



rijksuniversiteit  
 groningen



**LEUPHANA**  
UNIVERSITÄT LÜNEBURG

# The Effects of Perceived Motivation and Perceived Overarching Social Identity on Environmental Minorities' Potential to Spark Change

*Ida Maria Dirr*

Master Thesis – Double Degree Master Sustainability and Environmental  
Psychology

*S5286018*

*July 2024*

Department of Psychology

University of Groningen & Leuphana University Lüneburg

Examiner/Daily supervisor: Prof. Dr. Lise Jans & Prof. Dr. Birte Siem

A thesis is an aptitude test for students. The approval of the thesis is proof that the student has sufficient research and reporting skills to graduate, but does not guarantee the quality of the research and the results of the research as such, and the thesis is therefore not necessarily suitable to be used as an academic source to refer to. If you would like to know more about the research discussed in this thesis and any publications based on it, to which you could refer, please contact the supervisor mentioned.

### Abstract

The present study examines how people living in ecovillages can present themselves in order to be more accepted by the inhabitants of the local region and, in turn, motivate participation in their initiative. Perceived high moral motivation of the ecovillagers is hypothesized to reduce people's evaluation of the ecovillage, the perception of a shared group and pro-environmental ingroup perceptions. On the other hand, highlighting the ecovillagers' identification with the local region is expected to improve the evaluation of the ecovillage and the perception of a shared group. An interaction effect of identification with the local region neutralizing the negative effects of high moral motivation is expected. In an experimental 3 (high moral motivation vs. moderate moral motivation vs. mixed motivation) by 2 (identification with the local region vs. with the ecovillage) design, 469 participants read scenarios and gave their assessment on several outcome measures. In line with our predictions, high moral motivation negatively affected the cognitive and affective evaluation of ecovillages and identification with the local region improved the evaluation of ecovillages and created a sense of shared identity. Both factors interacted in their effects on environmental group identity. However, in contrast to our hypotheses, the experimental factors did not affect the other outcome variables and there were no other interaction effects. The implications of this study include the risks of overly moral argumentation as well as the benefits of highlighting identification with the local region which are important for shaping environmental minority groups' role in the transition toward sustainability.

*Keywords:* do-gooder derogation, ecovillages, minority influence, common ingroup, morality threat

## **The Effects of Perceived Motivation and Perceived Overarching Social Identity on Environmental Minorities' Potential to Spark Change**

Climate change is one of the biggest current global challenges. To mitigate its effects and to adapt to its consequences, large-scale systemic change as well as individual behavioral changes are essential (IPCC, 2022). While concern about climate change is generally high (European Commission, 2022), only a small portion of the population adopts everyday sustainable practices. For example, people living in ecovillages do their best to live their daily life as sustainably as possible. The Global Ecovillage Network (GEN) defines an ecovillage as “an intentional, traditional or urban community that is consciously designed through locally owned, participatory processes in all four dimensions of sustainability (social, culture, ecology and economy) to regenerate their social and natural environments” (GEN, n.d.). This definition is quite broad, as the realities of different ecovillages are heterogenous and cannot be summarized in one strict category of lifestyle (Dawson, 2015, as cited in Dias et al., 2017). Nevertheless, ecovillages generally aim to promote a sustainable lifestyle, drive regional transformation, and provide education on alternatives to currently prevalent ideas and practices of capitalism (Dias et al., 2017). To grow their so far modest impact (Hong & Vicdan, 2016), it is important for ecovillages to gain more acceptability and motivate more people to join their activities or adapt their practices.

Generally, if one wishes to promote pro-environmental behavior, it is recommended to use arguments based on the environmental consequences of the behavior (Bolderdijk et al., 2013; Sloot et al., 2018). In contrast, highlighting financial reasons to change one's behavior may be seen as undesirable or “greedy”, hindering any behavioral change. Therefore, it seems appropriate that an environmental group, such as an ecovillage, looking to increase its impact

should appeal to others by stressing their care for the environment and their intentions to change the world for the better. Yet, at the same time, research suggests that there might be a risk in communicating environmental motivations. Because highlighting environmental consequences (unintentionally) ends up being perceived as moralizing the issues at hand, environmental groups are often met with rejection (Minson & Monin, 2012).

The aim of this thesis is to analyze how pro-environmental minority groups, such as ecovillages, are perceived by those who are not part of the group, if they may unintendedly hamper their goals, and how to counteract the potential negative effects of perceived moral motivation by emphasizing a common ingroup identity. The results will give insight into how such groups can strategically frame themselves to increase their impact and motivate others to behave sustainably.

### **The Risks of Moral Motivation**

The so-called *do-gooder derogation effect* (Minson & Monin, 2012) has been reported in the context of environmental (e.g., Bolderdijk et al., 2018; Goedkoop & Jans, 2023) and other moral issues (e.g., Monin et al., 2008) and describes the rejection of morally motivated groups and individuals. Pro-environmental behaviors, such as participating in an environmental group, are often perceived as moral behaviors as well, especially when there is a social norm that construes behaving pro-environmentally as desirable and those actions are taken voluntarily (Kurz et al., 2020). Consequently, those who are not members of such groups assume that members of environmental groups have high moral standards and see themselves as morally superior. This elicits the expectation of being judged by members of the environmental group for not adhering to the same moral standards. To avoid negative feelings of rejection and to protect one's positive moral self-image, environmental groups and individuals are therefore often

rejected and devalued. This rejection can manifest itself in a lower cognitive, affective, and behavioral evaluation of the group (e.g., Minson & Monin, 2012; Goedkoop & Jans, 2023). *Cognitive evaluation* refers to how acceptable one finds the group, and if it is seen as good or bad. *Affective evaluation* refers to how one feels about the group, for example how warm or cold the members of the group are perceived (see Parker & Janoff-Bulman, 2013). *Behavioral evaluation* refers to whether one would consider participating in any of the group's activities. Hence, the do-gooder derogation effect describes that environmental groups which are assumed to have high moral standards tend to be perceived as less acceptable, less emotionally warm and less inviting to others. This perspective explains the limited impact of ecovillages on an individual level, i.e. protecting one's moral self-image. Since ecovillages are often tight-knit communities with a strongly pronounced collective identity, and their lifestyle signals the membership of this group to those around them, ecovillagers tend to be perceived as a group rather than individuals (Kurz et al., 2020; Ulug et al., 2021). Therefore, it is also important to shine a light on processes that could hamper the impact of ecovillages at the group level, i.e. how social identity processes influence people's perception of their own group and of ecovillagers as a group.

According to Social Identity Theory (SIT; Tajfel & Turner, 1986), a group is defined by three attributes: one has the cognitive knowledge that one belongs to the group, this membership of the group is associated with a positive or negative evaluation, and this membership of the group results in emotions towards one's own group (ingroup) and other groups (outgroup). From the perspective of SIT, an important aspect of social identity is the strength of identification with one's group. This predicts whether one will act in accordance with group norms, such as moral standards, which is why high identification with a group seeking social change is generally

assumed to be a positive predictor of said change (Fielding & Hornsey, 2016; Fritsche et al., 2018). However, in the context of ecovillages, this may be different. Ecovillages can be seen as practice-based groups (Kurz et al., 2020), meaning that it is not only an opinion that makes one a member of this group, but rather everyday practices of living in the ecovillage. These practices signal one's identity as an ecovillager to others. Ecovillages are minority groups that exist in the context of a non-ecovillager majority. This minority status leads to high identification with the ingroup, i.e. the ecovillage, to protect oneself against discrimination by the outgroup, i.e. the majority of non-ecovillagers (Jetten et al., 2001). In combination with the practice-based nature of ecovillages, this results in the perception of tight and strict moral criteria that need to be adhered to become and remain an accepted member of the ecovillage (Kurz et al., 2020).

These strict moral criteria could result in the perception of low group boundary permeability between the ecovillage and other people who are not part of the ecovillage. Perceived group boundary permeability describes whether one feels like the structure of the groups allows individuals to move from their current group to another (Ellemers et al., 1990). Impermeable group boundaries imply that it feels impossible for an individual to change their group membership. Very strict rules for group membership can create such impermeable group boundaries, as they result in all-or-nothing criteria. For instance, a reduction of meat consumption to once a month would still not be sufficient to become an accepted vegetarian, as the moral standard is to never eat meat again. In the case of ecovillages, the group boundary is not defined by one specific practice, but rather by a number of different practices that make up the ecovillage lifestyle. Because of these strict expectations which are hard to fulfill perfectly, people may feel as if they could never become a respected member of the group and therefore resort to rejecting the ecovillage (Mendes et al., 2001). To summarize, the perception of a

morally motivated ecovillage can result in low perceived group boundary permeability and thus in rejection of the ecovillage. This explains do-gooder derogation from a social identity perspective and suggests that ecovillages may be scaring off others from joining their activities with their high moral motivation.

Even further, for those who are not members of an ecovillage, the comparison of their own group with a more environmentally friendly group, i.e. the ecovillage, may even have consequences on the perception of their ingroup and other behaviors. This is because they may begin to define their own group specifically as non-members of the ecovillage, in contrast to members of the ecovillage. It has been shown that a comparison with a group which is stereotypically perceived as very environmentally friendly can change the stereotypes about one's ingroup (Rabinovich et al., 2012, see also Pearson et al., 2018). More specifically, the ingroup is perceived as less environmentally friendly. These ingroup stereotypes can decrease perceived environmental norms of the ingroup and self-stereotypes and reduce an individual's pro-environmental behavior. This suggests that ecovillagers' high moral motivation may not only cause them to fail at recruiting new members but also to demotivate others from acting sustainably at all.

While the reasoning above paints a grim picture for the psychological impact of ecovillages, social identity research also offers a solution on how to counter these unintended negative effects.

### **The Potential Benefits of a Common Ingroup Identity**

Utilizing social identity can be a powerful tool to overcome conflicts or disliking between groups. More specifically, by introducing or highlighting the shared membership of a common overarching social group, the common ingroup identity, two opposing groups can gain a sense of



shared identity (Gaertner & Dovidio, 2000). The perception of the ingroup and outgroup changes from “us vs. them” to “we”, resulting in shared goals and interests. This process has been shown to be effective in reducing conflict and promoting collective action within different social issues, such as discrimination and racism (e.g., Kunst et al., 2015) and in the workplace (e.g., Haslam et al., 2003; Slater et al., 2016). In environmental psychology, such overarching group identities have been linked to increased pro-environmental norms and subsequent pro-environmental behavior to benefit the greater good (Batalha & Reynolds, 2012; Loy et al., 2022; Milfont et al., 2020; Reese, 2016).

While ecovillages often appear as separate communities, they always exist in the context of a local region (Ulug et al., 2021). As the community of inhabitants of one’s local region can be a relevant social group, the membership of which influences individuals’ perceptions and behaviors, the local region could be a potential overarching common identity for members of an ecovillage and the people living in the surrounding area (Bouman & Steg, 2019; Goedkoop et al., 2022; Nolan et al., 2008). This is not unique to ecovillages, as other locally based initiatives could also consider this option (see Jans, 2021). However, for environmental groups without a specific location, such as vegetarians, a common ingroup is only found at a much higher level, e.g. a national or global identity (Loy et al., 2022; Milfont et al., 2020).

### **Current Research**

There are some initial findings on the effects of moral motivation and identification with the local region on people’s perceptions of environmental initiatives. A recent study (Goedkoop & Jans, 2023, study 4) confirmed not only the do-gooder derogation effect for highly morally motivated ecovillages compared to moderately morally motivated ones regarding the cognitive, affective, and behavioral evaluation of the ecovillage but also provides initial evidence for the

mitigating effects of highlighting identification with the local region. That is, when the ecovillagers were portrayed as identifying with the local region rather than with just the ecovillage, the do-gooder derogation effect on behavioral evaluation disappeared. Therefore, it seems possible for a common ingroup identity to neutralize or compensate for the negative effects of high moral motivation. However, the reported effect sizes were rather small, the experimental manipulation of the identification with the local region did not work as intended, and the proposed process variable of perceived group boundary permeability was not assessed.

A second study shows that moderate moral motivation of environmental initiatives can be beneficial for people's perception of the initiative when compared to a combination of moderate moral and financial motives (Goedkoop & Jans, 2023, study 5). This is in line with previous findings (e.g. Bolderdijk et al., 2018) and raises the question to which degree moral motivation can increase an environmental group's impact, and at what point the moralization becomes a barrier to sustainable transitions. Involvement with the local region, a more active way of showing connection and identification with the local region and operationalized as investing financial profits from the initiative's projects in a community fund, did affect the evaluation of the initiative positively, but could not neutralize the negative effects of mixed motivation.

The aim of this thesis is to combine the two studies by Goedkoop and Jans (2023) and to provide some more robust evidence and insights into the effects of motivation and identification and to clarify the mechanisms at play. This will be done by extending the design to include three different moral motivation conditions: high moral motivation, moderate moral motivation, and mixed motivation. Further, to address methodological issues, the manipulation of the identification of the initiative will be a combination of the manipulations used in the two studies to make the manipulation stronger and more convincing. In addition, we will extend the previous

research by explicitly measuring the process variable of perceived group boundary permeability as well as group stereotypes and the participants' perceived environmental group identity of the inhabitants of the local region (Wang et al., 2021). Based on the theoretical reasoning provided above, we will test the following hypotheses:

**H1:** The high moral motivation condition (vs. moderate moral motivation) will result in *lower* scores on non-members' ...

- a) ...behavioral evaluation of the ecovillage.
- b) ...cognitive evaluation of the ecovillage.
- c) ...affective evaluation of the ecovillagers.
- d) ...perceived shared identity of the local region and the ecovillage.
- e) ...perceived group boundary permeability.
- f) ...perceived pro-environmental stereotypes of non-members of the ecovillage compared to the ecovillagers.
- g) ...perceived environmental group identity of the inhabitants of the local region.

**H2:** Framing the ecovillagers as identifying with the local region (vs. identification with the ecovillage) will result in *higher* scores on...

- a) ...behavioral evaluation of the ecovillage.
- b) ...cognitive evaluation of the ecovillage.
- c) ...perceived shared identity of the local region and the ecovillage.
- d) ...perceived group boundary permeability.
- e) ...affective evaluation of the ecovillagers.

