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Life in "Paradise" a social psychological and anthropological study of nature conservation in the Caribbean Netherlands

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Conservation as Integration: Need to Belong as Motivation for Environmental Conservation¹.

¹ This chapter was co-authored with Dr. Henk Staats and published in Society and Natural Resources. Due to a strict word limit and limited number respondent in the BES survey study, Study One was omitted from the publication. Nevertheless, the findings of Study One do support the qualitative findings discussed in Chapter Three.



4.1 INTRODUCTION

The need to belong is one of the most important persistent motivations of behavior (Baumeister & Leary, 1995). The need to belong represents the need for “frequent, non-aversive interactions within an ongoing relational bond [...] human beings have a pervasive drive to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships” (Baumeister & Leary, 1995, p. 497). Fulfilling this need gives people a sense of meaning and identity, strengthens their self-esteem, and overall well-being (Baumeister & Leary, 1995; Gabriel, 2021). One way to fulfill this need is to engage in pro-social behavior (Batson 1998; Nolan & Schultz, 2013). Pro-social behavior can be defined as “a broad range of acts, including helping behavior, altruism, cooperation and solidarity intended to benefit other people” (Cuadrado, Tabernero & Steinel, 2016, p. 1). One category of pro-social behavior that has received considerable scholarly attention over the past years is behavior intended to help preserve the natural environment (e.g., Bamberg & Möser, 2007; Clayton et al., 2016; Gifford & Nilson, 2014; Nolan & Schultz, 2013). Considering that trying to preserve the natural environment is generally seen as positive and encouraged by societies, the question arises if people also engage in efforts to conserve the natural environment to fulfil their need to belong. This chapter sets out to investigate this question.

Unlike Chapters 2 and 3, the current chapter presents a quantitative analysis of an online survey conducted on the Caribbean Netherlands and in the United Kingdom and requires an additional introduction as it was written from a “positivist” scientific perspective (i.e., quantitative environmental psychology) with specific merits and requirements. In addition to data collected among residents of the Caribbean Netherlands, it also includes data derived from an online database, Prolific, using a sample of residents from rural, isolated towns and villages in the U.K with populations below 50.000. The data is included for several reasons. First, the number of respondents to the online survey distributed on the Caribbean Netherlands was insufficient to conduct reliable statistical analyses. However, despite its limitations, the data did present interesting outcomes in line with the findings of the qualitative studies. As reviewers deemed the quantitative data insufficient for publication, several attempts were made to expand this dataset by means of replication studies. Initially, we attempted to conduct a replication study on the Dutch Frisian Islands (or Wadden Islands) as these islands share similar characteristics with the Caribbean Netherlands (small scale, small communities, semi-isolated, but still part of The Netherlands), but here too cooperation was insufficient. Therefore, we resorted to using a sample pool from an existing online database, namely Prolific. To ensure at least some similarities in terms of social context, participants were preselected based on several criteria. Lastly, as this chapter is co-authored with Dr. Henk Staats, we use the plural “we” rather than the first person “I” as I do in the rest of the thesis..

4.1.1 Belonging and Nature Conservation

There are several bodies of research that examine the link between belonging and environmental conservation behavior (Farrow, Grolleau & Ibanez, 2017; Hernández et al., 2010; Kollmus & Agyemen, 2002; Sloot, Jans & Steg, 2019). However, these are based on a different causal relationship between belonging and conservation behavior from the ones that we examine in this chapter. The existing work states that a feeling of belonging to a community may be a cause of engaging in pro-conservation behavior that has overall beneficial consequences for the community. We will argue that there is reason to expect that specific individual and social conditions may favor the execution of conservation behavior as a means to bolster feeling like a part of a community.

The main body of research underlying this idea involves intra-group dynamics and social norms. Previous research has shown that social norms affect many kinds of behavior, including conservation behavior: e.g., littering behavior (Cialdini, Reno & Kallgren, 1990), recycling (Burn & Oskamp, 1986); energy consumption (Schultz et al., 2007); and pro-environmental behavior, in general (Farrow, Grolleau & Ibanez, 2017). One reason people abide by social norms is to fulfill their need to belong (Cuadrado, Tabernero & Steinel, 2016). The need to belong makes people strive to build and maintain relationships with others and is related to people's adherence to group norms (Steinel et al. 2010). People also engage in conservation behavior to fit in when this behavior conforms to the social norms of the individual's reference group (Farrow, Grolleau & Ibanez, 2017). The influence of social norms on behavior is usually investigated on the level of specific significant social groups such as friends, relatives, and people living in the same neighborhood, as the consequences of nonconformity within these reference groups usually are clearer and more evident (see Festinger, 1954).

However, Culiberg and Elgaaied-Gambier (2016) found that the influence of social norms on both a specific (i.e., from relevant others like friends and family) **and** general (i.e., country) level can indeed affect people's engagement in environmental conservation behavior. Their findings imply that it is indeed possible that adhering to country- (or community-) level norms affect people's engagement in conservation behavior as the goal. This corresponds with the work of Delmas and Lessem (2014), who concluded that public information motivates consumers to engage in green behavior so that they receive the benefit of a "green reputation". The authors define public information as "information about a specific agent's behavioral impact that is publicly disclosed, allowing environmentally friendly behavior to act as a signal of "green" virtue" (p. 3). Public information is thus susceptible to the evaluation of others, which can impact the extent to which individuals are accepted, welcomed, or praised in a community which, in turn, affects their sense of belonging. Their study found that reputational benefits, i.e., society's positive assessment of a person because of their engagement in conservation behavior, can motivate people's participation in said behavior.

In sum, the literature we have discussed presents arguments for the proposition that people may engage in conservation behavior to fulfill their desire to belong to a community. However, we believe that this motive will primarily manifest itself as an explicit behavioral motive under certain conditions, as elaborated in the sections below.

4.2 CONSERVATION AS INTEGRATION, BUT ONLY IF...

4.2.1 Condition 1: Behavior is Visible to Other Members of the Community

Not every effort to protect the natural environment may be as effective for enhancing a person's sense of belonging. Conservation behavior for which this can be hypothesized to apply are publicly visible actions (Kollmuss & Agyemen, 2002). Examples of these are participation in clean up events, tree planting events, or nature awareness campaigns, and include political activities.

