.43], [−0.05, 0.04], respectively. Furthermore, support for autochthony belief was positively associated with instrumental compensation through moral shame, as expected, but contrary to expectations not through guilt or image shame [0.20, 0.50], [−0.04, 0.19] and [−0.03, 0.06], respectively. Finally, as expected, autochthony belief was related to *less* topic avoidance through collective moral shame [−0.51, −14] and to *more* topic avoidance through image shame [0.07. 0.22]. Contrary to expectations, collective guilt did play a significant role in this relationship [−0.29, 0.04].

[6] Using pwrSEM (Wang and Rhemtulla in press), we performed a power analysis to determine the power of our model to detect small effect sizes (0.3) for each path coefficient. We utilized the observed factor loadings, residual (co)variances and total variance and performed 1000 simulations using the real sample size ($N = 475$). Based on this analysis, we had 81% power to detect small effects, which is above the commonly accepted threshold of 80%. See Table A4 in online Appendix A for a complete list of the power values per coefficient.

Table 3 Bivariate correlations between variables used in the analysis for Study 2 ($N = 475$)

		01	02	03	04	05	06	07	08	09	10	11	12	13
01	*Autochthony belief*	–												
02	*Collective guilt*	.50***	–											
03	*Collective moral shame*	.55***	.84***	–										
04	*Collective image shame*	.41***	.69***	.70***	–									
05	*Support for institutional apologies*	.48***	.77***	.74***	.57***	–								
06	*Instrumental compensation*	.58***	.72***	.80***	.59***	.17**	–							
07	*Topic avoidance*	−.16*	−.40***	−.45***	−.19**	−.15**	−.48***	–						
08	Gender (ref = male)	.01	.19***	.11*	.15**	.10*	.13**	.04	–					
09	Age	−.01	−.16***	−.24***	−.20***	.02	−.20***	−.14**	−.19***	–				
10	Political left–right orientation	−.05	−.13**	−.15**	−.04	−.11*	−.20***	−.18***	−.35***	−.07	–			
11	Educational attainment	.05	.09†	.16**	.07	.02	.10*	.16**	.07	.12**	−.12*	–		
12	Born in Australia (vs. born abroad)	−.01	−.04	−.04	.00	−.09*	−.01	−.03	.03	.00	−.15**	.03	–	
13	Both parents Anglo-Celtic (vs. one)	.00	−.02	−.05	−.08†	.04	−.03	−.05	−.01	.00	.18***	−.06	.14**	–
14	Feelings towards Aborigines	.11†	.25***	.14***	.14**	.31***	.17**	−.15**	.10*	.02	−.11*	.02	−.09*	.04

†$p < .1$; *$p < .05$; **$p < .01$; ***$p < .001$ (2-tailed). Latent variable names are italicized

Table 4 Summary of ranges, means/proportions, standard deviations and composite reliability of the variables used in the analysis for Study 2 ($N=475$)

	Range	*M*	SD	*N*	ρ
Autochthony belief	1–7	4.36	(1.34)	474	*.80*
Collective guilt	1–7	4.40	(1.81)	475	*.92*
Collective moral shame	1–7	3.84	(1.73)	475	*.91*
Collective image shame	1–7	4.03	(1.63)	475	*.91*
Support for institutional apologies	1–7	4.71	(1.77)	475	*.93*
Instrumental compensation	1–7	4.14	(1.65)	475	*.88*
Topic avoidance	1–7	4.82	(1.62)	475	*.90*
Gender (ref = male)	0/1	0.51	–	474	
Age	18–85	40.90	(16.03)	474	
Political left–right orientation	1–6	3.02	(1.56)	390	
Educational attainment	1–5	3.26	(1.13)	465	
Born in Australia (vs. born abroad)	0/1	0.62	–	475	
Both parents Anglo-Celtic (vs. one)	0/1	0.65	–	475	
Feelings towards Aborigines	0–10	6.98	(2.64)	473	

Latent variable names are italicized. Indicated means for dichotomous variables are the proportions