The effects of identification on the remaining variables (perceived pro-environmental stereotypes of non-members of the ecovillage compared to the ecovillagers, and environmental group identity) will be investigated exploratively.

**H3:** The negative effects of high moral motivation (H1) will be countered by identification with the local region (interaction effect).

The effects of mixed motivation on the perception of the ecovillage will be investigated exploratively. The master thesis resulting from this research will be focusing on the effects of high moral motivation compared to moderate moral motivation.<sup>1</sup>

### **Method**

The current study was pre-registered on 21.03.2024 ([https://aspredicted.org/QJT\\_5P4](https://aspredicted.org/QJT_5P4)). Based on a checklist by the Ethics Committee of the Faculty of Behavioral and Social Sciences at the University of Groningen, this study was exempt from full ethical review.

### **Participants and Design**

Using the student participant pools of the University of Groningen and Leuphana University Lüneburg, 514 participants were recruited and were rewarded course credits for their participation. This number exceeded the pre-registered sample of 500, as an additional 14 participants had already clicked the link to participate before it was detected that the desired sample size was reached. Data collection took place between 21.03. and 23.05.2024.

---

<sup>1</sup> The following additional variables were measured, but will not be analyzed in this master thesis: Perceived distinctions between eco-villagers and non-ecovillagers regarding other values and attributes based on the Stereotype Content Model (Cuddy et al., 2008), pro-environmental intentions, shared identity measured with an alternative image-based rating scale.

As pre-registered, participants to whom the exclusion criteria applied were omitted. Therefore, 24 respondents who did not complete the survey were not included in the final analysis. Seven were excluded because they indicated to live or have lived in an ecovillage. Due to failing both attention checks, 12 participants were excluded. Further, 2 participants gave an implausible response to the question which region they identify with and were thus excluded. The final sample consisted of 469 participants (105 male, 344 female, 8 other) aged 18 to 47 ( $M = 20.75$ ,  $SD = 2.84$ ). According to a power analysis based on an estimated effect size of  $\eta_p^2 = .021$  from the original study (Goedkoop & Jans, 2023), a sample of 453 is required to reach a power of .80 in a two-way ANOVA, indicating that our sample size is sufficient.

Of the final sample, 309 participants stemmed from the University of Groningen's student participant pool, and 160 from Leuphana University's. The study was available in German and English for the participants recruited via the University of Groningen's participant pool. Native German speakers were asked to complete the survey in German, which 39 participants did. All participants recruited via Leuphana University's participant pool received the survey in German.<sup>2</sup>

In this between-subject design, the independent variables were moral motivation framing of the ecovillage (highly moral vs. moderately moral vs. mixed) and identification framing of the ecovillage (identification with the ecovillage vs. identification with the local region). Table 1 shows the distribution of participants across the conditions.

---

<sup>2</sup> An exploratory analysis of the results separated by language is included in Appendix A.

**Table 1***Distribution of Participants Across Conditions*

Condition	High Moral Motivation	Moderate Moral Motivation	Mixed Motivation
Identification with the Ecovillage	$n = 79$	$n = 76$	$n = 80$
Identification with the Region	$n = 80$	$n = 80$	$n = 74$

**Material and Procedure**

The study was accessed by the participants online on their own device. All materials in both languages are included in the Appendix B. Participants were welcomed to the study and informed on the procedure and data processing. The study was introduced to participants as investigating the motives for participating in an ecovillage. After consenting to the conditions, participants were asked if they had previous knowledge about ecovillages including whether they (had) lived in an ecovillage. Then, environmental self-identity was assessed.

Next, participants were asked to name the region that they live in and identify with most (e.g., neighborhood, city, municipality, county). This information was later used to personalize the manipulation of the experimental conditions to their own local region.

Participants were assigned randomly to one of the six experimental conditions. In all conditions, they were asked to read a text about the ecovillage “Ecotopia” in the region they had indicated identifying with previously. Participants were instructed to imagine this scenario vividly. Depending on the condition, the text described the ecovillage with varying levels of moral motivation and identification at different levels. Apart from variations aimed at manipulating these factors, the texts were mostly identical.

In the *high moral motivation condition*, the ecovillagers were described as on a “moral mission to protect the environment” and that they believed that it was their “moral duty to live sustainably”. In addition, their moral motivation was highlighted by stating that they “consider unsustainable practices morally wrong”, that they were vegetarian, and that they “teach and advocate” at their events.

In the *moderate moral motivation condition*, the scenario described that the ecovillagers “care about the environment”, “try to live sustainably” and “hope to contribute to protecting the environment”. Moreover, it was mentioned that the ecovillagers do so by “not eating meat” and “sharing experiences of living sustainably” at their events.

In the *mixed motivation condition*, it was stated that the ecovillagers all had different reasons for their lifestyle, as some “hope to contribute to protecting the environment” and others “want to save money”. Meat consumption and other sustainable practices were not mentioned, and it was described that the ecovillagers “share experiences of ecovillage living” at their events.

### ***Identification Manipulation***

To make the scenarios personally relevant, the name of the region that the participant had stated to identify with was mentioned several times in all texts when referring to the local region and the location of the ecovillage.

In the *local region identification condition*, the ecovillagers were presented as seeing themselves as “part of this great and unique local region”, highlighting that this was a group whose membership they valued. It was mentioned that the ecovillagers “feel strongly connected to our region and its people and want to contribute”. Additionally, the text stated that the benefits from the ecovillage’s renewable energy projects were “reinvested in the local community (...)

via a community benefit fund” and that the events were hosted for “fellow inhabitants of the region”.

In the *ecovillage identification* condition, the ecovillagers were described as seeing the ecovillage as “a great and unique community”, highlighting that this was a group whose membership they valued. It was mentioned that the ecovillagers “feel strongly connected to our ecovillage and its people and want to contribute”. In this scenario, the revenues of the energy projects went to “benefit the members of the ecovillage directly”. The people joining the ecovillage’s events were merely described as “others”.

After reading the scenario, the manipulation checks followed and, after that, the dependent variables were measured. Then, participants were asked how easily they could imagine the ecovillage from the scenario. Last, age and gender were assessed. Participants were shortly debriefed and thanked for their participation before being redirected to the study recruitment system.

### **Measures and Scale Description**

If not specified differently, items were answered on a 7-point Likert scale (1 = *completely disagree*; 7 = *completely agree*). We used the same items as Goedkoop & Jans (2023, study 4) if not specified otherwise. All descriptive statistics and correlations are depicted in Table 2. For the complete scales in both languages, see Appendix B. The scales were presented in the order as mentioned in the following, with the items of each scale in randomized order.



**Table 2***Descriptive Statistics, Reliabilities, and Correlations of the Scales*

Scale	<i>M</i>	<i>SD</i>	Reliability	1	2	3	4	5	6	7
1. Cognitive Evaluation	1.67	1.02	$\alpha = .88$	1						
2. Behavioral Evaluation	4.22	1.36	$\alpha = .92$	.41***	1					
3. Affective Evaluation	1.42	1.10	-	.48***	.43***	1				
4. Shared Identity	3.80	0.95	$\alpha = .65$	.32***	.24***	.23***	1			
5. PGBP	3.94	1.20	$\alpha = .77$	.27***	.07	.16***	.61***	1		
6. EGI	4.14	1.21	$\alpha = .90$	.19***	.22***	.15**	.47***	.38***	1	
7. Stereotypes	-1.66	1.01	$\rho = .84$	-.07	-.01	-.14**	.16***	.13**	.18***	1
Motivation Manipulation										
Morality	0.06	1.09	$\alpha = .67$							
Uniformity	0.77	1.67	-							
Pro-environmentalism	2.68	0.90	-							
Identification Manipulation										
Ecovillage	4.30	1.08	$\alpha = .51$							

Scale	<i>M</i>	<i>SD</i>	Reliability
Identification Manipulation			
Local region	4.94	1.15	$\alpha = .74$
Exploratory Variables			
ESI	4.29	1.18	$\alpha = .86$
Easiness	3.66	0.90	-

*Note.* PGBP: Perceived group boundary permeability. EGI: Environmental group identity. ESI: Environmental self-identity. For two-item scales, the Spearman-Brown coefficient was used. For single-item scales, only the descriptive statistics and correlations are reported.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

**Environmental Self-Identity.** Environmental self-identity was measured with the scale by van der Werff and colleagues (2013). This scale includes the three items “Acting environmentally-friendly is an important part of who I am”, “I am the type of person who acts environmentally-friendly”, and “I see myself as an environmentally-friendly person”. Additional items were added to obscure the purpose of the questionnaire and not included in the analysis. The reliability of the scale was acceptable (Tavakol & Dennik, 2011).

**Motivation Manipulation Check.** The effectiveness of the motivation manipulation was assessed using a 7-item bipolar rating scale ranging from -3 to 3, which was adapted and adjusted from Goedkoop and Jans (2023, study 4). Participants were asked how the ecovillagers presented themselves in the scenario. The scale consisted of pairs of descriptions separated into three subscales. The first subscale concerned the moral motivation of the ecovillagers and consisted of four items (e.g., “not morally motivated/morally motivated”), the second subscale measured how uniformly the motivation of the ecovillagers was perceived and consisted of two items (“divided/unanimous” and “diverse in motivations/similar in motivations”), of which only the latter was used in the final analysis. The last subscale consisted of a single item that measured the perceived pro-environmental motivation of the ecovillagers (“environmentally unfriendly/environmentally friendly”).

The reliability of the morality subscale was only slightly below acceptable (Tavakol & Dennik, 2011), but the reliability of the uniformity subscale was very low ( $\rho = .26$ ). Therefore, only one of the two items was used for the manipulation check of uniformity was used. The item that was chosen was “diverse in motivations/similar in motivations”, as it captures the diversity in motivations in the *mixed motivations* conditions more accurately.

**Identification of the Ecovillage Manipulation Check.** The identification manipulation check consisted of six items adapted and adjusted from study 4 and 5 by Goedkoop and Jans (2023). The scale assessed how the participants perceived the identification and benefit sharing of the ecovillage. This scale was divided into two subscales. The first one measured the identification of the ecovillagers with the local region with three items (e.g., “The residents of the ecovillage perceive themselves as part of my region”) and the second one measured identification with the ecovillage (e.g., “Only the members of Ecotopia can benefit from the projects of the ecovillage”).

The reliability of the scale measuring identification with the local region was acceptable, while the reliability of the scale measuring identification with the ecovillage was below acceptable (Tavakol & Dennik, 2011). This was unexpected, as both scales use very similar items to measure similar constructs. Deleting any of the items of the ecovillage identification scale did not yield an acceptable reliability. Therefore, exploratory analyses were conducted with each item separately to clarify the effect of the manipulation.

**Cognitive Evaluation of the Ecovillage.** Cognitive evaluation of the ecovillage was measured using three items of the scale by Liu and colleagues (2020). Participants were asked to rate the ecovillage on the dimensions “very unacceptable/very acceptable”, “very negative/very positive”, and “very bad/very good” on a bipolar scale ranging from -3 to 3. The reliability of the scale was acceptable (Tavakol & Dennik, 2011).

**Behavioral Evaluation of the Ecovillage.** Behavioral evaluation of the ecovillage was measured using a 6-item scale. This scale includes various statements ranging from very low effort (“I want to learn more about the ecovillage”) to very high engagement (“I want to live in the ecovillage”). The reliability of the scale was acceptable (Tavakol & Dennik, 2011).

**Affective Evaluation of the Ecovillagers.** A single item scale was used to measure the affective evaluation of the ecovillagers. This item was adapted from Parker and Janoff-Bulman's feeling thermometer (2013) and asks the participants how they would perceive the members of Ecotopia. Responses were given on a bipolar rating scale ranging from -3 (very cold) to 3 (very warm).

**Perceived Shared Identity.** The scale for shared identity consisted of three items. An example item is “The members of the ecovillage and the inhabitants of my region belong to the same group”. The reliability of this scale was slightly below acceptable (Tavakol & Dennik, 2011). As the items of this scale were worded quite similarly to the items of the perceived group boundary permeability measure, a factor analysis was already planned in the pre-registration. The results showed that a model with a single factor for the items of both scales fit the data significantly better ( $\chi^2_{diff}(1) = 22.016, p < .001$ ). The combined scale had a reliability of  $\alpha = .81$ , which is well within the acceptable range (Tavakol & Dennik, 2011). The results of both the separate scales and the combined scale will be reported in the results section.

**Perceived Group Boundary Permeability.** Perceived group boundary permeability was measured using the *objective constraint* subscale of the membership permeability scale by Armenta and colleagues (2017). An example item is “The inhabitants of my local region and the members of Ecotopia are worlds apart”. Items were recoded so that higher scores indicate higher group boundary permeability. The reliability of the scale was acceptable (Tavakol & Dennik, 2011).

**Environmental Group Identity.** Environmental group identity was measured on a 3-item scale adapted from van der Werff and colleagues (2013). One example item is “We, as a

local region, see ourselves as environmentally friendly people”. The reliability of the scale was acceptable (Tavakol & Dennik, 2011).

**Ingroup vs. Outgroup Stereotypes.** To measure stereotypes regarding the in- and outgroup, the scale by Rabinovich et al. (2012) was adapted. Participants were asked to indicate if each of the two descriptions, “caring for the environment” and “living a sustainable lifestyle”, was more applicable to members of Ecotopia or to non-members. The response scale ranged from -3 (only members of Ecotopia) to 3 (only non-members). Additional items were added to obscure the purpose of the questionnaire and not included in the analysis. The reliability of the scale was acceptable (Tavakol & Dennik, 2011).

**Easiness of Imagining the Ecovillage.** The easiness of imagining the ecovillage was measured on a 5-point scale (1 = very hard; 5 = very easy).

## Results

### Manipulation Checks

To assess whether the experimental manipulations were successful, a repeated measures ANOVA was conducted for each experimental factor with the experimental manipulation as the between-subject factor and the subscales of the manipulation check scale as the within-subject factor.