Because of their visibility to others, these actions are more susceptible to others' views and opinions within a community than private environmental behavior (e.g., reduced energy consumption in the home). Therefore, this may be a way to receive approval from the community and improve a person's sense of belonging. This is in line with Steinel et al. (2010), arguing that an effective way for peripheral group members to enhance their position within the group could be by publicly endorsing group norms. Hence, improving one's sense of belonging might function as a motive for engagement, especially for public actions. Moreover, in a recent study, Sparks et al. (2020) found that publicly visible environmental behavior has different predictors than private environmental behavior. Specifically, they concluded that respondents' environmentalist identity was a stronger predictor for public conservation behavior than a person's connectedness to nature, while the latter was the strongest predictor of private behavior.

This chapter focusses on behavior that can be classified as environmental conservation behavior in the public sphere. More specifically, we consider public actions with a collective impact on environmental issues, for example, actively participating in community conservation awareness events (Alistat & Riemer, 2015), from here on referred to as environmental actions.

4.2.2 Condition 2: The Need to Belong is Salient

We argue that the need to belong must be salient to act as a motive for engagement in environmental actions. It can become salient due to contextual, but also due to more personal factors. Regarding the former, the need to belong is often more salient in contexts where people are highly dependent on each other. This argument has been presented by Prezza and Costantini (1998) and later by Obst, Smith and Zinkiewics (2002) who argue that a smaller sized community can result in a stronger sense of belonging, ties,

support, influence, and interdependence. We agree, and reason that small, relatively isolated, communities are especially relevant to study this relationship. For one thing, people within these communities are more familiar with each other. Second, they are also more dependent on each other as external resources such as (social) services, food, supplies or materials, and income might be more challenging to come by. While being familiar with each other is not the same as being dependent on each other, it does increase the importance of belonging in relation to having a good reputation (being accepted, approved of, liked). Moreover, Kramer and Brewer (1984) demonstrated that belonging processes play a more prominent role when group identity processes are more salient. Specifically, they stated that “when belongingness is stimulated by making the group identity salient, people are more likely to restrain their self-interested tendencies and instead cooperate with others for the greater good of the group” (Baumeister & Leary, 1995 519).

Regarding personal factors, we expect the need to belong to be especially salient among people who feel they do not belong to the community. If people feel they do not belong to a group but have the desire to belong, they are more likely to engage in behavior that helps them to realize their currently absent sense of belonging (Steinel et al., 2010; Baumeister & Leary, 1995). Steinel et al. (2010), for example, found that the need to belong is especially important for people who occupy a peripheral position in their group. According to their research, peripheral group members only adhere to group norms when they have a strong need to belong. Building on these findings, we reason that especially for those who currently do not have a sense of belonging but have a strong desire to belong, doing something for the community to enhance their sense of belonging could be of great importance. Considering the importance of the natural environment for a community’s well-being and the salience of the need to belong, engaging in activities that help protect the natural environment might be a good way to fulfill this need.

4.2.3 Condition 3: Behavior Is in Line with Social Norms

Regarding environmental actions that can help fulfil a person’s need to belong, and when examining this need as a predictor for conservation actors, the discussed literature clearly suggests that this behavior must be visible to, and in line with, the reference group’s social norms. Despite the positive connotation of environmental actions, protecting the natural environment is not necessarily the norm in all communities. It may even go against the ways people normally behave (e.g., Alisat & Riemer, 2015; Byrka, Kaiser & Olko, 2017). Therefore, it is important to distinguish between types of environmental actions that may be more or less in line with community norms. For example, protesting development projects that are harmful to the environment but beneficial for economic development might not be appreciated by all community members. The behavior selected to investigate the main research question reflects these considerations. We focus on environmental actions that aim to conserve environmental quality displayed in public, but that may

differ in local communities' acceptance. Actions that will generally be considered less controversial may be more instrumental in striving to fulfil a desire to belong.

Concerning social norms, we argue that the aforementioned considerations are especially prevalent among people who care about others' opinions. This factor has been operationalized as "reputational concern", meaning the extent to which people are concerned about their reputation. We consider this to be an important factor in our analysis as reputational concern derives from a social mechanism which is closely related to a person's sense of belonging (e.g., Cavazza, Pagliaro & Guidetti, 2014; De Cremer, 2002; De Cremer & Tyler, 2005; Pagliaro et al., 2016). As I mentioned previously, social norms are reliable determinants of conservation behavior and can affect people for different reasons, namely, people want to fit in and thus adhere to social norms, avoid social disapproval, or seek social esteem, to experience a sense of belonging. A person's reputational concern can be an indication of his/her sensitivity to certain social norms, which is a key determinant of the impact of a social norm on behavior (e.g., Bénabou & Tirole, 2006; Cialdini, Reno & Kallgren, 1990; Farrow, Grolleau & Ibanez, 2017). Therefore, we argue that the extent to which individuals are concerned about their reputation within their community may affect behavior that is significant for the group. This tendency may qualify the relationship between their desire to belong and their engagement in environmental actions.

4.3 OVERVIEW OF HYPOTHESES AND STUDIES

We expect that a stronger desire to belong to a community leads to more participation in environmental actions (hypothesis 1). We also expect that the effect of desire to belong on participation in environmental actions is stronger for those who have a lower current sense of belonging (hypothesis 2). Lastly, we expect that the effect of the desire to belong on participation in environmental actions is stronger for those who have stronger reputational concerns (hypothesis 3).

In this chapter, we present findings from two questionnaire studies performed in two different places that we deemed suited to test our hypotheses. Specifically, we focused on individuals residing in small and, to a certain extent, isolated communities. Study One took place on the three small Dutch Caribbean islands of Bonaire, Saba, and Sint Eustatius, also known as the Caribbean Netherlands, that have been studied in the rest of this dissertation. The initial observations suggesting this possible dynamic, based on qualitative data, were made on these islands; in other words, these islands inspired the research questions examined at greater depth in this chapter. Study Two focused on individuals residing in isolated communities in the U.K. This choice was made to see whether the dynamic investigated is indeed present within these argued optimal conditions. We included a more elaborate explanation in the Method section of the chapter.

4.4 STUDY ONE: A SURVEY IN THE CARIBBEAN NETHERLANDS

In terms of population, Saba (population circa 1900 anno 2019; 13 km²), Sint Eustatius (population circa 3.000 anno 2019; 21 km²), and Bonaire (circa 20.000 anno 2019; 288 km²) are the smallest of the six Dutch Caribbean islands. The small scale of the islands, their isolated nature, and their ecological vulnerability mean that environmental degradation is likely to be clearly visible. This can trigger the perceived need among residents to act. At the same time, small islands' limited but valuable environmental resources create competition for these environmental resources (Kelman, 2018; Polman et al., 2016). Due to the small scale of the communities, residents often know each other. This can create both benefits and challenges for a person's efforts to engage in conservation behavior (Polman et al. 2016).