To get a better sense of the relative importance of each emotion, we compared the strengths of the paths from emotions to reparations. Guilt and moral shame were related to apologies more strongly than image shame (Wald (1) = 17.964, $p<0.001$; Wald (1) = 6.218, $p=0.013$, respectively), but the coefficients of guilt and moral shame were not significantly different (Wald (1) = 0.763, $p=0.382$). Moral shame was related to support for instrumental compensation significantly more strongly than guilt or image shame (Wald (1) = 4.739, $p=0.0295$; Wald (1) = 13.626, $p<0.001$, respectively), and the relationship between moral shame and topic avoidance was not significantly different from the relationship between guilt and topic avoidance (Wald (1) = 3.241, $p=0.064$).

Finally, there was a positive leftover direct relationship between autochthony belief and support for instrumental compensation, and there were no significant leftover relationships with support for institutional apologies and topic avoidance. The main paths were not substantively different in a model without control variables (see Table A5, Online Appendix A).

Discussion

Study 2 provides further support for the expected positive relation between settler majority's support for autochthony as a general ideological belief and their support for reparations for Aborigines. The findings show that autochthony belief is associated with both more support for symbolic and instrumental reparations and an overall lower desire to avoid the topic of land appropriation.

Table 5 Structural equation model for the relationships of support for institutional apologies, topic avoidance and instrumental compensation with autochthony belief, through collective guilt, moral shame and image shame ($N=475$)

	Collective guilt		Moral shame		Image shame		Support for institutional apologies		Instrumental compensation		Topic avoidance	
	B	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*
Direct relationships												
Autochthony belief	.67***	(.07)	.69***	(.07)	.47***	(.07)	.12†	(.06)	.23***	(.06)	.09	(.08)
Collective guilt							.44***	(.08)	.12	(.08)	−.17	(.12)
Collective moral shame							.25**	(.09)	.48***	(.10)	−.44***	(.12)
Collective image shame							−.01	(.05)	.04	(.05)	.29***	(.08)
Indirect relationships												
Autochthony belief → collective guilt →							.29***	(.06)	.08	(.06)	−.11	(.08)
Autochthony belief → c. moral shame →							.17**	(.06)	.33***	(.07)	−.31**	(.09)
Autochthony belief → c. image shame →							.00	(.02)	.02	(.02)	.14***	(.04)
Total relationships												
Autochthony belief							.59***	(.07)	.66***	(.08)	−.19*	(.08)
Control variables												
Gender (ref = male)	.57***	(.14)	.31*	(.13)	.37**	(.13)	.02	(.10)	−.09	(.09)	−.16	(.13)
Age	−.02***	(.00)	−.02***	(.00)	−.02***	(.00)	−.01†	(.00)	.00	(.00)	.01**	(.00)
Educational level	.08	(.06)	.15**	(.06)	.07	(.06)	−.01	(.04)	.06	(.04)	.04	(.06)
Left–right orientation	−.11*	(.04)	−.13**	(.04)	−.03	(.04)	−.09**	(.03)	−.05†	(.03)	.28***	(.05)
Born in Australia (ref = born abroad)	−.22	(.20)	−.26	(.18)	−.07	(.18)	.13	(.13)	.05	(.11)	−.22	(.19)
Both parents Anglo-Celtic (ref = 1 parent)	−.02	(.14)	−.11	(.13)	−.18	(.13)	−.03	(.11)	−.08	(.10)	.00	(.13)
Feelings towards Aborigines	.11***	(.03)	.04	(.03)	.05*	(.02)	.09***	(.02)	.02	(.02)	−.04	(.03)

$^{\dagger}p<.1$; *$p<.05$; **$p<.01$; ***$p<.001$ (2-tailed). Reported coefficients are unstandardized