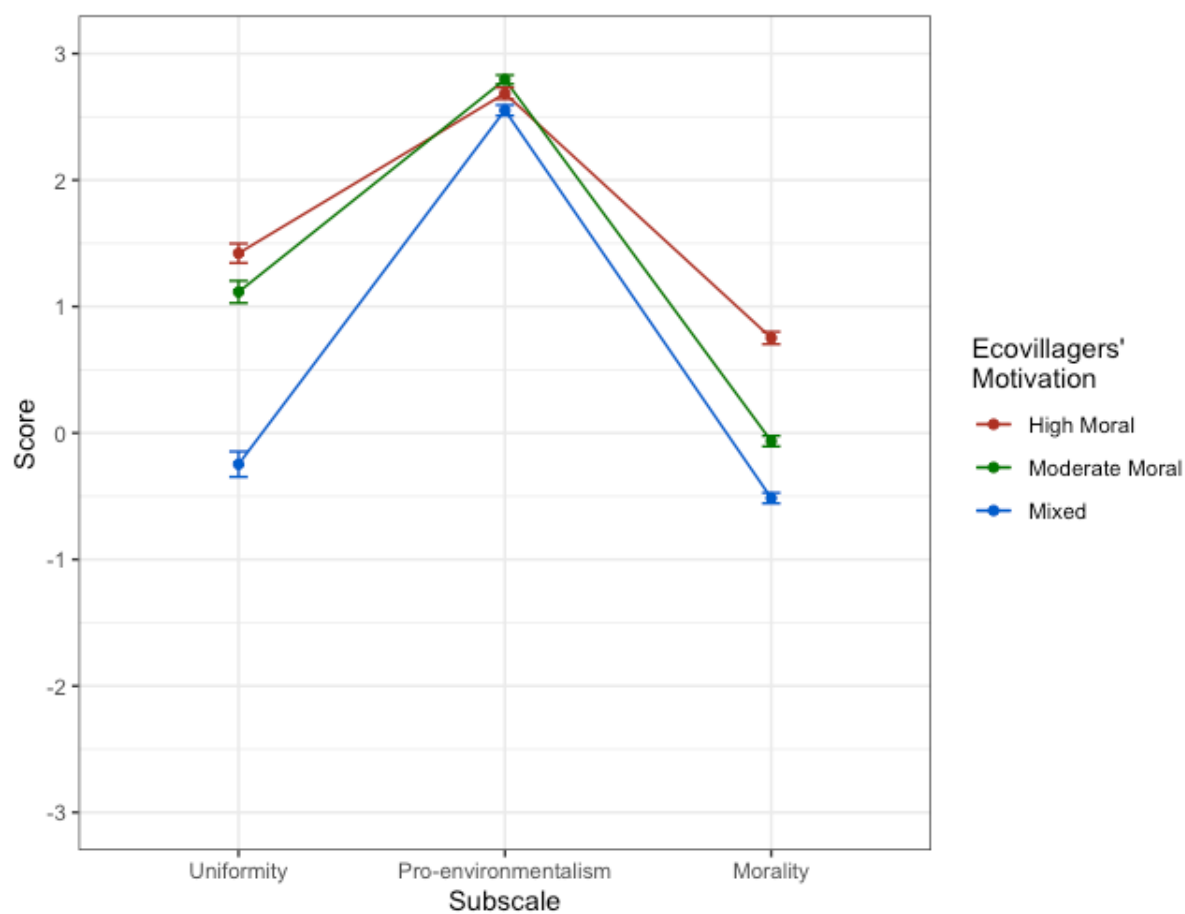
### *Motivation Manipulation*

The results of the motivation manipulation check are depicted in Figure 1. For the motivation manipulation there was a main effect of the manipulation ( $F(2, 466) = 55.24, p < .001, \eta^2 = .091$ ) a main effect of the subscale ( $F(2, 932) = 548.28, p < .001, \eta^2 = .404$ ) and an interaction effect between manipulation and subscale ( $F(4, 932) = 20.01, p < .001, \eta^2 = .047$ ).

Pairwise comparisons with Bonferroni correction showed that, as intended, the high moral motivation manipulation increased perceptions of moral motivation compared to the moderate moral motivation condition ( $t(466) = 7.54, p < .001$ ) and the mixed motivation condition ( $t(466) = 11.70, p < .001$ ). The manipulation also resulted in a higher perception of moral motivation in the moderate moral motivation condition than in the mixed motivation condition ( $t(466) = 4.13, p < .001$ ).

**Figure 1**

*Results of the Motivation Manipulation Check*



*Note.* Error bars represent standard errors.

As expected, participants in the mixed motivation condition perceived the motivations of the ecovillagers to be less uniform than those in the high moral ( $t(466) = 7.67, p < .001$ ) and moderate moral motivation condition ( $t(466) = 6.24, p < .001$ ). There was no significant difference in perceived uniformity of motivations between the high and moderate moral motivation conditions ( $t(466) = 1.41, p = .467$ ).

The perceived pro-environmentalism of the ecovillagers was the same in all conditions, as there were not any differences in perceived pro-environmentalism of the ecovillagers between the high and moderate moral motivation condition ( $t(466) = -1.08, p = .842$ ) between the high moral and mixed motivation condition ( $t(466) = 1.32, p = .567$ ) or between the moderate moral and mixed motivation condition ( $t(466) = 2.38, p = .053$ ). However, this should not cause any issues in the further analysis, as the important aspect about high moral motivations is not the high degree of pro-environmentalism, but rather the moral superiority and judgment of others, which is captured by the morality subscale of the manipulation check and shows clear differences between the high moral motivation condition and the other two. Thus, the manipulation of the ecovillagers' motivation was successful.

### ***Identification Manipulation***

For the identification manipulation, there was no main effect of the manipulation ( $F(1, 467) = 1.51, p = .220, \eta^2 = .001$ ), but a main effect of the subscales ( $F(1, 467) = 61.74, p < .001, \eta^2 = .086$ ) and an interaction effect ( $F(1, 467) = 77.90, p < .001, \eta^2 = .106$ ).

Unexpectedly, there was no difference between the scores on the ecovillage identification scale ( $M = 4.62, SD = 0.97$ ) and the local identification scale ( $M = 4.55, SD = 1.11, t(233) = 0.74, p = .461$ ) when the ecovillagers were portrayed as identifying with the ecovillage. As the scale used to measure the perceived identification of the ecovillagers with the ecovillage was low



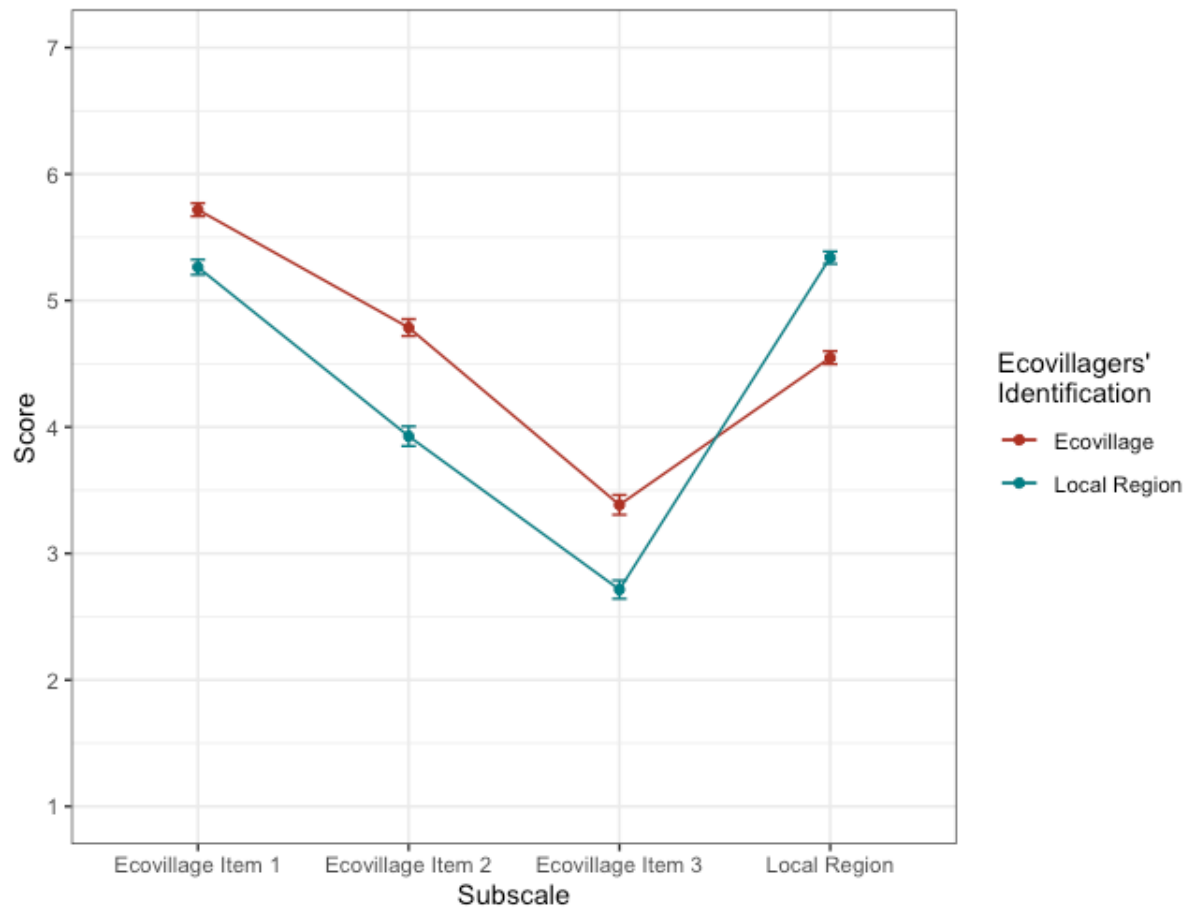
in reliability, additional exploratory analyses with each item separately were conducted. A repeated measures ANOVA showed a main effect of the manipulation ( $F(1, 467) = 20.93, p < .001, \eta^2 = .011$ ), a main effect of the subscales ( $F(3, 1401) = 267.32, p < .001, \eta^2 = .299$ ), and an interaction effect ( $F(3, 1401) = 33.67, p < .001, \eta^2 = .051$ ). Participants in the ecovillage identification condition gave higher ratings on all three items of the ecovillage manipulation check (“The residents of the ecovillage see themselves as a unique group.”, “The residents of the eco-village seem to identify only with their eco-village.”, “Only the members of Ecotopia benefit from the projects of the ecovillage.”) than those in the local identification groups ( $t(467) = 4.07, p < .001$ ;  $t(467) = 5.92, p < .001$ ;  $t(467) = 4.44, p < .001$ ), as depicted in Figure 2.

As intended, participants in the local identification condition perceived the ecovillagers as more connected to the local region than those in the ecovillage identification condition ( $t(467) = -7.89, p < .001$ ). Overall, the manipulation of the ecovillagers’ identification worked as expected.

Finally, a two-way MANOVA was conducted with both experimental factors as the independent variables and all manipulation check subscales as outcome variables. The results confirm the previous analyses and show that there was no interaction between one experimental manipulation and the other’s subscales (see Table 3). In conclusion, the experimental manipulations worked as intended in creating different perceptions of the ecovillagers on all relevant outcomes across the experimental conditions.

**Figure 2**

*Results of the Identification Manipulation Check*



*Note.* Error bars represent standard errors.

**Table 3***Univariate MANOVA Results of the Manipulation Checks*

Factor	Outcome	<i>F</i>	<i>p</i>	$\eta_p^2$
Motivation Manipulation	Motivation Subscales			
	Morality	69.81	< .001	.230
	Uniformity	33.02	< .001	.120
	Pro-environmentalism	2.83	.060	.010
	Identification Subscales			
	Ecovillage item 1	0.11	.893	< .001
	Ecovillage item 2	1.11	.329	.005
	Ecovillage item 2	0.09	.918	< .001
	Local region	0.14	.872	.001
	Identification Manipulation	Motivation Subscales		
Morality		0.13	.725	< .001
Uniformity		0.07	.786	< .001
Pro-environmentalism		0.48	.491	.001
Identification Subscales				
Ecovillage item 1		16.34	< .001	.030
Ecovillage item 2		34.68	< .001	.070
Ecovillage item 2		19.80	< .001	.040
Local region		62.24	< .001	.120
Motivation * Identification		Motivation Subscales		
	Morality	0.18	.832	.001

Factor	Outcome	<i>F</i>	<i>p</i>	$\eta_p^2$
Motivation * Identification	Motivation Subscales			
	Uniformity	0.44	.645	.002
	Pro-environmentalism	0.09	.913	< .001
	Identification Subscales			
	Ecovillage item 1	0.45	.637	.002
	Ecovillage item 2	0.65	.521	.003
	Local region	2.54	.080	.010

### Assumption Testing

Before the main analysis, the assumptions of MANOVA were tested. The preconditions of no multicollinearity, homogeneity of error variances, linearity, and homogeneity of covariances were met. The assumption of multivariate normality was violated, but MANOVA is quite robust against violations of this assumption (Finch, 2005). A more detailed account of the assumption tests can be found in Appendix C.

### Hypothesis Testing

To examine the overall effect of the ecovillagers' motivation and identification on the dependent variables, a 3x2 MANOVA was conducted. This was followed by univariate ANOVAs for each dependent variable (see Table 4). Significant effects of motivation were followed up by planned contrasts, as indicated by the hypotheses. A table with all means and standard deviations across conditions can be found in Appendix D.

**Table 4***Univariate MANOVA Results*

Factor	Dependent Variable	<i>F</i>	<i>p</i>	$\eta_p^2$
Motivation	Behavioral evaluation	0.13	.880	.001
	Cognitive evaluation	3.43	.033	.010
	Affective evaluation	9.29	<.001	.040
	Shared identity	0.49	.612	.002
	PGBP	1.11	.332	.005
	Environmental group identity	0.33	.719	.001
	Stereotypes	1.61	.201	.007
Identification	Behavioral evaluation	6.65	.010	.010
	Cognitive evaluation	4.63	.032	.010
	Affective evaluation	4.30	.039	.009
	Shared identity	7.97	.005	.020
	PGBP	1.87	.172	.004
	Environmental group identity	3.24	.072	.007
	Stereotypes	1.23	.268	.003
Motivation * Identification	Behavioral evaluation	0.12	.889	.001
	Cognitive evaluation	0.13	.880	.001
	Affective evaluation	0.25	.777	.001
	Shared identity	2.66	.071	.010
	PGBP	0.98	.376	.004
	Environmental group identity	4.70	.010	.020

Factor	Dependent Variable	<i>F</i>	<i>p</i>	$\eta_p^2$
Motivation * Identification	Stereotypes	1.11	.332	.005

*Note.* PGBP: Perceived group boundary permeability. An analysis of the combined scale of shared identity and perceived group boundary permeability also showed a significant main effect of identification ( $F(1, 463) = 5.01, p = .026, \eta_p^2 = .010$ ). There was no main effect of motivation ( $F(2, 463) = 1.00, p = .370, \eta_p^2 = .004$ ) and no interaction effect ( $F(2, 463) = 2.01, p = .135, \eta_p^2 = .008$ ).