It is also important to consider the fact that the three islands are "special municipalities" of the Netherlands and that there is a long and complicated colonial history that can relate to environmental conservation. Since 2010, the Caribbean Netherlands are now more intensively integrated into the Netherlands than ever before. The significant influx of Dutch bureaucrats and other foreign citizens has had a social and political impact. Complaints are often expressed about the loss of identity and culture, the influx of European Dutch citizens, and the fear that local islanders will have less to say about what happened on their islands (Veenendaal & Oostindie, 2018). Colonial history and the present constitutional imbroglio have also deeply impacted how many of the environmental challenges facing the islands are perceived and dealt with (Jaffe, 2016).

The pressing need to protect the environment of the Caribbean Netherlands on the one hand, and the changes within the islands' societies on the other, create an interesting context in which to further examine the relationship between belonging and conservation efforts. In addition, the small scale of the islands creates an environment where the conservation actors are easily targeted for praise or censure by the community, which can have consequences for one's sense of belonging. In other words, the implications of the constitutional reforms and the islands' small scale may affect people's sense of, and the salience of, their desire to belong. Engaging in activities that help protect the natural environment might be a good way to fulfill this need. Examples of these activities are participating in clean up events and the restoration ecosystems (coral reefs, forests), protection of endangered species, combatting invasive species, or recycling campaigns.

4.4.1 Method

An online questionnaire was developed and distributed through online social platforms, direct e-mails, and online news media among residents of the three Dutch Caribbean islands. The questionnaire allowed respondents to reflect on their motives behind their engagement in environmental actions in relation to their sense of belonging

within the community. Data was collected from June through September 2016. The survey sample was limited to residents of the three islands who had participated in environmental actions for a minimum of four hours over the previous six months. This low threshold was included to ensure that respondents had at least minimal experience with environmental actions and were, therefore, better able to reflect on their motives to engage in environmental conservation activities. Direct experience is generally considered the most powerful basis for behavioral beliefs and behavioral attitudes to be salient and influential in affecting behavior. This also goes for negative experiences, of course, possibly leading to more negative attitudes and a decision not to participate in such actions in the future (Fishbein & Ajzen, 2010; Staats, 2003). We approached respondents personally on the islands, and a request for participation was distributed through local (social) media.

Respondents and Procedure

Respondents resided on one of the three islands and were required to be eighteen years or older. Convenience sampling led to a sample of 42 respondents who completed the survey which was deemed sufficient for this first exploratory study. Respondents were informed that the purpose of this study was to understand why residents of Bonaire, Sint Eustatius, and Saba might be willing to protect the natural environment. Respondents were allowed to enter a lottery draw for one of five \$50 prizes. All responses were treated confidentially.

Ethics statement. Consent of each respondent was given by virtue of survey completion. Anonymity of respondents was guaranteed.

Measures

For the initial development of the questionnaire, eleven conservationists in the Dutch Caribbean were interviewed. These interviews were intended to elicit readily accessible beliefs about behavioral outcomes, normative referents, and control factors concerning their conservation behavior. The final questionnaire was pre-tested with a small sample of twelve residents in the Caribbean Netherlands to identify unclear, repetitive, or poorly worded questions (See Appendix E for full online survey).

Demographics. Respondents were asked to report their age, gender, educational level, and length of residence. Demographic data was collected to provide a demographic profile of the respondents and to examine whether these variables explain differences in the behavioral and psychological measures.

Behavior measure. *Environmental actions* were measured with the Environmental Action Scale (EAS) by Alisat and Riemer (2015). The EAS consists of eighteen items that measure a person's engagement in public actions with a collective impact on environmental issues (e.g., "Participated in a community event that focused on environmental awareness").

The EAS has demonstrated validity and internal consistency ($\alpha = .92$; Alisat & Riemer, 2015). For the EAS items, respondents indicated how often they engaged in the eighteen actions in the past six months on a five-point scale (0 = never, 4 = frequently).

A principal component analysis (PCA) with varimax rotation for the EAS scale was performed (Table 7). The PCA's interpretation suggested that the scale consisted of three components with an eigenvalue greater than 1.0, explaining 53% of environmental actions variance. The first component in the PCA of the environmental actions reflected involvement in creating awareness and educating others about environmental issues and was called "awareness actions" ($\alpha = .82$). The second component reflected actions within governmental or political spheres and was called "political actions" ($\alpha = .75$). Finally, the third component reflected engagement in protests and rallies and was called "protest actions" ($\alpha = .71$). The items of each of the components were averaged to produce separate scores of the three categories of environmental actions.

Table 7. PCA factor loadings for the items of Environmental Action Scale Study One.

Item	Factor loading
Factor 1: Awareness Action	
Consciously made time to be able to work on environmental issues.	.71
Participated in nature conservation efforts.	.68
Used online tools to raise awareness about environmental issues.	.65
Participated in a community event that focused on environmental awareness.	.63
Helped to organize an educational event related to environmental issues.	.60
Helped to organize a community event that focused on environmental awareness.	.60
Talked with others about environmental issues.	.58
Educated myself about environmental issues.	.57
Factor 2: Political Actions	
Personally wrote to or called a politician/government official about an environmental issue.	.81
Financially supported an environmental cause.	.73
Used traditional methods to raise awareness about environmental issues.	.59
Became involved with an environmental group or political party.	.56
Participated in an educational event related to the environment.	.48
Helped to organize a boycott against a company or government engaging in environmentally harmful practices.	.47
Spent time working with a group/organization that deals with the connection of the environment to other societal issues such as justice or poverty.	.44
Factor 3: Protest Actions	
Helped to organize an environmental protest/rally.	.84
Took part in a protest/rally about an environmental issue.	.82
Helped to organize a petition for an environmental cause.	.71

N = 42

Psychological measures. Table 8 presents an overview of all psychological measures. Five behavioral belief statements were included which reflect the *belief that respondents' engagement can improve their sense of belonging to the local community*. These behavioral outcome statements served as a direct measure to test hypothesis-1 ($\alpha = .90$). Respondents' *desire to belong* to the community was measured using responses to four questions, based on the "group opinion concern" measure from Beersma and Van Kleef (2011) and the "three factor social identity" measure from Cameron (2007). Items were averaged to create a "desire to belong" score ($\alpha = .76$). Two measures of *sense of belonging* to the community were used. A single item measure asked respondents to rate the extent to which they considered themselves *local* on their island of residence. Because it is debatable if feeling local also reflects a sense of belonging, the Psychological Sense of Community (PSOC) scale (Jason, Stevens & Ram, 2015) was included. The PSOC scale consists of nine statements. The items were averaged to produce a single measure of the psychological sense of community ($\alpha = .91$). Lastly, we included two items to determine a respondent's *reputational concern*, derived from the "group opinion concerns" measure developed by Beersma and Van Kleef (2011). The items were averaged to create a reputational concern-score ($\alpha = .74$).