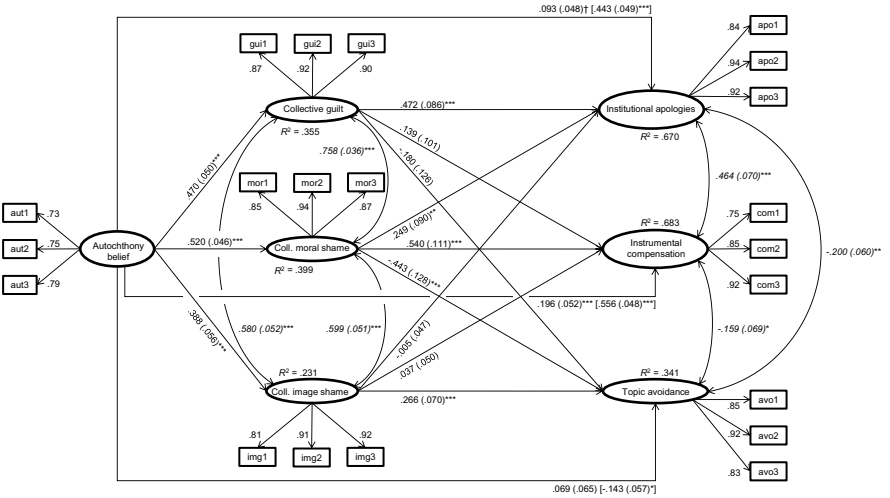

Fig. 2 Structural equation model 2, Study 2 with standardized coefficients, controlling for gender, age, educational attainment, political orientation, parents' ethnicity and whether participants were born in Australia. Note: Control variables omitted from the figure. The total relationships between autochthony belief and the three outcome variables are displayed between square brackets, and covariances are displayed in italics. $^{\dagger}p < .1$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$ (2-tailed)

At the same time, the findings show the importance of considering collective guilt, moral shame and image shame in parallel, as they have different implications. Most importantly, whereas moral shame accounted for the negative association between autochthony belief and the desire for topic avoidance, image shame suppressed this association. The findings also demonstrate that, while there are no meaningful differences between the roles of collective guilt and moral shame with regard to institutional apologies, there are differences in relation to instrumental compensation, as autochthony belief was related to support for instrumental compensation via moral shame rather than guilt.

General Discussion

Autochthony, the belief that a territory belongs to those who were there first, is a pervasive ideological belief that is often self-evidently used by territorially established groups to exclude non-autochthonous others (Geschiere, 2009; Martinović & Verkuyten, 2013; Ceuppens & Geschiere, 2005). Previous research has primarily examined how autochthony is utilized by groups that claim primo-occupancy, and to our knowledge there has been no systematic research on autochthony belief in a setting where the majority group is not the primo-occupant. In such a setting, endorsement of autochthony as a general ideological belief implies support for the primacy of indigenous ownership. As a result, the acquisition of indigenous territories could be perceived as unjust and in conflict with the values of the in-group. We set out to investigate whether and how settler majority endorsement of autochthony belief

is associated with support for reparations for indigenous peoples, and whether this association is accounted for by the self-conscious moral emotions of collective guilt, moral shame and image shame.

In two studies using samples of Anglo-Celtic Australians, we demonstrate that autochthony belief consistently relates to more support for reparations for Aborigines, which we examined in terms of instrumental compensation (both studies) and institutional apologies (Study 2). We also considered a less favourable, though still likely attitude, namely the desire to avoid the topic of land appropriation (Study 2), and we found autochthony belief to be related to less topic avoidance. These relationships were found to be robust when controlling for gender, age, educational attainment, political orientation and feelings towards Aborigines. To our knowledge, this research provides the first evidence for the claim that settler majority's endorsement of autochthony as a general ideological belief plays a positive role in attitudes towards reparations for indigenous peoples. These findings not only confirm the notion that first arrival is generally considered a valid basis for inferring ownership (Martinović et al., 2020), they also suggest that support for this belief might have implications for current-day intergroup relations in the contexts with past transgressions of indigenous ownership.