### The Effects of Motivation and Identification on the Evaluation of the Ecovillage

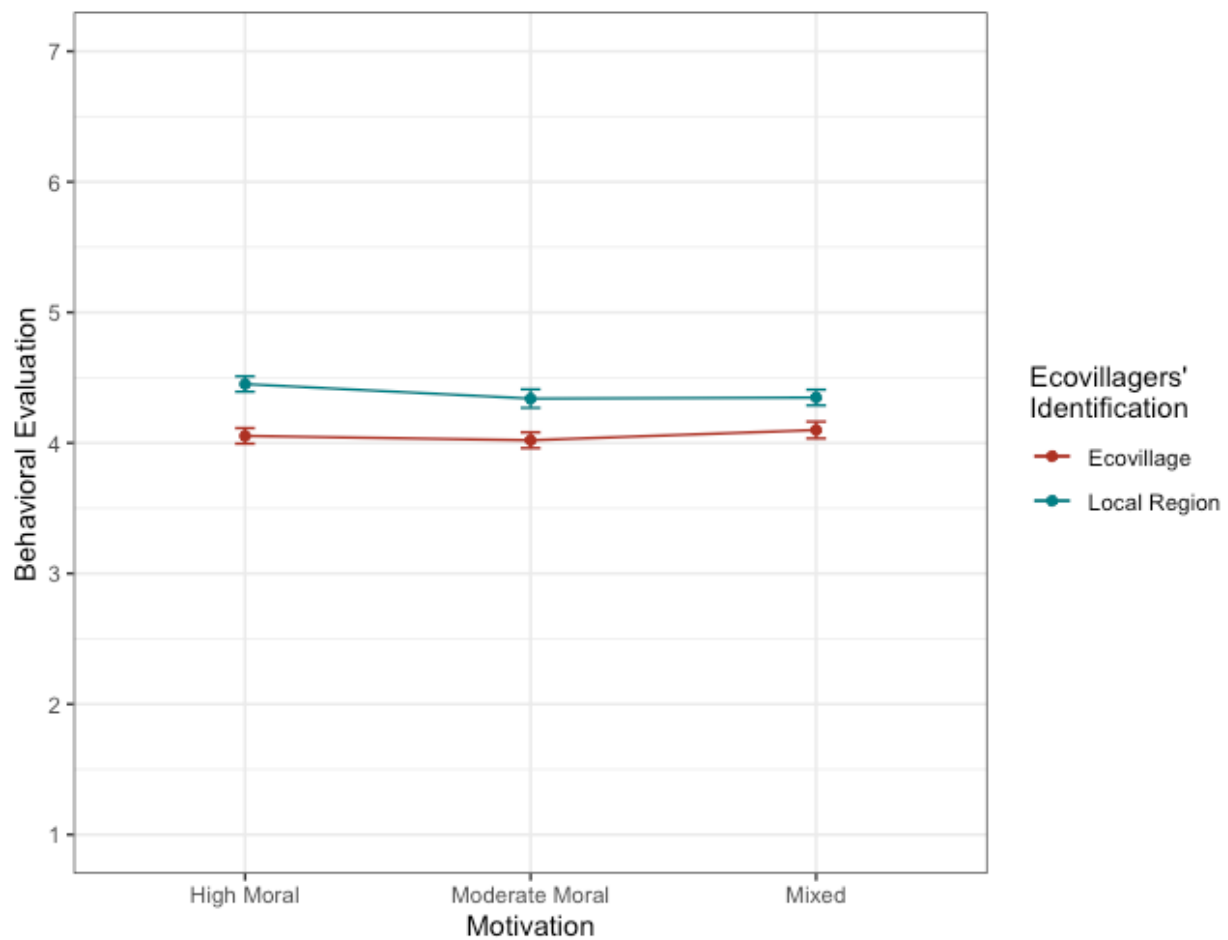
Against our expectations (H1 a)), behavioral evaluation of the ecovillage was not affected by the ecovillagers' motivation (see Figure 3). Nevertheless, the ecovillagers' motivation had a significant effect on the cognitive evaluation of the ecovillage (see Figure 4) and the affective evaluation of the ecovillagers (see Figure 5). These results were followed up by planned contrasts, as indicated by the hypotheses. As expected, highly morally motivated ecovillagers (vs. moderately morally motivated and those with mixed motivations: C1) were cognitively ( $t(463) = 1.967, p = .049, \Delta M = -0.26$ ) and affectively ( $t(463) = 3.135, p = .002, \Delta M = -0.44$ ) evaluated less favorably. This is in line with H1 b) and c). Ecovillages with moderate moral motivation and mixed motivation (C2) did not differ in cognitive evaluation ( $t(463) = 0.504, p = .615, \Delta M = -0.03$ ) nor in affective evaluation ( $t(463) = 1.186, p = .236, \Delta M = -0.13$ ). No differences were hypothesized, as this comparison was merely exploratory.

The identification of the ecovillagers with the local region ( $M = 4.38, SD = 1.37$ ) did significantly increase participants' behavioral evaluation ( $M = 4.06, SD = 1.33$ ), cognitive evaluation ( $M = 1.77, SD = 1.04$ ), and affective evaluation ( $M = 1.53, SD = 1.07$ ) of the

ecovillage compared to identification with just the ecovillage, in line with H2 a), b) and e). The effect of the ecovillagers' identification was independent of their moral motivation, as there was no interaction effect. This means that the negative effect of high moral motivation on the cognitive and affective evaluation of the ecovillage was not mitigated by identification with the local region, which goes against what was predicted in H3. Therefore, H3 was rejected in the case of behavioral, cognitive, and affective evaluation.

**Figure 3**

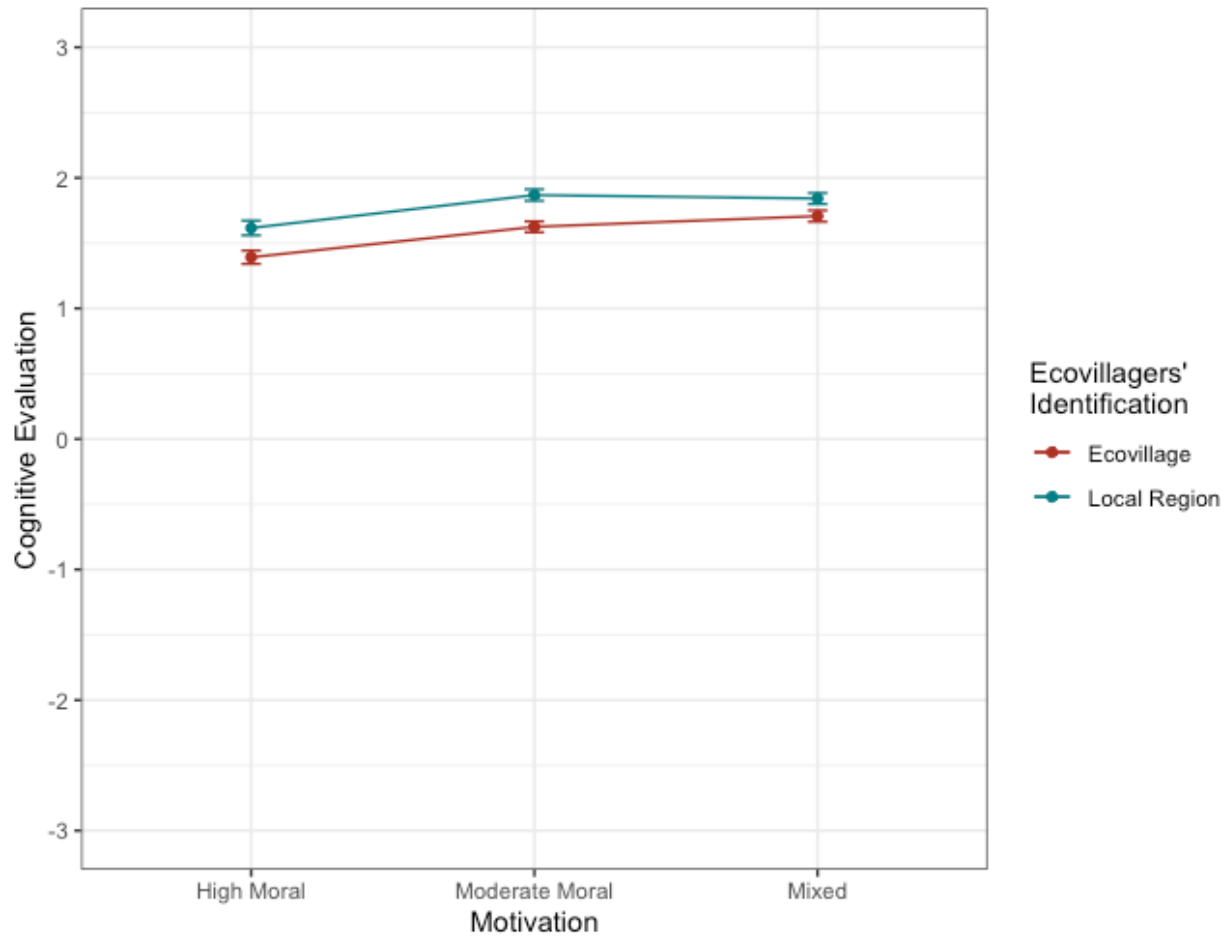
*Effects of Motivation and Identification on the Behavioral Evaluation of the Ecovillage*



*Note.* Error bars represent standard errors.

**Figure 4**

*Effects of Motivation and Identification on the Cognitive Evaluation of the Ecovillage*

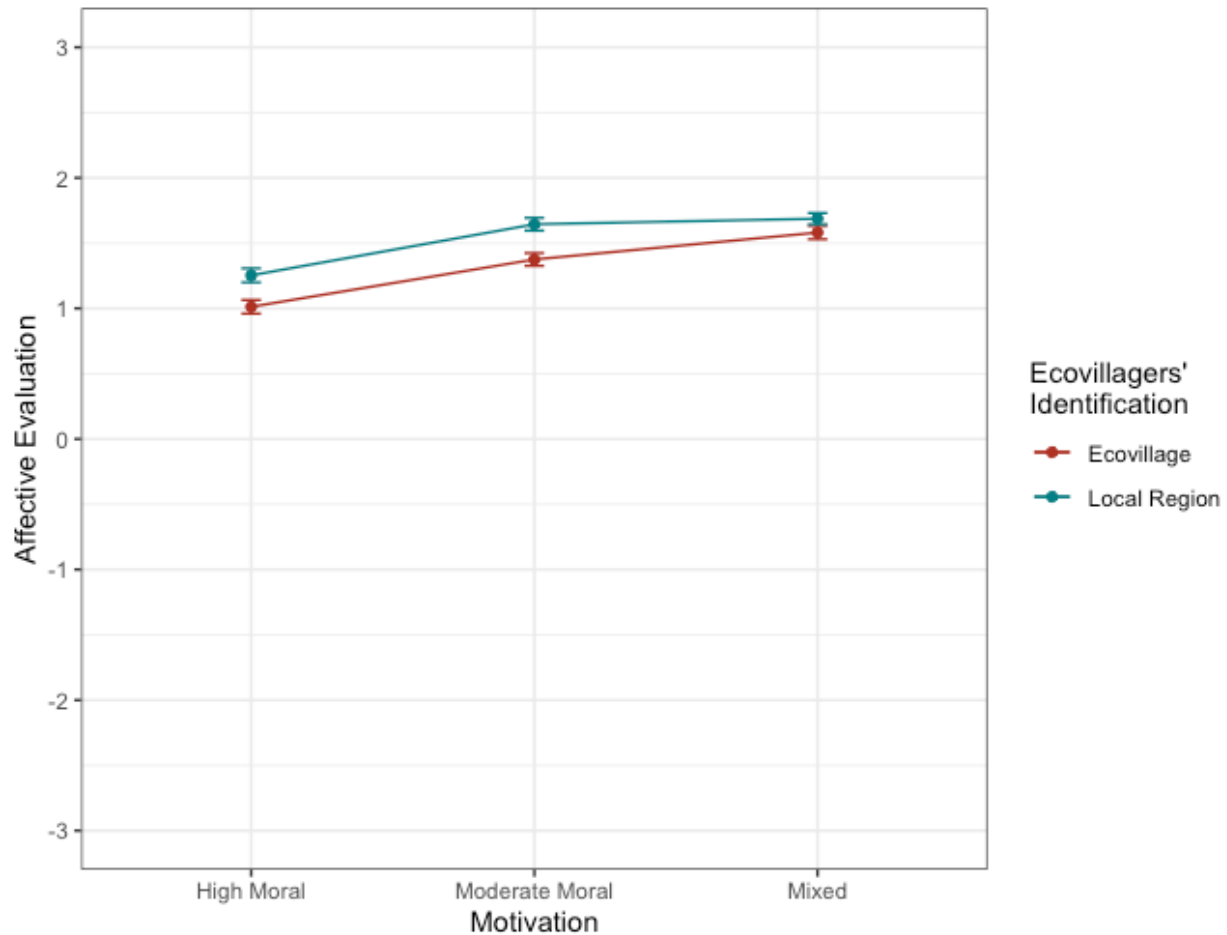


*Note.* Error bars represent standard errors.



**Figure 5**

*Effects of Motivation and Identification on the Affective Evaluation of the Ecovillagers*



*Note.* Error bars represent standard errors.