To test for the moderating effect of one's current sense of belonging on the relation between one's desire to belong and efforts to protect the natural environment (hypothesis 2), two interaction terms were calculated by multiplying the scores of the desire to belong measure with each of the sense of belonging measures (i.e., desire to belong**self-consideration*; desire to belong*PSOC; desire to belong**reputational concern*) (Field, 2013). The interaction terms were based on the mean-centered scores to increase the interpretability of the interactions.

Table 8. Overview psychological measures.

Measure	Items	Scale	α Study 1 – Caribbean Netherlands (N = 42)	α Study 2 – Rural U.K. (N = 399)
Behavioral beliefs	1. By actively protecting the natural environment of [place], you get to interact with the community of [place]. 2. Actively protecting the natural environment of [place] helps to build social relationships with others from [place]. 3. Actively protecting the natural environment of [place] makes you feel included in the community of [place]. 4. Actively protecting the natural environment of [place] makes you feel more closely connected to the community of [place]. 5. Actively protecting the natural environment of [place] gives you the feeling you are part of [place].	1 = Strongly Disagree, 5 = Strongly Agree	.90	.94
Desire to belong	1. How much do you want to be a member of the local community of [place]? 2. How important or unimportant is it to you that the local community of [place] accepts you? 3. How important or unimportant is it to you that the local community of [place] has a positive evaluation about you? 4. How often do you think about being (or becoming) a member of the local community of [place]?	1 = not at all, 5 = very much	.76	.86
Sense of belonging (A)	1. Do you consider yourself to be a local of [place]?	1 = not at all, 5 = very strongly	-	-
PSOC	1. I think the local community of [place] is a good community. 2. I am not planning on leaving this local community of [place]. 3. For me, the local community of [place] is a good fit. 4. Residents of [place] can depend on each other in this local community. 5. Residents of [place] can count on receiving help from other residents if they need it. 6. Residents of [place] can safely share their opinions or ask for advice. 7. The local community of [place] is important to me. 8. I have friends in the local community of [place]. 9. I feel good helping the local community of [place] and the residents.	1 = Strongly Disagree, 7 = Strongly Agree	.91	.90
Reputational concern	1. How much or little do you think about what the local community might think about you when you are actively protecting the natural environment of [place]? 2. How much or little do you take into consideration what the local community of [place] might say about you when you are actively protecting the natural environment of [place]?	1 =, not at all, 5 = A great deal	.74	.76
Normative beliefs	1. Does the local community generally approve or disapprove of efforts to actively protect the natural environment of [place]?	1 = Completely disapprove, 5 = Completely approve.	n/a	-

4.4.2 Results

Socio-demographic Background of the Respondents.

All respondents were current residents on Bonaire ($n = 22$), Saba ($n = 15$) or Sint Eustatius ($n = 5$). The years of residence of respondents on these islands ranged from 0.58 to 59 years ($M = 12.95$, $SD = 15.73$). Compared to characteristics of the general population of Bonaire, Sint Eustatius, and Saba, respondents with a high educational level were overrepresented: 69% of the respondents indicated they completed their higher education (bachelor's degree or higher), compared to 18% of the total population (Central Bureau for Statistics, 2014). Respondents had a mean age of 43 years. All remaining analyses were conducted with the total sample of $N = 42$.¹

Descriptive Results

Before testing the hypotheses, inter-correlations between the three environmental actions were explored. The means, standard deviations, and inter-correlations of the main variables are listed in Table 9. The three EAS subscales all correlate significantly with each other. Significant correlations are also found for the behavioral belief measure that engagement in environmental actions fulfils the need to belong. The belief measure correlates with the EAS political subscale ($r = .32$, $p = .04$), the psychological sense of community-scale ($r = .56$, $p < .001$), the desire to belong measure ($r = .49$, $p < .001$) and the reputational concern measure ($r = .43$, $p = .004$). Lastly, the desire to belong measure was significantly and positively correlated with the psychological sense of community-scale ($r = .46$, $p = .002$)², and the reputational concern measure ($r = .35$, $p = .025$). The former suggests that people with a strong sense of community also have a greater desire to belong within the local community. The latter suggests that perhaps those who have a strong desire to belong to the community are also more concerned about their reputation than those who do not have a strong desire to belong.

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- 1 Due to the small sample size of the study, these measures were not included in the regression analyses. Moreover, no significant correlations were found between the demographic variables and the other measures included.
 - 2 As the items of the desire to belong and PSOC measure shared some similarities and were strongly correlated (Study One $r = .37$, $p < .01$; Study Two $r = .68$, $p < .01$), we conducted a principal component analysis (PCA) with varimax rotation to see whether the two measures address the same or different concepts. The PCA identified two clearly distinct factors, including the items of the desire to belong scale, the other the items of the PSOC scale (see Appendix F for Study One and Study Two). Hence, we can conclude that the two measures indeed each address a unique concept.

Table 9. Means, Standard Deviations, and Inter-correlations for the EAS subscales, and all predictor variables Study One.

	N	M	SD	1	2	3	4	5	6	7	8
1. Behavioral belief Nature: to belong	42	3.8	0.95	1							
2. EAS awareness	42	3.3	0.89	.21	1						
3. EAS political	42	2.5	0.87	.32*	.53**	1					
4. EAS protest	42	2.0	1.01	.06	.78**	.41**	1				
5. Self-consideration as local	42	3.0	1.41	-.17	.03	.10	.14	1			
6. PSOC	42	4.7	0.95	.56**	.05	.16	.08	.10	1		
7. Desire to belong	42	3.1	0.85	.49**	.16	.25	.02	.20	.46**	1	
8. Reputational concern	42	1.7	0.82	.36	.06	.10	.08	-.21	.18	.35*	1

** . Correlation is significant at the 0.01 level (2-tailed); * . Correlation is significant at the 0.05 level (2-tailed).