Our findings further show that autochthony belief relates to stronger feelings of collective guilt (Study 1 and 2) as well as of moral and image shame (Study 2). This supports our assertion that majority members' endorsement of autochthony means that they perceive the appropriation of indigenous lands as illegitimate and in conflict with the values of their in-group. Furthermore, the relationships between autochthony belief and different attitudes towards reparations were largely accounted for by these three group-based emotions. These results suggest that moral emotions are an important link to consider between autochthony belief, which by definition takes the past into account, and attitudes towards making amends to indigenous peoples in settler societies in the present.

Importantly, we found that collective guilt, moral shame and image shame were differently related to support for reparations. The differences may be due to the different origins of these moral emotions, which therefore motivate different types of behaviour. First, collective guilt was found to be more strongly related to institutional apologies than to instrumental compensation or topic avoidance. This may be due to the focus of guilt on the specific wrongdoing and how this act affected the victims, which may also foster empathic concern for the victims (Tangney et al., 2007). Apologies usually directly address the victims, and the specific act one is apologizing for (in our studies, land appropriation), whereas instrumental compensation can be conceptualized in a broader sense and we measured it primarily in terms of support for affirmative action. This form of compensation may also be seen as a means to address present-day inequalities rather than rectify the past wrongdoing. Future research could examine whether guilt would be more strongly related to support for land restitution, which would be the most direct way to rectify the specific wrongdoing of land appropriation.

Second, moral shame was found to be related to more support for apologies and instrumental compensation and to less topic avoidance. Because moral shame stems from perceiving a failure in the morality of one's group ("we are

bad people"), and because people have a need to see their group as moral, they will be highly motivated to act in a moral way to restore the self-image of their group, and this may be a stronger motivator for pro-social behaviour than feelings of guilt (Allpress et al., 2010). This can be done by offering apologies, which can help perpetrator groups restore their self-image by showing their (renewed) respect for morality (Barlow et al., 2015), but also by fixing other "wrongs", not necessarily the ones related to the past (e.g. present-day inequalities). The latter may be the reason why in Study 2, when considering all three moral emotions in parallel, we found moral shame to be positively related to support for instrumental compensation to improve the position of Aborigines in the Australian society, whereas the initially positive relationship between guilt and compensation disappeared.

Third, when it comes to image shame, we argued that the need for the restoration of the public image could be achieved by publicly demonstrating that one is (again) a moral person by publicly apologizing or compensating for the wrongdoing (Barlow et al., 2015; Ding et al., 2016; Jordan et al., 2011), or by attempting to avoid the topic of the wrongdoing altogether (Gausel et al., 2012). We found that image shame was positively related to the desire to avoid the topic, and there was no significant association between image shame and offering symbolic or instrumental reparations in the multivariate model when guilt and moral shame were accounted for (but see Table 3 for positive bivariate correlations). Whereas offering compensation might reduce *actual* judgement by others, image shame primarily stems from *perceived* judgement by others. If perpetrators see avoiding the topic as an effective strategy, they may therefore be less inclined to support compensation, which may explain why we did not find any significant association between image shame and offering symbolic or instrumental compensation. It remains an open question whether image shame also predicts support for apologies and compensation when avoiding the topic is not perceived as a viable strategy.

Limitations and Future Directions

We want to highlight four main directions that future research on the topic of autochthony belief and reparations could take and reflect on some limitations of our studies. First, we considered three moral emotions in the current manuscript, but there are others, and in particular the role of existential guilt may be worth considering in relation to instrumental compensation. Existential guilt is a moral emotion experienced when one profits from advantages that are perceived as not fully deserved (i.e. illegitimate) as a consequence of being a member of a certain group, and feeling at least some level of responsibility for the continuation of inequality (Montada & Schneider 1989). Therefore, existential guilt is not necessarily past-oriented, and one can experience existential guilt even if one does not feel responsible for causing the inequality in the first place. Previous research (among non-Aborigines) in Australia has indeed found that simply perceiving the in-group as advantaged was associated with higher levels of guilt, which was in turn associated with more support for compensation (Leach, Iyer, & Pedersen, 2006). Future research on reparations and social

justice in settler societies—particularly instrumental compensation—could simultaneously examine the role of moral emotions experienced for past misdeed and existential guilt for the present-day inequalities, to see whether these two types of moral emotions independently relate to this form of reparations.