### **The Effects of Motivation and Identification on the Perception of Separate Groups**

Unexpectedly, neither shared identity nor perceived group boundary permeability were affected by the motivation of the ecovillagers, which contradicts H1 d) and e).

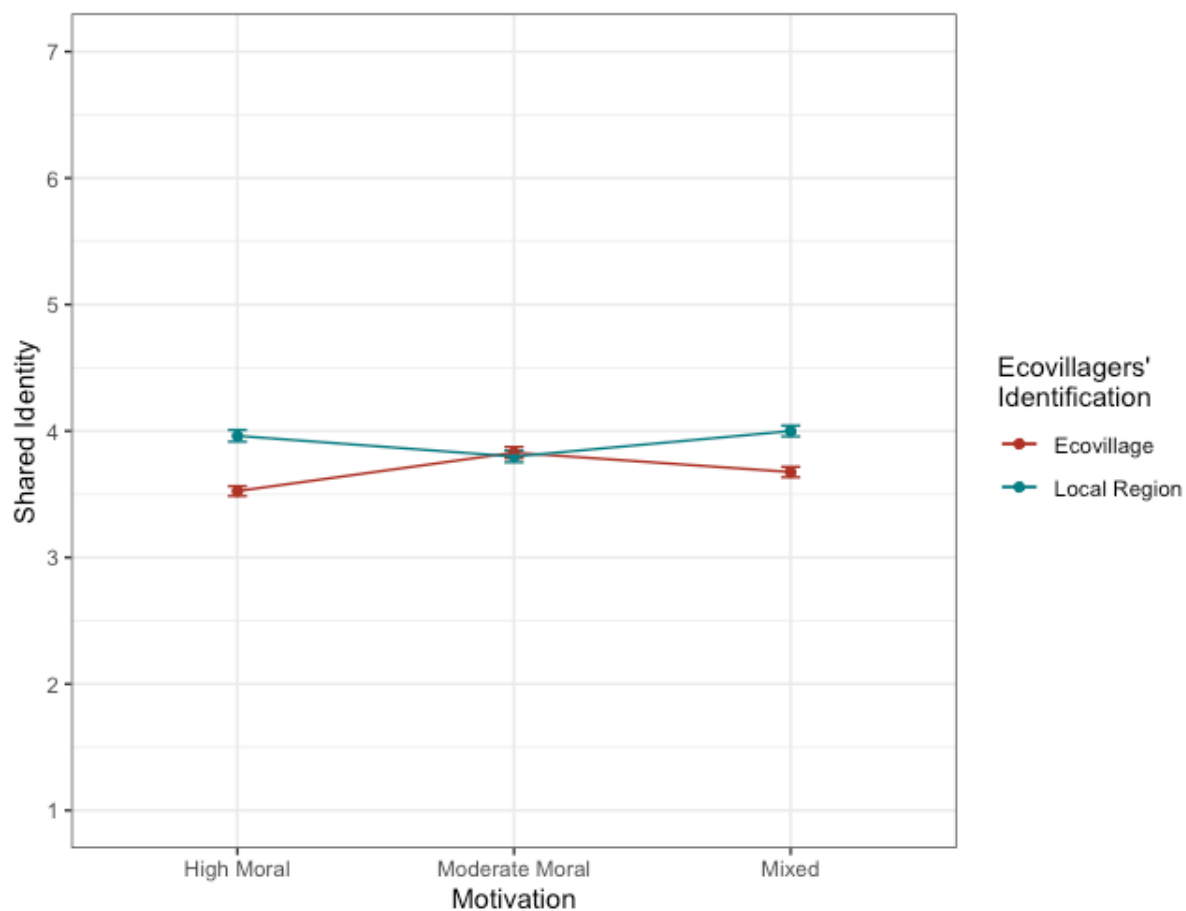
Yet, the identification of the ecovillagers with the local region led to higher perceptions of shared identity ( $M = 3.92$ ,  $SD = 0.97$ ) compared to identification with the ecovillage ( $M = 3.68$ ,  $SD = 0.90$ ). This effect is in line with H2 c) and is depicted in Figure 6. The identification of the

ecovillagers had no effect on perceived group boundary permeability, see Table 5. This was unexpected, as we predicted a positive effect of identification with the local region (H2 d)).

H3 was rejected for both of the two outcome variables, as there was no interaction effect of the ecovillagers' motivation and identification.

**Figure 6**

*Effects of Motivation and Identification on Shared Identity*



*Note.* Error bars represent standard errors.

**Table 5**

*Means and Standard Deviations of Perceived Group Boundary Permeability and Stereotypes Across the Conditions*

Condition	PGBP	Stereotypes
Identification with the Local Region		
High Moral Motivation	3.97 (1.36)	-1.53 (1.13)
Moderate Moral Motivation	3.95 (1.21)	-1.81 (0.88)
Mixed Motivation	4.12 (1.07)	-1.48 (1.10)
Identification with the Ecovillage		
High Moral Motivation	3.68 (1.23)	-1.76 (0.95)
Moderate Moral Motivation	4.01 (1.15)	-1.72 (0.93)
Mixed Motivation	3.89 (1.13)	-1.65 (1.02)

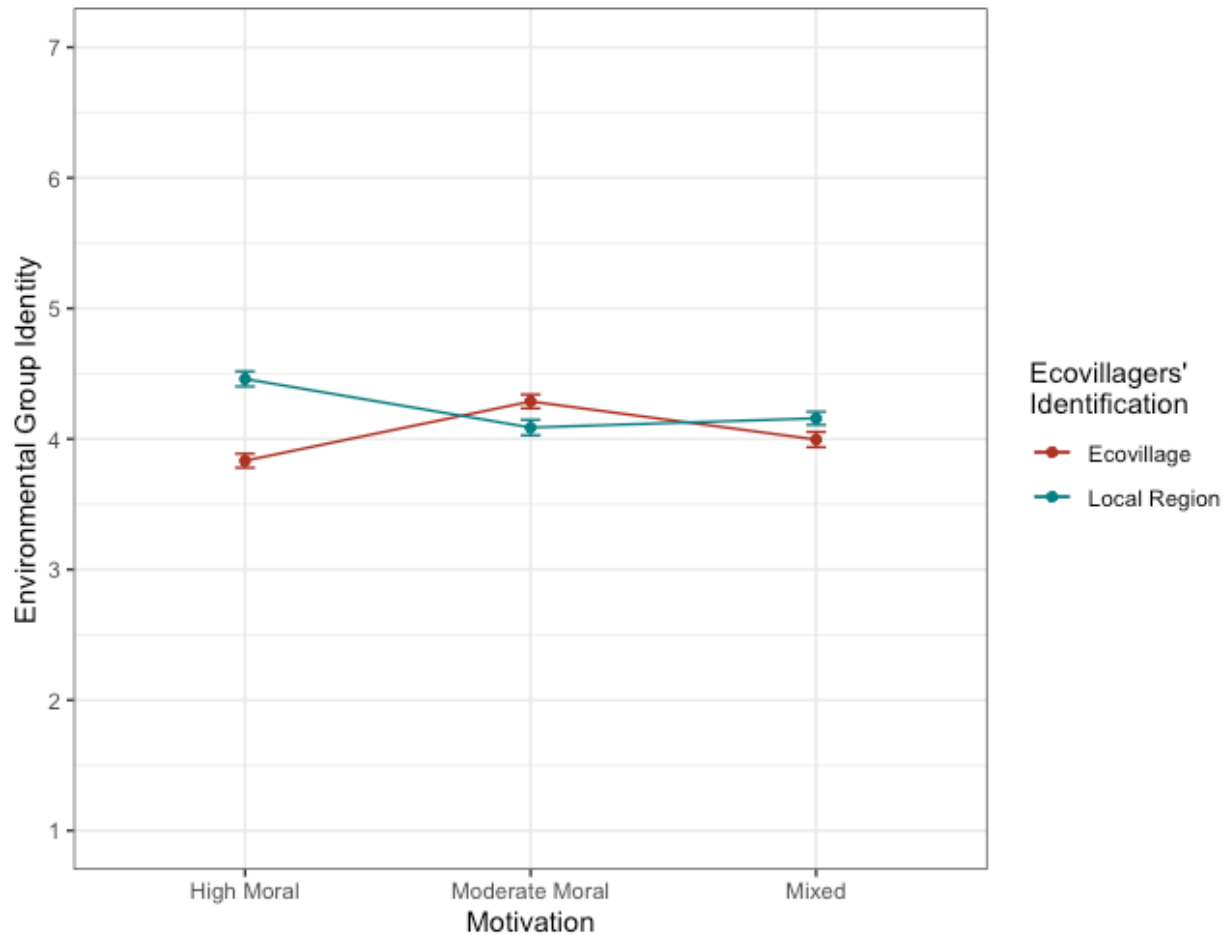
*Note.* PGBP: Perceived group boundary permeability. Standard deviation in brackets.

### **The Effects of Motivation and Identification on Pro-Environmental Group Perceptions**

Neither environmental group identity (see Figure 7) nor the ascription of group stereotypes (see Table 5) were influenced by the ecovillagers' motivation, which goes against the predictions of H1 f) and g). The exploratory analysis of the effects of the ecovillagers' identification on the two outcome variables showed that there was also no effect on either of them.

**Figure 7**

*Interaction Effect of Motivation and Identification on Environmental Group Identity*



*Note.* Error bars represent standard errors.

However, there was an interaction effect of motivation and identification on environmental group identity. A pairwise comparison with Bonferroni correction was conducted to clarify the effects. When the ecovillagers were highly morally motivated, the effects of that motivation depended on which group the ecovillagers identified with. When the ecovillagers identified with the local region, participants reported a significantly higher environmental group identity than when the ecovillagers identified only with the ecovillage ( $t(463) = 3.29, p = .016$ ),

see Figure 7. This is in line with the interaction effect predicted in H3 in the case of environmental group identity.

### **Exploratory Analysis of Environmental Self-Identity**

Linear regression analyses showed that the effects of the experimental factors were not moderated by environmental self-identity, as there were no significant interaction terms (all respective  $p$ -values  $> .05$ ).

### **Discussion**

The aim of this study was to examine how ecovillages can present themselves in order to be more accepted by the non-ecovillager majority and in turn motivate participation in the initiative. Overall, the results show that high moral motivation can negatively affect the cognitive and affective evaluation of ecovillages. Moreover, the results highlight the potential of stressing the ecovillagers' identification with the local region for improving the cognitive, affective, and behavioral evaluation of ecovillages as well as creating a sense of shared identity, which are all relevant for increasing their impact.

In line with H1b) and c), it was shown that perceived high moral motivation negatively affects cognitive and affective evaluation of the ecovillage compared to moderate moral motivation and mixed motivation. Unexpectedly, the motivation of the ecovillagers had no influence on behavioral evaluation (H1 a)). When the ecovillagers were portrayed as identifying with the local region, they were evaluated higher than when they were described as identifying only with the ecovillage. This is in line with our expectations (H2 a), b), and e)). Unexpectedly, there were no interaction effects of motivation and identification. This means that H3 was rejected for these outcome variables.

Contrary to what was expected, the perceived motivation of the ecovillagers had no influence on the perception of separate groups (H1 d) and e)). The exploratory analysis showed that moderate moral motivation and mixed motivation of the ecovillagers also did not cause any differences for both outcome variables.

As expected, higher levels of shared identity were reported when participants read the text describing the ecovillagers as identifying with the local region compared to the text framing them as identifying only with the ecovillage itself (H2 c)). Against the predictions of H2 d), the identification of the ecovillagers with the local region did not increase perceived group boundary permeability compared to identification with only the ecovillage. There were no interaction effects between the ecovillagers' motivation and identification on the perception of a shared identity and perceived group boundary permeability, which is contrary to what we hypothesized (H3).

Against our expectations, portraying the ecovillagers as highly morally motivated did neither directly influence group stereotypes (H1 f)) nor environmental group identity (H1 g)). The exploratory results showed no differences in either outcome variable between moderately morally motivated ecovillagers and those with mixed motivations. Exploratory analyses also showed that the identification of the ecovillagers also did not affect environmental group identity or perceived group stereotypes either.

Unexpectedly, no interaction effect between the ecovillagers' motivation and identification was found on group stereotypes, which means that H3 was rejected for this variable. However, in line with what was expected, there was an interaction effect of motivation and identification on environmental group identity. When the ecovillagers were highly morally motivated, the level of environmental group identity depended on which group the ecovillagers

identified with. When the ecovillagers identified with the local region, participants reported a significantly higher environmental group identity than when the ecovillagers identified only with the ecovillage. This interaction confirms our expectation that the negative effect of high moral motivation on environmental group identity can be mitigated by highlighting the ecovillagers' identification with the local region, which is in line with H3 in the case of environmental group identity.

An exploratory analysis of the effects of environmental self-identity showed that environmental self-identity did not moderate the effects of the ecovillagers' motivation and identification.

### **The Effects of Motivation and Identification on the Evaluation of the Ecovillage**

Our findings replicate the do-gooder derogation effect (Minson & Monin, 2012), i.e. high moral motivation resulting in lower cognitive and affective evaluation of the group. This effect is in line with the previous study by Goedkoop and Jans (2023, study 4) and confirms that the mechanism of do-gooder derogation extends beyond vegetarianism and veganism in the environmental domain. However, our findings also indicate that further research is needed to explore how varying degrees of moral motivation affect the perception of environmental groups and at which point the effects become negative.

It should be noted that, even when the ecovillagers were highly morally motivated, the ratings of cognitive and affective evaluation were well above the midpoint of the respective scales. This means that the ecovillage was not outright rejected, but rather less highly evaluated than the moderately morally motivated ecovillage and the one with mixed motivations. This is similar to the findings of some previous studies (Bolderdijk et al., 2018; Goedkoop & Jans, 2023, study 4), while earlier studies report a much more pronounced derogation effect (Minson &

Monin, 2012; Monin, 2008). In addition, do-gooder derogation regarding the behavioral evaluation of ecovillages was not found in the current study, but was previously reported (Goedkoop & Jans, 2023, study 4).