Testing Our Hypotheses

This study's main purpose was to investigate if people engage in environmental actions to improve their sense of belonging within the local community. Initial support for this reasoning was found by looking at the mean scores of the belief that environmental actions contribute to a sense of belonging. Many respondents strongly agreed that this belief is a reason for them to engage ($M = 3.8$, $SD = 0.95$) in environmental actions. The absence of significant correlations between the desire to belong and the three EAS subscales suggests no direct relationship between these two variables, rejecting hypothesis 1.

To test for the moderating effects of belonging (hypothesis 2) and reputational concern (hypothesis 3) on the relationship between desire to belong and the extent to which people engage in environmental actions, separate hierarchical regressions were performed with the different types of environmental actions (awareness, political, and protest) as the dependent variables. The main effects were controlled for by entering the desire to belong measure, two belongingness measures, and the reputational concern measure at the first step of each analysis. The three interaction terms were entered at the second step (Table 10).

The regression analysis showed an interaction effect of desire to belong*considering yourself local for EAS Awareness ($\beta = -.42$, $p = .012$). The addition of the interaction terms to the equation explained 18.3 % of the variation in EAS Awareness, but this change in R^2 was not significant ($F(3, 34) = 2.62$, $p = .066$).

We also found a significant effect of desire to belong*considering yourself local for EAS Protest ($\beta = -.34$, $p = .047$). The change in R^2 for EAS Protest was not significant ($F(3, 34) = 1.62$, $p = .204$). No other effects were found, including effects for reputational concern (hypothesis 3).

Subsequently, simple regression slopes we calculated for self-consideration as local, divided into three groups, namely self consideration as local ‘low’ ($n = 13$; $m = 1.23$; $sd = 0.44$) selfconsideration as local ‘average’ ($n = 14$; $m = 3$; $sd = 0$) and self consideration as local ‘high’ ($n = 15$; $m = 4.53$; $sd = 0.52$). The simple slope regression analyses indicated that desire to belong only has an effect on EAS Awareness if self-consideration as local is ‘low’ ($\beta = 0.63$, $t(11) = 2.70$, $p = 0.02$). There is no significant effect of desire to belong on the degree of EAS Awareness if self-consideration as local is ‘average’ ($\beta = -0.21$, $t(12) = -0.77$, $p = 0.46$) or ‘high’ ($\beta = -0.19$, $t(13) = -0.71$, $p = 0.49$). The simple slope analysis for the EAS Protest shows no significant effects, but the trend is consistent with the findings for EAS Awareness. Namely, desire to belong only affects the extent of EAS Protest if self-consideration as local is ‘low’ ($\beta = 0.53$, $t(11) = 2.07$, $p = 0.06$). There is no significant effect of desire to belong on the degree of EAS Protest if self-consideration as local is ‘average’ ($\beta = -0.18$, $t(12) = -0.63$, $p = 0.54$). or ‘high’ ($\beta = -0.31$, $t(13) = -1.19$, $p = 0.26$). In both instances where significant effects were found, the positive beta’s imply that EAS awareness and EAS Protest increases under these conditions. In other words, this finding is in line with our expectations that desire to belong only is an (additional) driver for environmental actions if one does not consider oneself to be a local (i.e., the person’s status within a community is not optimal).

Table 10. Hierarchical Multiple Regression Analyses Predicting Conservation Actions Study One

Step	Predictor variable	Awareness				Political				Protest			
		R ²	ΔR^2	Original β	Final β	R ²	ΔR^2	Original β	Final β	R ²	ΔR^2	Original β	Final β
1	Desire to belong	.03			.10	.07		.20	.20	.04		-.10	-.16
	PSOC			-.03	.06			.05	-.12			.08	.13
	Self-local			.00	-.04			.06	.09			.18	.16
	Reputational Concern			.00	-.03			.03	.01			.14	.11
2	PSOC*Desire to belong	.21	.18		-.05	.18	.12		-.37	.16	.12		-.06
	Self-local*Desire to belong				-.42*				-.16				-.34*
	Reputational concern*Desire to belong				.19				.19				.15

$N = 42$; **, Correlation is significant at the 0.01 level (2-tailed). ;*, Correlation is significant at the 0.05 level (2-tailed).

4.4.3 Discussion of Study One

Based on the theoretical model we expected that a stronger desire to belong to a community translates into more participation in environmental actions (hypothesis 1). Initial support was found by looking at the mean scores of the belief that environmental actions contribute to a sense of belonging measure; however the absence of significant correlations and main effects in the regression analyses for desire to belong on the EAS behavior leads us to conclude that there is no direct effect of desire to belong on environmental actions. Based on these findings, we reject hypothesis 1. We did find some evidence for our hypothesis that the effect of the desire to belong is moderated by people's current sense of belonging (hypothesis 2). Specifically, we found that the desire to belong is related to higher levels of engagement in conservation awareness and protest actions among those who do not consider themselves local. We found no evidence for hypothesis 3, namely that the effect of desire to belong on participation in environmental actions is stronger for those who have stronger reputational concerns.

We conclude that it is encouraging to find partial support for expectations that deal with phenomena that have hardly been investigated previously, even in an exploratory study. There is one important limitation: sample size. This limitation can affect the accuracy of our findings (i.e., increasing change of making a type-2 error) which in turn decreases the power of the study. We also did not explicitly control for or check whether the studied actions are socially approved by the island communities. However, the pattern of relationships suggests, as we expected beforehand, that less controversial actions may be better suited to fulfil the need to belong. Political actions, probably the most controversial form of action on these islands, did not show any of the hypothesized effects contrary to the other two forms. To overcome the limitations mentioned, we conducted a second study.

4.5 STUDY TWO: A SURVEY IN RURAL REGIONS OF THE UNITED KINGDOM

To further explore our hypotheses with a substantially larger sample, we conducted a replication study using the online database Prolific Academic (PA). We tested the same hypotheses as in Study One and included a normative belief measure to determine whether the community approves of the environmental actions we examined. While the historical context of the communities investigated in Study Two is widely different from the context that initially inspired the research question (Study One), we paid careful attention to the fact that certain contextual factors were similar. Specifically, we paid attention to the remote location and small scale of the communities in which the respondents reside and possibly participate in environmental actions.