Second, we only considered the ownership ideology based on first arrival, namely autochthony belief (e.g. Martinović & Verkuyten, 2013; Geschiere, 2009). While we have shown that in a settler society majority endorsement of autochthony belief is related to more support for making amends to Aborigines, it might be that the majority population uses other arguments to justify ownership claims for their own group. For example, part of the argument for declaring Australia *terra nullius* was that Aborigines had not worked the land and therefore could not claim to own it (Short, 2016). Having invested in and developed the land might be used as an argument to justify ownership by majority members (Verkuyten & Martinović, 2017) and future research could consider autochthony and investment beliefs in parallel.

Third, we did not take into account the role of group identification, which can be important for experiencing group-based moral emotions (Doosje et al., 1998). Furthermore, research shows that higher identifiers are more likely to have self-defensive reactions when confronted with in-group wrongdoings, so that they can keep a more positive image of their group (Zebel, Doosje, & Spears, 2004), and research in the Netherlands has shown that stronger national identification was related to stronger claims of autochthony among the native Dutch majority (Martinović & Verkuyten, 2013). It would be interesting for future research to examine how majority group identification relates to autochthony belief, moral emotions and reparations, as well as whether it qualifies the relationships between these constructs in a setting where the majority is not autochthonous.

Fourth, we used correlational survey data in our research. Surveys results can be affected by social desirability concerns, but given that our data collection was online and anonymous, social desirability probably did not play a big role. Yet, given the cross-sectional nature of the design, we cannot make causal claims about the direction of influence, and reverse mediation testing with cross-sectional data is not a useful strategy for determining causality (Lemmer & Gollwitzer, 2017). However, we derived our predictions based on theories and experimental (e.g. Rees, Klug, & Bamberg, 2015) and longitudinal research (e.g. Brown et al., 2008) that supports the directionality of the proposed relations between moral emotions and compensation, as well as between past wrongdoings and moral emotions (e.g. Doosje et al., 1998). A reverse causal order from greater support for compensation to moral emotions is less likely. Still, it is possible that there might be mutual directions of influence. Participants who experience greater feelings of guilt and shame may come to more strongly endorse autochthony belief, or people may justify their support for reparations by this belief. Furthermore, we cannot rule out that a third variable partly accounted for the relationship between autochthony and more support for reparations and less topic avoidance. Hence, longitudinal and experimental research is needed to further establish the directions of influence and to rule out the influence of other variables. For example, an experiment could manipulate autochthony belief by presenting the participants with a text that emphasizes the importance of first arrival as a principle for determining entitlement in a multitude of settings (e.g. cutting in line, taking someone's usual parking

spot). In this way, we could find out whether support for autochthony belief is higher in the experimental compared to the control condition, and whether this translates to more support for compensating indigenous peoples.

Ideally, future research would also measure actual behaviour instead of attitudes, for instance, signing a petition to encourage the government to apologize or donating money to compensate the indigenous groups. This would solve not only the problem of a mismatch between attitudes and behaviours (Ajzen & Fishbein, 1973), but also help us further disentangle the causality in the proposed relationships. Finally, we only focused on Australia, and future research should examine the generalizability of our results by considering different contexts, like other settler societies (e.g. the USA and New Zealand), but also contexts where it may not be clear who arrived first (e.g. Kosovo).

Conclusion

In conclusion, we have provided the first empirical evidence on the importance of autochthony as a general ideological belief for settler majority member's attitudes towards indigenous peoples. Whereas previous studies have shown that autochthony belief can be related to the exclusion of newcomers (e.g. Geschiere, 2009), the present research shows that, in a settler society, settler majority's endorsement of autochthony belief is associated with support for compensating the groups that were there first, namely the indigenous peoples.

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