Highlighting the ecovillagers' identification with the local region increased the ecovillage's cognitive and affective evaluation, which is in line with the previous report of the effects of benefit sharing (Goedkoop & Jans, 2023, study 5) but contrary to the prior report of the effects of identification with the local region (Goedkoop & Jans, 2023, study 4). Additionally, the behavioral evaluation of the ecovillage was positively affected by local identification. As the manipulation of the ecovillagers' identification had not been successful in the previous study (Goedkoop and Jans, 2023, study 4) the present results may be more reliable and insightful about the effects of identification. By highlighting the identification with the local region, even the evaluation of the highly morally motivated ecovillagers was improved and thus some of the negative effects of being overly moral could be mitigated. These findings showcase the important role of social identity for the impact of environmental minority groups and confirm the positive effect of highlighting a common overarching social identity in the context of environmental groups (Gaertner & Dovidio, 2000; Loy et al., 2022; Milfont et al., 2020). Our results also indicate that the perception and evaluation of practice-based minority groups differs based on their perceived integration with more accepted groups, adding some nuance to Kurz and colleagues' (2020) pessimistic outlook on these minority groups' potential to spark change. Additionally, these findings confirm that participation in environmental groups is driven by communal motives (Sloot et al., 2018; Goedkoop et al., 2022).



## **The Effects of Motivation and Identification on the Perception of Shared or Separate Groups**

The previously reported negative effect of high moral motivation on the perception of shared identity with the ecovillage (Goedkoop & Jans, 2023, study 4) was not found in the current study. The ecovillagers' motivation also did not affect perceived group boundary permeability. These findings are surprising, as low perceived group boundary permeability due to high moral standards is the proposed process (Kurz et al., 2020) as an explanation for the do-gooder derogation effect from a group-level perspective, which should be related to the perception of a shared identity with the ecovillagers. The ecovillagers' identification with the local region positively influenced shared identity, which is in line with previous findings (Goedkoop & Jans, 2023, study 4), but, unexpectedly, did not affect perceived group boundary permeability.

On the one hand, the reason for the lack of effects regarding perceived group boundary permeability may be that moral motivations and subsequent standards of a practice-based minority group do not affect the perception of group boundary permeability and that do-gooder derogation takes place on a more individual level. On the other hand, an explanation for our results could be that the questionnaire used to measure perceived group boundary permeability had been designed with other groups in mind (Armenta et al., 2017). More specifically, the groups for which the questionnaire was designed were from the so-called *intergroup competition context* (Wright, 2009). These are groups based on attributes which one physically cannot or only very hardly change (e.g., gender, class, ethnicity), and the group's goal is solidarity and unity against the outgroup. Environmental minority groups, however, exist in a *conversionary collective action context*, in which group membership is not physically determined and the goal

is gaining new members. Group boundaries may be perceived differently depending on the context, which is why a measure which takes the conversionary collective action context into consideration may have been the better choice. However, no such measure exists yet. Therefore, perceived group boundary permeability should not be completely disregarded as a process variable of the do-gooder derogation effect in the context of practice-based environmental minority groups until it has been assessed with the appropriate tools.

Another issue was the low reliability of the shared identity scale. The results of a confirmatory factor analysis show that the items of the scales used to measure shared identity and perceived group boundary permeability can be better explained by a single-factor model. This means that, from a test theoretical perspective, they appear to measure the same construct. It remains unclear, which construct that is: shared identity, perceived group boundary permeability, a combination of both, or something completely different? As mentioned before, the scale for measuring perceived group boundary permeability may have failed to capture perceived group boundary permeability in the specific group context, which makes it unlikely that the combined scale was successful at doing so. Looking at the items, they all relate to perceived similarities of the ecovillagers and the inhabitants of the local region, which in combination with very similar results of the analyses using shared identity and the combined scale as outcome variable, suggests that shared identity was the construct measured by the combined scale. Nevertheless, this is merely an assumption and should be clarified by future research. Moreover, the pattern of results stayed the same as for the initial shared identity scale, meaning that there was no do-gooder derogation effect on the combined measure, in contrast to what was expected. This indicates that the influence of overly high moral motivation might be not as detrimental for the perception of separate or shared groups as previously theorized (Kurz et al., 2020).

## **The Effects of Motivation and Identification on the Perceived Environmentalism of the In- and Outgroup**

The results of the manipulation check of the motivation manipulation indicates that the ecovillage was generally perceived as very environmentally friendly in all conditions. This could explain why there was no effect of the motivation manipulation on group stereotypes. The items of the stereotype measure were both closely related to being environmentally friendly, or pro-environmentally motivated. Participants rated these descriptions to be better fitting as a description of the members of the ecovillage than of non-members in all conditions. Resulting from this observation, there are two explanations for the lack of effects of the ecovillagers' motivation on perceived pro-environmental stereotypes.

For one, the perceived pro-environmentalism of the ecovillagers may have been so strong in all conditions, that, regardless of the perceived morality of the ecovillagers, the ecovillagers were clearly seen as the more pro-environmental group. The upward comparison of the non-members with the members of the ecovillage may thus then have resulted in a lower rating of the non-members pro-environmentalism, as reported by Rabinovich and colleagues (2012). On the bipolar rating scale for group stereotypes, these perceptions then would manifest as the description being more applicable to the ecovillagers.

Alternatively, the perception of non-members' pro-environmentalism may have been affected by either the motivation of the ecovillagers or their identification with the local region, but perceptions of the pro-environmentalism of the ecovillagers was constantly even higher in all conditions. On the bipolar rating scale, participants then still would have indicated that the description applied more to the members of the ecovillagers, obscuring the perceived changes in the pro-environmentalism of non-members. Therefore, a separate measure for each group, as in

the original study (Rabinovich et al., 2012), may have been the better choice to assess whether the stereotypes regarding the non-members of the ecovillage differ across conditions.

The results regarding environmental group identity of the inhabitants of the local region provide a hint that the perception of the inhabitants of the local region was in fact affected by the framing of the ecovillage. The interaction effect of motivation and identification on environmental group identity highlights the importance of considering social identity for environmental minorities. Generally, the identification of the ecovillagers did not affect environmental group identity, except when the ecovillagers were highly morally motivated. In this case, when the ecovillagers' focus was entirely on themselves, the reported environmental group identity of the inhabitants of the local region was lower than when the ecovillagers' were framed as seeing themselves as part of the local region. This indicates that, on the one hand, high moral motivation can discourage people who are not members of an ecovillage and lead to lower perceived environmental identity of their ingroup. However, on the other hand, when the ecovillagers highlight their identification with and care for the overarching group, their high moral motivations are perceived as reflecting the entire group's pro-environmentalism. In this case, a strongly motivated minority group can influence the group identity of the overarching group, similar to the processes of bottom-up social identity formation (Jans, 2021). Having such a normative signaling effect can be an important tool for minority groups seeking to spark change within the majority group.

### **Missing Interaction Effects**

Contrary to the hypotheses, identification with the local region only mitigated the effects of high moral motivation of the ecovillagers on environmental group identity. For the other outcomes, there was no interaction effect. Rather, it seems that the two factors influence the

evaluation of the ecovillage and the consequences of that evaluation independently. This contradicts the prior reports of interaction effects (Goedkoop & Jans, 2023, study 4). As the manipulation of the ecovillagers' identification had not been successful in the previous study, the present results may be more reliable and insightful about the effects of identification. However, future studies with higher power could investigate these effects for additional clarity.

### **Comparing Moderate Moral Motivation and Mixed Motivation**

The current study finds no difference in effects between moderately morally motivated ecovillagers and those with mixed motivations. This is rather surprising, given that Goedkoop and Jans (2023, study 5) report positive effects of moderate moral motivation compared to mixed motivation. This result also goes against other findings that financial motivation can be perceived as “greedy” or less desirable (e.g., Bolderdijk et al., 2013; Sloot et al., 2018). As the focus of the motivation manipulation in the mixed motivation conditions was mainly on the diversity of motivations, it is possible that the financial aspects were not as prominent as in the previous studies. However, this remains an assumption, as the manipulation check did not explicitly assess the perception of financial motives. Further, these results only provide limited evidence, as they were merely exploratory. Future research is needed to empirically test and confirm these suggestions.

### **Exploring the Effects of Environmental Self-Identity**

Environmental self-identity was used for exploratory analyses, the results of which should not be taken as definitive. In the current study, environmental self-identity did not moderate the effects of motivation or identification, meaning that the effects of the ecovillagers' motivation and identification did not differ depending on the strength of participants' environmental self-identity.

## Limitations

Although we expected larger effects than in the previous studies (Goedkoop & Jans, 2023) due to the combination and improvement of the manipulations, the effect sizes reported in the current study are small (ranging from  $\eta_p^2 = .010$  to  $\eta_p^2 = .040$ ). This may explain why some of the effects, such as the do-gooder derogation effect on the behavioral evaluation of the ecovillage and the perception of a shared identity, were not replicated in the current study. The previously reported effect sizes were rather small already, and the present study has a lower power, which is why these effects may not have been detected. Future studies with larger sample sizes could help to clarify the effects of moral motivation.

Another limitation is the hypothetical nature of the scenarios and the outcome variables. Although it was aimed to present the scenarios as relevant to the participants by including the region that they most identify with, and the mean of the easiness of imagining the ecovillage was well above the midpoint of the scale, the external validity of the current study remains low, as it was based on hypothetical scenarios. For example, this may explain the overall high cognitive evaluation of the ecovillage, as the scenario has no real consequences on the participants' reality whatsoever. A possible solution to this would be conducting a study with a real ecovillage or at least including outcome variables that are more tangible, such as actual pro-environmental behavior. Of course, including a real ecovillage in a study with some conditions resulting in a lower evaluation of the ecovillage would have its own ethical implications.

Moreover, this study was conducted using two different languages. While the scenarios were checked by multiple persons to ensure that they conveyed the same information in both languages, it is possible that differences in phrasing or word associations could result in different perceptions of the ecovillage. In fact, results did differ both in the pattern of results and the size

of the effects between the two languages (see Appendix A). Whether these deviations are caused by differences in phrasing or word associations that result in different perceptions of the ecovillage, potential cultural differences between native speakers of German and native speakers of other languages, non-native speakers of English completing the survey in English, or a reduced sample size and unequal group sizes, this is something to be aware of in future research. To maximize the interpretability of results in future studies, either the same language should be used for all participants or possible differences should be expected and accounted for.

Another limitation is the lack of a baseline measurement or control group. The evaluation of the ecovillagers differed depending on their portrayal in the scenario, but remained well above the midpoint of the scale even when the ecovillagers were portrayed as highly morally motivated. Therefore, it is possible that highly morally motivated ecovillagers are evaluated less favorably than those with moderately moral or mixed motivations, but still better than an ecovillage without any information on underlying motives. A baseline measurement or control group could help to further clarify the effects of high moral motivation and show whether it is a negative effect compared to how ecovillages are generally perceived or just a less positive effect than moderate moral and mixed motivation. The same applies to the effect of identification with the local region. If compared to a neutral condition, the results could become even more impactful and relevant for real-life practices.

### **Practical Implications and Conclusion**

This thesis provides new insights into how ecovillages can increase their impact by gaining acceptability and motivating inhabitants of the local region to join their activities. Generally, caution is advised when using moral arguments, as being overly morally motivated can hamper the perception of ecovillages. Although the reported effect sizes are small, these

effects have been reported repeatedly in the literature. This does not mean that moral arguments should be avoided completely, but they should be used in moderation. Using maximal moral standards instead of minimal ones (Kessler et al., 2010) could be a solution. Highly morally motivated groups tend to have *minimal standards* that represent the minimal requirements needed to fulfill the moral criteria of becoming a group member, such as never eating meat ever again. *Maximal group standards*, however, represent idealistic goals. Any action that gets one closer to reaching that goal, such as reducing one's meat consumption to once a week, is deemed a valuable contribution to the group. This way, ecovillages could reduce people's expectations of being judged for not fulfilling all standards perfectly. Additionally, the current study also provides some initial evidence suggesting that ecovillages need not shy away from financial arguments, as long as they are combined with other moderately moral arguments. An added benefit of this is that mixed motivations may make the ecovillagers more relatable to a broader audience.

Further, highlighting the identification of the ecovillagers with the local region surrounding the ecovillage is recommended, as it benefits the perception of ecovillages, creates a sense of shared identity, and motivates participation in the ecovillages' activities. This emphasis on connection can be achieved by initiating and drawing attention to joint projects with local communities, cultural events, collaboration with local businesses, and sharing financial and social benefits with the inhabitants of the local region. Especially if the ecovillagers are highly morally motivated, this can undo at least some of the damage.

Policy makers might also consider supporting the integration of ecovillages into the community of the local region. By doing so, the salience and strength of pro-environmental norms could be increased, leading to more sustainable behavior choices. This way, they could



help create more resilient local communities that are equipped to address environmental challenges collectively without having to apply top-down measures (see Jans, 2021).

As these recommendations are based on group processes which are not unique to ecovillages, the same would be advised to other environmental minority groups that aim to increase their impact and bring forward sustainability transformations. However, our reasoning applies to minority groups only, as moral motivation affects the perception and impact of more widely accepted movements very differently (Judge et al., 2024).

## References

- Armenta, B. M., Stroebe, K., Scheibe, S., Van Yperen, N. W., Stegeman, A., & Postmes, T. (2017). Permeability of group boundaries: Development of the concept and a scale. *Personality and social psychology bulletin*, *43*(3), 418-433. <https://doi.org/10.1177/0146167216688202>
- Batalha, L., & Reynolds, K. J. (2012). ASPIRing to Mitigate Climate Change: Superordinate Identity in Global Climate Negotiations. *Political psychology*, *33*(5), 743–760. <https://doi.org/10.1111/j.1467-9221.2012.00896.x>
- Bolderdijk, J. W., Brouwer, C., & Cornelissen, G. (2018). When do morally motivated innovators elicit inspiration instead of irritation?. *Frontiers in psychology*, *8*, 295270. <https://doi.org/10.3389/fpsyg.2017.02362>
- Bolderdijk, J. W., Steg, L., Geller, E. S., Lehman, P. K., & Postmes, T. (2013). Comparing the effectiveness of monetary versus moral motives in environmental campaigning. *Nature climate change*, *3*(4), 413-416. <https://doi.org/10.1038/nclimate1767>
- Bouman, T., & Steg, L. (2019). Motivating society-wide pro-environmental change. *One earth*, *1*, 27–30. <https://doi.org/10.1016/j.oneear.2019.08.002>
- Cuddy, A. J., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS map. *Advances in experimental social psychology*, *40*, 61-149. [https://doi.org/10.1016/S0065-2601\(07\)00002-0](https://doi.org/10.1016/S0065-2601(07)00002-0)
- Dias, M. A., Loureiro, C. F. B., Chevitarese, L., & Souza, C. D. M. E. (2017). The meaning and relevance of ecovillages for the construction of sustainable societal alternatives. *Ambiente & sociedade*, *20*, 79-96. <https://doi.org/10.1590/1809-4422ASOC0083V2032017>

Ellemers, N., Van Knippenberg, A., & Wilke, H. (1990). The influence of permeability of group boundaries and stability of group status on strategies of individual mobility and social change. *British journal of social psychology*, 29(3), 233-246.