4.5.1 Method

Respondents and Procedure

To mimic some of the characteristics and social dependency, within island communities (i.e., small scale, isolated, the familiarity of residents) as were present in Study One, respondents of Study Two were initially recruited using a pre-selection survey. This survey consisted of a few questions regarding residence and was sent to 2000 members of the PA database in the U.K.'s rural regions. Only respondents who stated they lived in a hamlet, a village, or a small town (< 50,000 inhabitants) were included. Based on these criteria, 504 eligible respondents remained out of the pool of 2000 respondents, of which 400 were requested to complete an adapted version of the Study One questionnaire. Respondents were informed that the purpose of this study was to understand the bond people have with the natural environment in their place of residence and to learn more about their views on protecting the natural environment within their place of residence. Respondents received payment for the completion of each survey according to PA's payment guidelines. All responses were treated confidentially. Ethical approval was granted by the Leiden University Psychology Ethics Committee on the 16th of December 2019, Application number: (CEP19-1125/559).

Measures

Where required, the measures used in Study One were adapted to better fit the context of the U.K. and are described in more detail below.

Demographics. Respondents were asked to report their age, gender, educational level, income, and length of residence. The educational level and income answer scales were adapted to fit the U.K. setting.

Behavior measures. The same EAS subscales as in Study One were created to ensure the two studies' outcomes' comparability. The "awareness actions" subscale yielded good reliability ($\alpha = .84$), as did the "political actions" subscale ($\alpha = .81$). Lastly, the "protest actions" subscale yielded acceptable reliability ($\alpha = .74$). Like Study One, each of the components' items was averaged to produce separate measures of the environmental actions.

Psychological measures. The same set of psychological measures were used as in Study One, with two exceptions. First, the behavioral belief statements were slightly rephrased to ensure respondents would not feel offended or guilty if they had not actively engaged in environmental actions in the past. For example, instead of "*I actively protect the environment of [place] because it helps me build social relationships in [place]*" (as in Study One), the statement was formulated as: *Actively protecting the natural environment of [place] helps to build social relationships with others from [place]*". Second, we included a single item **normative belief** measure to determine the extent to which respondents

believed their engagement in environmental actions would be approved of by the community (Table 11). Again, measures using more than one item were averaged to produce a single score, and all produced good reliability scores.

To test for the moderating effect of one's current sense of belonging on the relation of one's desire to belong and efforts to protect the natural environment, two interaction terms were calculated (i.e., desire to belong*considering yourself local; desire to belong*PSOC). The interaction effects between desire to belong and reputational concern were calculated to test the moderating effect of reputational concern on desire to belong and the efforts to protect the natural environment. The interaction terms were based on the mean-centered scores to increase the interactions' interpretability.

4.5.2 Results

Socio-demographic Background of the Respondents

All respondents (145 males, 254 females) currently reside in the U.K. On average, respondents lived in their current residence place for 16.21 years (SD = 14.29). Respondents had a mean age of 40.87 years (SD = 13.23).

Descriptive Results

Before testing the hypotheses, inter-correlations between the different types of environmental actions (awareness, political, and protest) were explored. The means, standard deviations, and inter-correlations of the main variables are listed in Table 11, including some demographic variables (age, level of education, gender, income, years of residence).

First, it is relevant to know if the respondents believe that their environmental actions are indeed approved of. We checked for this using the normative belief item. The high mean for this item ($M = 4.01$) indicates that most people believe engaging in conservation behavior is highly approved by other members of our respondents' communities.

Because we were interested to know whether people engaged in environmental actions to improve their sense of belonging within their community, we looked at the outcomes of the direct behavioral belief measure (i.e., the direct measure asking respondents if they protect the environment to improve their sense of belonging within the community). The relatively high mean score ($M = 3.63$, $SD = .93$) was similar to that of Study One and indicates that respondents generally believe that engagement in environmental actions is beneficial for one's sense of belonging in the community. The behavioral belief measure also significantly and positively correlated with EAS Awareness ($r = .34$, $p < .001$) and EAS political ($r = .19$, $p < .001$). These correlations suggest that people who believe that their efforts contribute to becoming a community member perform environmental actions more frequently. Significant correlations were also found between the behavioral

belief measure and desire to belong ($r = .51, p < .001$), suggesting that people with the desire to belong believe environmental actions can help fulfill their sense of belonging. Not surprisingly, all EAS subscales strongly correlate with each other.

The desire to belong measure significantly correlates with all behavior measures (rEAS Awareness = .40, $p < .001$; rEAS Political = .32, $p < .001$; rEAS Protest = .21, $p < .001$). These positive correlations imply that a stronger desire to belong is related to more engagement in environmental actions. This finding, combined with the significant positive correlation found between the desire to belong and the behavioral belief measure, suggests that people who want to belong to the community also engage in more environmental actions, *in line with our expectations related to hypothesis 1*.

Next, we looked at the correlations between the desire to belong, the two measures of sense of community, and the reputational concern measure to explore our second and third hypotheses. We found that the desire to belong significantly and positively correlates with the two sense of belonging measures (rSelf Local = .44, $p < .001$; rPSOC = .69, $p < .001$), suggesting that people with a strong sense of community also have a greater desire to belong to their respective community. Lastly, we found a significant positive correlation between the desire to belong and reputational concern ($r = .52, p < .001$). This suggests that greater concern about one's reputation is related to a stronger desire to belong to the community and provides some preliminary evidence that, indeed, the effect of desire to belong on environmental actions is moderated by one's reputational concern (hypothesis 3).

Table 11. Mean, Standard Deviations and Correlations Study Two.

	N	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Behavioural belief: protect nature to belong	400	3.63	.93	1													
2. EAS Awareness	400	2.00	.68	.34**	1												
3. EAS Political	400	1.40	.57	.19**	.77**	1											
4. EAS Protests	400	1.20	.52	.08	.54**	.77**	1										
5. Age	400	40.87	13.23	-.02	-.09	-.14**	-.09*	1									
6. Gender	400	1.64	.49	.07	.11*	.06	-.03	-.11*	1								
7. Education	399	4.29	1.26	.12*	.12*	.09	-.04	.09	-.11*	1							
8. Income	369	3.10	1.41	-.03	.08	.05	-.02	.06	-.03	.10	1						
9. Years of Residence	400	16.21	14.29	-.06	-.06	-.03	.01	.23**	-.05	-.06	.08	1					
10. Desire to belong	400	2.62	.94	.51**	.40**	.32**	.21**	.07	.06	.06	.09	.03	1				
11. Self consideration as local	400	3.33	1.27	.19**	.13**	.12*	.11*	-.03	-.06	-.11*	.13*	.45**	.44**	1			
12. PSOC	400	3.62	.79	.52**	.29**	.18**	.08	.10*	.02	-.00	.13*	.10*	.68**	.49**	1		
13. Reputational concern	400	2.00	.95	.27**	.31**	.32**	.25**	-.23**	.07	-.02	.07	-.06	.52**	.21**	.34**	1	
14. Normative Belief	400	4.01	.74	.34*	.13*	.01	-.05	.08	.08	-.03	.05	-.00	.35**	.21**	.47**	.11*	1

**, Correlation is significant at the 0.01 level (2-tailed).

*, Correlation is significant at the 0.05 level (2-tailed).