<https://doi.org/10.1111/j.2044-8309.1990.tb00902.x>

European Commission. (2021). *Special eurobarometer 513: Climate change*.

[https://climate.ec.europa.eu/citizens/citizen-support-climate-action\\_en](https://climate.ec.europa.eu/citizens/citizen-support-climate-action_en)

Fielding, K. S., & Hornsey, M. J. (2016). A social identity analysis of climate change and environmental attitudes and behaviors: Insights and opportunities. *Frontiers in psychology*, 7, 171214. <https://doi.org/10.3389/fpsyg.2016.00121>

Finch, H. (2005). Comparison of the Performance of Nonparametric and Parametric MANOVA Test Statistics when Assumptions Are Violated. *Methodology*, 1(1), 27–38.

<https://doi.org/10.1027/1614-1881.1.1.27>

Fritsche, I., Barth, M., Jugert, P., Masson, T., & Reese, G. (2018). A social identity model of pro-environmental action (SIMPEA). *Psychological review*, 125(2), 245.

<https://psycnet.apa.org/doi/10.1037/rev0000090>

Gaertner, S. L., & Dovidio, J. F. (2000). *Reducing intergroup bias: The common ingroup identity model*. Psychology Press.

GEN. (n.d.). *Who is the Global Ecovillage Network?*. <https://ecovillage.org/about/about-gen/>

Goedkoop, F., Sloot, D., Jans, L., Dijkstra, J., Flache, A., & Steg, L. (2022). The role of community in understanding involvement in community energy initiatives. *Frontiers in psychology*, 12, 775752. <https://doi.org/10.3389/fpsyg.2021.775752>

- Haslam, S. A., Eggins, R. A., & Reynolds, K. J. (2003). The ASPIRe model: Actualizing Social and Personal Identity Resources to enhance organizational outcomes. *Journal of occupational and organizational psychology*, 76(1), 83–113.  
<https://doi.org/10.1348/096317903321208907>
- Hong, S., & Vicdan, H. (2016). Re-imagining the utopian: Transformation of a sustainable lifestyle in ecovillages. *Journal of business research*, 69(1), 120-136.  
<https://doi.org/10.1016/j.jbusres.2015.07.026>
- IPCC. (2022). *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press. <https://dx.doi.org/10.1017/9781009157926>
- Jans, L. (2021). Changing environmental behaviour from the bottom up: The formation of pro-environmental social identities. *Journal of environmental psychology*, 73, 101531.  
<https://doi.org/10.1016/j.jenvp.2020.101531>
- Jetten, J., Branscombe, N. R., Schmitt, M. T., & Spears, R. (2001). Rebels with a cause: Group identification as a response to perceived discrimination from the mainstream. *Personality and social psychology bulletin*, 27, 1204–1213.  
<https://doi.org/10.1177/0146167201279012>
- Judge, M., Bouman, T., Steg, L., & Bolderdijk, J. W. (2024). Accelerating social tipping points in sustainable behaviors: Insights from a dynamic model of moralized social change. *One earth*, 7(5), 759-770. <https://doi.org/10.1016/j.oneear.2024.04.004>

Kessler, T., Neumann, J., Mummendey, A., Berthold, A., Schubert, T., & Waldzus, S. (2010).

How do we assign punishment? The impact of minimal and maximal standards on the evaluation of deviants. *Personality and social psychology bulletin*, 36(9), 1213-1224.

<https://doi.org/10.1177/0146167210380603>

Kunst, J. R., Thomsen, L., Sam, D. L., & Berry, J. W. (2015). “We are in this together” common

group identity predicts majority members’ active acculturation efforts to integrate immigrants. *Personality and social psychology bulletin*, 41(10), 1438-1453.

<https://doi.org/10.1177/0146167215599349>

Kurz, T., Prosser, A. M., Rabinovich, A., & O'Neill, S. (2020). Could vegans and lycra cyclists

be bad for the planet? Theorizing the role of moralized minority practice identities in processes of societal-level change. *Journal of social issues*, 76(1), 86-100.

<https://doi.org/10.1111/josi.12366>

Liu, L., Bouman, T., Perlaviciute, G., & Steg, L. (2020). Effects of competence-and integrity-

based trust on public acceptability of renewable energy projects in China and the Netherlands. *Journal of environmental psychology*, 67, 101390.

<https://doi.org/10.1016/j.jenvp.2020.101390>

Loy, L. S., Reese, G., & Spence, A. (2022). Facing a Common Human Fate: Relating Global

Identity and Climate Change Mitigation. *Political psychology*, 43(3), 563–581.

<https://doi.org/10.1111/pops.12781>

Mendes, W. B., Blascovich, J., Major, B., & Seery, M. (2001). Challenge and threat responses

during downward and upward social comparisons. *European journal of social*

*psychology*, 31(5), 477-497. <https://doi.org/10.1002/ejsp.80>

- Milfont, T. L., Osborne, D., Yogeeswaran, K., & Sibley, C. G. (2020). The role of national identity in collective pro-environmental action. *Journal of environmental psychology, 72*, 101522. <https://doi.org/10.1016/j.jenvp.2020.101522>
- Minson, J. A., & Monin, B. (2012). Do-gooder derogation: Disparaging morally motivated minorities to defuse anticipated reproach. *Social psychological and personality science, 3*(2), 200-207. <https://doi.org/10.1177/1948550611415695>
- Monin, B., Sawyer, P. J., & Marquez, M. J. (2008). The rejection of moral rebels: resenting those who do the right thing. *Journal of personality and social psychology, 95*(1), 76. <https://psycnet.apa.org/doi/10.1037/0022-3514.95.1.76>
- Nolan, J. M., Schultz, P. W., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2008). Normative social influence is underdetected. *Personality and social psychology bulletin, 34*(7), 913-923. <https://doi.org/10.1177/0146167208316691>
- Parker, M. T., & Janoff-Bulman, R. (2013). Lessons from morality-based social identity: The power of outgroup “hate,” not just ingroup “love”. *Social justice research, 26*(1), 81-96. <https://doi.org/10.1007/s11211-012-0175-6>
- Pearson, A. R., Schuldt, J. P., Romero-Canyas, R., Ballew, M. T., & Larson-Konar, D. (2018). Diverse segments of the US public underestimate the environmental concerns of minority and low-income Americans. *Proceedings of the national academy of sciences, 115*(49), 12429-12434. <https://doi.org/10.1073/pnas.1804698115>
- Rabinovich, A., Morton, T. A., Postmes, T., & Verplanken, B. (2012). Collective self and individual choice: The effects of inter-group comparative context on environmental values and behaviour. *British journal of social psychology, 51*(4), 551-569. <https://doi.org/10.1111/j.2044-8309.2011.02022.x>

- Reese, G. (2016). Common human identity and the path to global climate justice. *Climatic change*, 134(4), 521–531. <https://doi.org/10.1007/s10584-015-1548-2>
- Slater, M. J., Evans, A. L., & Turner, M. J. (2016). Implementing a Social Identity Approach for Effective Change Management. *Journal of change management*, 16(1), 18–37. <https://doi.org/10.1080/14697017.2015.1103774>
- Sloot, D., Jans, L., & Steg, L. (2018). Can community energy initiatives motivate sustainable energy behaviours? The role of initiative involvement and personal pro-environmental motivation. *Journal of environmental psychology*, 57, 99–106. <https://doi.org/10.1016/j.jenvp.2018.06.007>
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behaviour. In S. Worchel & W. G. Austin (Eds.), *The psychology of intergroup relations* (pp. 7–24). Nelson-Hall.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2, 53. <https://doi.org/10.5116%2Fijme.4dfb.8dfd>
- Ulug, C., Horlings, L., & Trell, E. M. (2021). Collective identity supporting sustainability transformations in ecovillage communities. *Sustainability*, 13(15), 8148. <https://doi.org/10.3390/su13158148>
- Van der Werff, E., Steg, L., & Keizer, K. (2013). The value of environmental self-identity: The relationship between biospheric values, environmental self-identity and environmental preferences, intentions and behaviour. *Journal of environmental psychology*, 34, 55-63. <https://doi.org/10.1016/j.jenvp.2012.12.006>

Wang, X., Van der Werff, E., Bouman, T., Harder, M. K., & Steg, L. (2021). I am vs. we are: how biospheric values and environmental identity of individuals and groups can influence pro-environmental behaviour. *Frontiers in psychology, 12*, 618956.

<https://doi.org/10.3389/fpsyg.2021.618956>

Wright, S. C. (2009). The next generation of collective action research. *Journal of social issues, 65*(4), 859-879. <https://doi.org/10.1111/j.1540-4560.2009.01628.x>



## Appendix A

### Univariate MANOVA Results Separated by Language

**Table A1**

*Univariate MANOVA Results of the German-Speaking Sample*

Factor	Dependent Variable	<i>F</i>	<i>p</i>	$\eta_p^2$
Motivation	Behavioral evaluation	0.06	.946	.001
	Cognitive evaluation	3.21	.042	.030
	Affective evaluation	1.60	.204	.020
	Shared identity	0.42	.657	.004
	PGBP	0.50	.606	.005
	Environmental group identity	2.02	.135	.020
	Stereotypes	0.60	.552	.006
Identification	Behavioral evaluation	10.77	.001	.050
	Cognitive evaluation	6.09	.015	.030
	Affective evaluation	3.77	.054	.020
	Shared identity	12.73	<.001	.060
	PGBP	9.03	.003	.040
	Environmental group identity	5.28	.023	.030
	Stereotypes	0.67	.415	.003
Motivation * Identification	Behavioral evaluation	1.72	.182	.020
	Cognitive evaluation	1.15	.203	.020
	Affective evaluation	0.38	.685	.004

Factor	Dependent Variable	<i>F</i>	<i>p</i>	$\eta_p^2$
Motivation * Identification	Shared identity	0.33	.719	.003
	PGBP	0.23	.791	.002
	Environmental group identity	1.12	.329	.010
	Stereotypes	0.82	.443	.008

*Note.* PGBP: Perceived group boundary permeability. *N* = 199.


**Table A2***Univariate MANOVA Results of the English-Speaking Sample*

Factor	Dependent Variable	<i>F</i>	<i>p</i>	$\eta_p^2$
Motivation	Behavioral evaluation	0.04	.957	< .001
	Cognitive evaluation	1.50	.225	.010
	Affective evaluation	9.05	<.001	.060
	Shared identity	2.67	.071	.002
	PGBP	3.58	.029	.030
	Environmental group identity	0.73	.483	.006
	Stereotypes	2.40	.093	.020
Identification	Behavioral evaluation	0.68	.412	.003
	Cognitive evaluation	1.30	.256	.005
	Affective evaluation	1.35	.246	.005
	Shared identity	1.14	.288	.004
	PGBP	0.24	.628	.001
	Environmental group identity	0.68	.412	.003
	Stereotypes	0.71	.399	.003
Motivation * Identification	Behavioral evaluation	0.78	.460	.006
	Cognitive evaluation	0.226	.798	.002
	Affective evaluation	0.05	.952	<.001
	Shared identity	2.82	.062	.020
	PGBP	0.84	.433	.006
	Environmental group identity	4.43	.013	.030

Factor	Dependent Variable	<i>F</i>	<i>p</i>	$\eta_p^2$
Motivation * Identification	Stereotypes	1.24	.291	.009

*Note.* PGBP: Perceived group boundary permeability. *N* = 270.

**Appendix B**  
**Experimental Materials**

English 

## language

This survey is available both in English and German.

We would like to ask German native speakers to complete this survey in German.

The language can be selected at the top right.

Thank you!

## Information für Teilnehmende

### Information for Participants

What motivates people to be involved in an ecovillage? This master thesis research project of the double-degree program Sustainability and Environmental Psychology at Leuphana University Lüneburg and the University of Groningen (UG) researches this question.

### What do we ask of you during the research?

We are interested in your opinions on ecovillages and your possible role in them. You will be asked to imagine an ecovillage in your local region, based on a scenario. Afterwards, you will be asked about your opinions and perceptions of this ecovillage in your local region. The questionnaire will also include questions about your motivations and intentions with regards to sustainability. You will be randomly presented with one of six possible scenarios about an ecovillage. This helps us to better understand how people think about different types of ecovillages.

We also ask for your age and gender to establish which societal groups participated in this research. The entire questionnaire takes approximately 25 minutes to complete.

Participation is completely voluntary and strictly confidential. You can stop anytime by not (continuing) filling in the survey. If you wish to retract your data, you can do so until it has been anonymised by contacting [i.m.dirr@student.rug.nl](mailto:i.m.dirr@student.rug.nl).

### **How will we treat your personal information?**

Your survey data will be archived at secure servers for the length of min. 10 years conform to the UG guidelines. Only the researcher from UG (Dr. Lise Jans) and master student (Ida Dirr) will have access to your data. We might share your personal data with members of the research team at Leuphana University. We will not share your data with these external partners unless there is a data processing agreement in place between the University of Groningen and Leuphana University. A data processing agreement is a legally binding contract that states the rights and obligations of each party concerning the protection of personal data.

If there is no data processing agreement in place between the University of Groningen and Leuphana University, we will only share your data with these external partners when it is fully anonymised. That means all your personal data is removed. As such, the chance you could be identified in these data is low.

Fully anonymized data and aggregated results will be made publicly available.