Table 12. Hierarchical Multiple Regression Analyses Predicting Conservation Actions Study Two.

Step	Predictor variable	Awareness					Political					Protest				
		R ²	ΔR ²	Model 1 β	Model 2 β	Model 3 β	R ²	ΔR ²	Model 1 β	Model 2 β	Model 3 β	R ²	ΔR ²	Model 1 β	Model 2 β	Model 3 β
1	Age	.04**		-.09	-.10	-.10	.03*		-.14**	-.12*	-.11*	.01		-.11*	-.07	-.06
	Gender			.12*	.09	.11*			.06	.03	.04			-.04	-.06	-.06
	Education			.14**	.12**	.13**			.11*	.09	.09			-.03	-.04	-.04
	Years of Residence			-.03	-.02	-.03			.00	.01	-.01			.03	.02	-.00
	Desire to belong	.21**	.17**		.30**	.33**	.16**	.13**		.27**	.31**	.09**	.07**		.19*	.23**
2	PSOC				.08	.09				-.05	-.06				-.12	-.15*
	Self-consideration as local				-.04	-.04				-.02	.00				.03	.05
	Reputational concern				.11*	.03				.17**	.08				.17**	.12
	scale															
3	PSOC*Desire to belong	.26**	.04**			.01	.20**	.04**			-.08	.10**	.017			-.11
	Self-local*Desire to belong					-.02					.03					.05
	Reputational concern					.22**					.23**					.11*
	scale*Desire to belong															

N = 399, **, * Correlation is significant at the 0.01 level (2-tailed), *, * Correlation is significant at the 0.05 level (2-tailed)

Testing Our Hypotheses

We conducted similar hierarchical regression analyses as in Study One to test the direct relationship between the desire to belong and engagement in environmental actions and the moderating effects of belonging (*hypothesis 2*) and reputational concern (*hypothesis 3*) on this relationship. We also entered age, gender, education, and years of residence at stage one of the regressions to control for possible demographic differences in environmental actions. Table 12 presents the full details of each regression model. The regressions' outcome is discussed separately for each behavioral outcome (EAS Awareness, EAS Protest, EAS Political).

EAS awareness. In the first step of the equation only gender ($\beta = 0.12, p = .017$) and education ($\beta = 0.14, p = .004$) contributed significantly to the regression model ($F(4, 394) = 4.30, p = .002$) and accounted for 4.2% of the variation for EAS awareness. In step 2, desire to belong ($\beta = .30, p < .01$) and reputational concern ($\beta = .11, p = .042$) were found to be significantly associated with EAS Awareness. The additional proportion of variance explained by these variables in engagement in EAS Awareness actions was 17%. This change in R^2 was significant, $F(4, 390) = 21.07, p < .001$. Lastly, in the third step, the three interaction effects were added to the model. Only the interaction between desire to belong*reputational concern significantly affected EAS Awareness ($\beta = .22, p < .001$). Reputational concern no longer remained a significant predictor for EAS Awareness, but desire to belong did ($\beta = .33, p < .001$). The interaction terms' addition significantly improved the proportion explained variance by 4.3% in EAS Awareness, $F(3, 387) = 7.50, p < .001$.

Simple regression slopes were calculated to understand the nature of the interaction between reputational concern*desire to belong. To do so, reputational concern was split into two groups (reputational concern 'high' ($n = 221$; $m = 0.69$; $sd = 0.71$; reputational concern 'low' ($n = 179$, $m = -0.85$; $sd = 0.23$)). The simple slope analysis for the EAS awareness showed that both in the case of high reputational concern ($\beta_{\text{reputational concern high}} = 0.45, t(219) = 7.42, p < 0.001$) and in the case of low reputational concern ($\beta_{\text{reputational concern low}} = 0.24, t(177) = 3.23, p < 0.001$) there is more engagement in EAS awareness if there is also a strong desire to belong. This effect is stronger for people with a high reputational concern than for people with a low reputational concern. This finding suggests that the effect of desire to belong on participation in EAS awareness is stronger among people with high reputational concerns compared to people with low reputational concerns.

EAS political. In the first step age ($\beta = -.14, p = .008$) and education ($\beta = .11, p = .037$) contributed significantly to the regression model ($F(4, 394) = 3.13, p = .015$) and accounted for 3.1% of the variation for EAS Political. The addition of desire to belong, the two sense of belonging variables, and the reputational concern variable explained a significant additional 12.6% of variation in EAS Political, $F(4, 390) = 14.52, p <$

.001. Again, both the desire to belong ($\beta = .27, p < .001$) and reputational concern ($\beta = .17, p = .003$) were significantly associated with EAS Political. Lastly, the three interaction effects were added to the model. Similar to the regression performed for EAS Awareness, only the interaction between desire to belong*reputational concern had a positive, significant effect on EAS Political ($\beta = .23, p < .001$). Desire to belong ($\beta = .31, p < .001$) remained a significant predictor for EAS Political, but reputational concern alone did not. The interaction terms' addition explained a significant additional 4.3% of variation in EAS Political $F(3, 387) = 6.97, p < .001$.

Again, simple slope analysis was conducted with the split reputational concern variable. For EAS political we found that only in the case of high reputational concern, desire to belong influences the degree of participation in EAS political actions ($\beta_{\text{reputational concern high}} = 0.36, t(219) = 5.77, p < 0.001$; $\beta_{\text{reputational concern low}} = 0.11, t(177) = 1.52, p = 0.13$). The positive betas suggest that EAS political increases if people are both concerned about their reputation and have a strong need to belong to the community. The main effect of desire to belong was no longer present.

EAS protest. The demographic variables entered in the first step of the equation appeared unrelated to EAS Protest behavior ($F(4, 394) = 1.26, p = .286$). The addition of desire to belong, the two sense of belonging variables, and the reputational concern variable explained an additional significantly improved model ($F(8, 390) = 4.54, p < .001$) and explained 8.5% proportion of variance in EAS Protest. Again, both the desire to belong ($\beta = .19, p = .011$) and reputational concern ($\beta = .17, p = .005$) were significantly associated with EAS Protest. Of the three interaction variables entered in step 3 of the question, only the interaction between a desire to belong*reputational concern had a positive, significant effect on EAS Protest ($\beta = .13, p = .018$). The interaction terms explained an additional 1.7% of EAS Protest variation, but this change in R^2 was not significant, $F(3, 387) = 2.42, p = .066$.

The simple slope analysis for EAS protest is consistent with the findings of the EAS political. Namely, only in the case of high reputational concern, desire to belong affects participation in EAS protest $\beta_{\text{reputational concern high}} = 0.22, t(219) = 3.28, p < 0.001$; $\beta_{\text{reputational concern low}} = 0.10, t(177) = 1.34, p = 0.18$). The positive betas suggest that people's engagement in EAS Protest increases when they are both concerned about their reputation and have a strong need to belong to the community. The main effect of desire to belong was no longer present.

4.5.3 Discussion of Study Two

In contrast to Study One, we found that there is a direct effect of desire to belong on people's engagement in environmental actions (hypothesis 1). The significant, positive correlations and Betas for the desire to belong found in the second step of the hierarchical regressions imply that a stronger desire to belong relates to more engagement in

environmental actions. Moreover, this effect remained after adding the interaction effects into the regression (step 3) for the EAS Awareness and EAS Political Behavior scales. We also found that the effect of desire to belong on participation in environmental actions is moderated by a person's reputational concerns, confirming hypothesis 3. Specifically, the results of Study Two show that stronger reputational concerns in combination with a strong desire to belong relates to even more engagement in all three types of environmental actions. Finally, no evidence in Study Two was found that the effect of desire to belong on participation in environmental actions is stronger for those who have a lower current sense of belonging (hypothesis 2). This finding contrasts with the results of Study One.

4.6 GENERAL DISCUSSION

Given that the need to belong is an important motivator of behavior (Baumeister & Leary, 1995), we set out to investigate if engagement in conservation behavior is considered a means to integrate within a community. Of course, the intensity of this need can vary among people. Therefore, we looked at people's desire to belong which acknowledges that not everyone has an equally strong need to belong. We examined this relationship in two studies.

Despite the small sample size of our first study, we found that a person's desire to belong is related to more engagement in environmental actions only if they do not yet consider themselves to be local in the community. Study Two found evidence for the *direct* relationship between people's desire to belong and the extent to which they engage in environmental actions. While we cannot determine the causality of this relationship with our study and analysis, this finding does suggest that a stronger desire to belong might lead to more engagement in environmental actions, especially when people are concerned about their reputation. The reverse, performing environmental actions leading to a stronger desire to belong seems conceptually implausible. Apart from the findings in correlational analyses it was encouraging to see that respondents in both studies generally agreed with the statement that directly reflected our central research question, namely the idea that engaging in environmental actions can lead to a stronger sense of belonging in a community.

These findings strongly suggest that the effect of desire to belong on people's engagement in environmental actions is especially imminent when the need to belong is salient – either because people do not yet feel they belong to the community or because they are concerned about their reputation. These findings are in line with the argument made by Steinel et al. (2010) that mostly peripheral group members will adhere to social norms when they want to belong. They also support the body of work arguing that reputational

concerns are essential indicators of social norms' impact on people's behavior (Farrow, Grolleau, & Ibanez, 2017).

In addition, we found evidence for the direct relationship between people's desire to belong and their engagement in environmental actions. While our results are promising, we should contemplate why the two studies showed different outcomes.

First, it was very encouraging to find partial support in Study One for expectations that have been hardly explored in previous scholarly literature. The small sample size of Study One, however, could mean that the findings of Study Two are more robust. Despite the small sample size of Study One, we chose to include this study for several reasons. First, even with the small sample the analysis did show some support for the argued relationship we address with our research question. Second, we feel it is important not to rely solely on data from online data bases such as Prolific, as this too might affect the reliability of the research findings (Newman et al., 2020).

Another critical difference between the two studies explaining the different outcomes is in what socio-political context the studies took place. Even though we used some selection criteria to ensure some similarities between the two studies' contexts, the social context of Caribbean islands and that of remote, small communities in the U.K. are very different from each other. As we mentioned in Study One, there are ongoing tensions between residents on the three islands, with an increasing number of (European) foreigners migrating to the islands. This development has sparked debates on the islands about who is local (who belongs) and who is not. Therefore, it makes sense that residents' behavior on the islands is more strongly affected by their considerations of being local or not. Considering there is less polarization in the U.K. context than the Dutch Caribbean context, this contextual difference may explain why we found evidence for our second hypothesis in Study One but not in Study Two.

Finally, it should be noted that we focused on publicly visible actions, and for good reasons: behavior displayed in public should be a more effective lever to create social bonds. However, even within the category of publicly visible actions, relationships appear to be different. The EAS Awareness actions' effects were more substantial than the effects for EAS Political and Protest actions. This finding could mean that EAS Awareness actions are generally more accepted and supported by the community and thus believed to be better able to fulfil a person's need to belong. This idea could be expanded to include other conservation behavior focused on the household but may have more or less visibility. For example, installing solar panels has high visibility compared to other indoor actions like reducing shower time. It would be interesting to see whether these kinds of actions are also considered helpful in creating bonds in a community and are performed for that reason. Sloot, Jans and Steg (2019), in fact, concluded in an extensive study that compared to financial motives, communal (social) and environmental motives

were more important drivers for participation in communal energy initiatives, which are themselves a type of public environmental action.

These are questions for the future and the research could be perfected further by using other measures than self-reports of behavior such as observations or statistics on organizational memberships. A truly valuable next step would be to conduct (field)-experiments to assess the causal direction of the relationship between the desire to belong and conservation behavior with more certainty than is possible with correlational findings.

Despite these limitations, the current study provides directions for mobilizing people to protect the natural environment in small communities. This research can inform planners, immigrant associations, and other community organizations that aim to integrate people within a community. In conclusion, the current study complements existing knowledge that people engage in environmental actions not only out of a concern for other people, species, or ecosystems (Bamberg & Möser, 2007) but that one's desire to belong can also be a motive for environmental actions.