### **Do you have questions about your rights as a research participant or about the conduct of the research?**

You may also contact the Ethics Committee of the Faculty of Behavioural and Social Sciences of the UG: [ec-bss@rug.nl](mailto:ec-bss@rug.nl).

### **Do you have questions regarding the handling of your personal data?**

You may also contact the UG Data Protection Officer: [privacy@rug.nl](mailto:privacy@rug.nl).

I have read the information about the study. I understand what the study is about, what is required of me, what the consequences of participation may be, how my data will be handled and what rights I have as a participant. I understand that participation in the study is voluntary. I myself decide to participate. I can terminate my participation at any time and

without giving reasons. Ending participation has no negative consequences for me.

Do you agree to participate in this study?

- Yes, I agree to participate.
- No, I do not agree to participate.

Consent to the processing of my personal data (e.g. Sona number) as indicated in the study information on the previous page:

- Yes, I consent to the processing of my personal data.
- No, I do not consent to the processing of my personal data.

Are you sure that you do not wish to participate? Unfortunately, in this case you cannot take part in the survey.

- No, I do not wish to consent to participation.
- Yes, I wish to consent to participation.

### **prv\_experience**

In an ecovillage, people live together with the goal of sustainability. Worldwide, there are about 10,000 of these projects, in urban as well as in rural areas.

Are you familiar with the concept of an ecovillage?

- Yes, I live(d) in an ecovillage.
- Yes, I have heard of ecovillages.
- No, I do not have any previous knowlegde about ecovillages.



## indivESI

To what extent do you agree with the following statements? (1 = strongly disagree, 7 = strongly agree)

	strongly disagree		neither agree nor disagree			strongly agree	
	1	2	3	4	5	6	7
I am the type of person who acts pro-environmentally.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acting environmentally-friendly is an important part of who I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Success is very important to me in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would describe myself as ambitious.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see myself as an extroverted person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see myself as an environmentally friendly person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am a very open person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being part of a community is an important part of who I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am the type of person who is always helpful.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am pretty happy with myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## local\_region

In this study, we will present you a scenario that we ask you to imagine vividly. To make this scenario as realistic as possible, we want to describe a region that you feel very connected to.

**What is the name of a region that you live in (e.g. your neighbourhood, city, municipality, county) and that you identify with the most?**

**Please finish the following sentence:**

**The name of this region is...**

## instructions

In the following, you will read a scenario about an ecovillage. Please read the text carefully and imagine the scenario of the ecovillage in your region vividly. Afterwards, we will ask you a few questions about the scenario.

## High\_MM\_local\_ID

Please imagine that the ecovillage Ecotopia has been established in  $\{q://QID29/ChoiceTextEntryValue\}$ . 60 people live in this special sustainable community. You can see a picture of the ecovillage below.

Please read the following text about the ecovillage Ecotopia carefully and imagine the ecovillage as vividly as possible. We will ask about your opinion on the ecovillage later.

To give you enough time to read the text thoroughly, you can only click "next" after one minute.



**Ecovillage Ecotopia: ‘We are part of this great and unique local region and have a moral mission to protect the environment’.**

The ecovillagers consider unsustainable practices morally wrong. This means that in all their activities environmental protection is guiding. Among others, this includes vegetarianism as well as sustainable farming, composting and energy production.

The members of Ecotopia feel deeply connected to our region and the people living here, and contribute to our special community in  $\{q://QID29/ChoiceTextEntryValue\}$ . For example, the ecovillage develops renewable energy projects in  $\{q://QID29/ChoiceTextEntryValue\}$ , from which the entire local community benefits. This involves installing collectively purchased solar cells on ecovillage buildings and land. Any revenues made from such locally produced renewable energy are reinvested in the local community of  $\{q://QID29/ChoiceTextEntryValue\}$  via a community benefit fund.

The ecovillagers welcome you to come join the events organized at the ecovillage, to teach and advocate how to live sustainably to fellow inhabitants of the region. Ecotopia organizes open house events, monthly markets with self-grown food.

Additionally, they offer lessons in renewable energy solutions and regenerative agriculture for nearby schools.

***“It is our moral duty to live sustainably. As inhabitants of  $\{q://QID29/ChoiceTextEntryValue\}$ , we feel strongly connected to our region and its people.”***

Please note that the "next" button appears after one minute.

### **Low\_MM\_local\_ID**

Please imagine that the ecovillage Ecotopia has been established in  $\{q://QID29/ChoiceTextEntryValue\}$ . 60 people live in this special sustainable community. You can see a picture of the ecovillage below.

Please read the following text about the ecovillage Ecotopia carefully and imagine the ecovillage as vividly as possible. We will ask about your opinion on the ecovillage later.

To give you enough time to read the text thoroughly, you can only click "next" after one minute.



**Ecovillage Ecotopia: ‘We are part of this great and unique local region and care about environmental protection’.**

The ecovillagers hope to contribute to protecting the environment with their lifestyle. Among others, this includes not eating meat as well as sustainable farming, composting and energy production.

The members of Ecotopia feel deeply connected to our region and the people living there, and aim to contribute to our special community in  $\{q://QID29/ChoiceTextEntryValue\}$ . For example, the ecovillage develops renewable energy projects in  $\{q://QID29/ChoiceTextEntryValue\}$ , from which the entire local community benefits. This involves installing collectively purchased solar cells on ecovillage buildings and land. Any revenues made from such locally produced renewable energy are reinvested in the local community of  $\{q://QID29/ChoiceTextEntryValue\}$  via a community benefit fund.

The ecovillagers welcome you to come join the events organized at the ecovillage, to share experiences of trying to live sustainably with fellow inhabitants of the region. Ecotopia organizes open house events, monthly markets with self-grown food. Additionally, they offer lessons in renewable energy solutions and regenerative agriculture for nearby schools.

***“We try to live sustainably. As inhabitants of  $\{q://QID29/ChoiceTextEntryValue\}$  we***

***feel strongly connected to our region and its people."***

Please note that the "next" button appears after one minute.

**mix\_MM\_local\_ID**

Please imagine that the ecovillage Ecotopia has been established in  $\{q://QID29/ChoiceTextEntryValue\}$ . 60 people live in this special sustainable community. You can see a picture of the ecovillage below.

Please read the following text about the ecovillage Ecotopia carefully and imagine the ecovillage as vividly as possible. We will ask about your opinion on the ecovillage later.

To give you enough time to read the text thoroughly, you can only click "next" after one minute.



## **Ecovillage Ecotopia: ‘We have different reasons for our lifestyle, but we all are part of this great and unique local region.**

Some ecovillagers hope to contribute to protecting the environment with their lifestyle. Others want to save money by using fewer resources and investing in renewable energy.

The members of Ecotopia feel deeply connected to our region and the people living there, and aim to contribute to our special community in  $\{q://QID29/ChoiceTextEntryValue\}$ . For example, the ecovillage develops renewable energy projects in  $\{q://QID29/ChoiceTextEntryValue\}$ , from which the entire local community benefits. This involves installing collectively purchased solar cells on ecovillage buildings and land. Any revenues made from such locally produced renewable energy are reinvested in the local community of  $\{q://QID29/ChoiceTextEntryValue\}$  via a community benefit fund.

The ecovillagers welcome you to come join the events organized at the ecovillage, to share experiences of ecovillage living with fellow inhabitants of the region. Ecotopia organizes open house events, monthly markets with self-grown food. Additionally, they offer lessons in renewable energy solutions and regenerative agriculture for nearby schools.

***“We all have different motives for our lifestyle. As inhabitants of  $\{q://QID29/ChoiceTextEntryValue\}$ , we feel strongly connected to our region and its people.”***

Please note that the "next" button appears after one minute.

### **High\_MM\_eco\_ID**

Please imagine that the ecovillage Ecotopia has been established in  $\{q://QID29/ChoiceTextEntryValue\}$ . 60 people live in this special sustainable community. You can see a picture of the ecovillage below.

Please read the following text about the ecovillage Ecotopia carefully and imagine the ecovillage as vividly as possible. We will ask about your opinion on the ecovillage later.

To give you enough time to read the text thoroughly, you can only click "next" after one minute.



**Ecovillage Ecotopia: "We are a great and unique community on a moral mission to protect the environment".**

The ecovillagers consider unsustainable practices morally wrong. This means that in all their activities environmental protection is guiding. Among others, this includes vegetarianism as well as sustainable farming, composting and energy production.

The members of Ecotopia feel deeply connected to the ecovillage and the people living there and aim to contribute to this special community. For example, the ecovillage develops renewable energy projects in  $\{q://QID29/ChoiceTextEntryValue\}$ , from which all members of Ecotopia benefit. This involves installing collectively purchased solar cells on ecovillage buildings and land. Any revenues made from such locally produced renewable energy go to benefit the members of the ecovillage directly.

The ecovillagers welcome you to come join the events organized at the ecovillage, to teach and advocate how to live sustainably to others. Ecotopia organizes open house



events, monthly markets with self-grown food. Additionally, they offer lessons in renewable energy solutions and regenerative agriculture for nearby schools.

***"It is our moral duty to live sustainably. As members of Ecotopia, we feel strongly connected to our ecovillage and its people."***

Please note that the "next" button appears after one minute.

### **Low\_MM\_eco\_ID**

Please imagine that the ecovillage Ecotopia has been established in `{q://QID29/ChoiceTextEntryValue}`. 60 people live in this special sustainable community. You can see a picture of the ecovillage below.

Please read the following text about the ecovillage Ecotopia carefully and imagine the ecovillage as vividly as possible. We will ask about your opinion on the ecovillage later.

To give you enough time to read the text thoroughly, you can only click "next" after one minute.



**Ecovillage Ecotopia: "We are a great and unique community who cares about environmental protection."**

The ecovillagers hope to contribute to protecting the environment with their lifestyle. Among others, this includes not eating meat as well as sustainable farming, composting and energy production.

The members of Ecotopia feel deeply connected to the eco village and the people living there, and aim to contribute to this special community. For example, the ecovillage develops renewable energy projects in  $\{q://QID29/ChoiceTextEntryValue\}$ , from which all members of Ecotopia benefit. This involves installing collectively purchased solar cells on ecovillage buildings and land. Any revenues made from such locally produced renewable energy go to benefit the members of the ecovillage directly.

The ecovillagers welcome you to come join the events organized at the ecovillage, to share experiences of trying to live sustainably with others. Ecotopia organizes open house events, monthly markets with self-grown food. Additionally, they offer lessons in renewable energy solutions and regenerative agriculture for nearby schools.

***"We try to live sustainably. As members of Ecotopia, we feel strongly connected to our ecovillage and its people."***

Please note that the "next" button appears after one minute.

### **mix\_MM\_eco\_ID**

Please imagine that the ecovillage Ecotopia has been established in  $\{q://QID29/ChoiceTextEntryValue\}$ . 60 people live in this special sustainable community. You can see a picture of the ecovillage below.

Please read the following text about the ecovillage Ecotopia carefully and imagine the ecovillage as vividly as possible. We will ask about your opinion on the ecovillage later.

To give you enough time to read the text thoroughly, you can only click "next" after one minute.



**Ecovillage Ecotopia: 'We have different reasons for our lifestyle, but we are a great and unique community'.**

Some ecovillagers hope to contribute to protecting the environment with their lifestyle. Others want to save money by using fewer resources and investing in renewable energy.

The members of Ecotopia feel deeply connected to the ecovillage and the people living there, and aim to contribute to this special community. For example, the ecovillage develops renewable energy projects in  $\{q://QID29/ChoiceTextEntryValue\}$ , from which all members of Ecotopia benefit. This involves installing collectively purchased solar cells on ecovillage buildings and land. Any revenues made from such locally produced renewable energy go to benefit the members of the ecovillage directly.

The ecovillagers welcome you to come join the events organized at the ecovillage, to share experiences of ecovillage living with others. Ecotopia organizes open house events, monthly markets with self-grown food. Additionally, they offer lessons in renewable energy solutions and regenerative agriculture for nearby schools.

***“We all have different motives for our lifestyle. As members of Ecotopia, we feel strongly connected to our ecovillage and its people.”***

Please note that the "next" button appears after one minute.

### instructions\_dvs

In the following, we will ask a few questions about the ecovillage Ecotopia. Please continue to imagine the scenario vividly.

### manipulation\_checks

How do the ecovillagers present themselves in the scenario?

open-minded	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strict
diverse in motivations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	similar in motivations

non-judgmental	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	judgmental
environmentally <b>un</b> friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	environmentally friendly
not morally motivated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	morally motivated
divided	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	unanimous
intolerant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	tolerant

To what extent do you agree with the following statements about the members of Ecotopia? (1 = strongly disagree, 7 = strongly agree)

	strongly disagree		neither agree nor disagree			strongly agree	
	1	2	3	4	5	6	7
The residents of the ecovillage perceive themselves as part of my region.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The residents of the ecovillage see themselves as a unique group.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The residents of the ecovillage seem to identify strongly with my region.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The residents of the eco-village seem to identify only with their eco-village.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Only the members of Ecotopia benefit from the projects of the ecovillage.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All inhabitants of the region can benefit from the projects of the ecovillage.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## DVs

Please imagine that the ecovillage Ecotopia exists in  $\{q://QID29/ChoiceTextEntryValue\}$ . Please rate the ecovillage on the following dimensions:

very unacceptable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	very acceptable
very negative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	very positive
very bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	very good

The following questions are about your future behavior. Please imagine that the ecovillage Ecotopia exists in  $\{q://QID29/ChoiceTextEntryValue\}$ . To what extent do you agree with the following statements? (1 = strongly disagree, 7 = strongly agree)

	strongly disagree		neither agree nor disagree			strongly agree	
	1	2	3	4	5	6	7
I want to be involved in the ecovillage (investing time, money etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want to learn more about the ecovillage.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am interested in joining the ecovillage.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want to participate in activities organized by the ecovillage.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want to live in the ecovillage.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want to visit the ecovillage.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Please choose "strongly disagree" (1) on this item. (attention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

check)

How would you perceive the members of Ecotopia?

very cold              very warm

Please imagine that the ecovillage Ecotopia exists in  $\{q://QID29/ChoiceTextEntryValue\}$ .  
 To what extent do you agree with the following statements? (1 = strongly disagree, 7 = strongly agree)

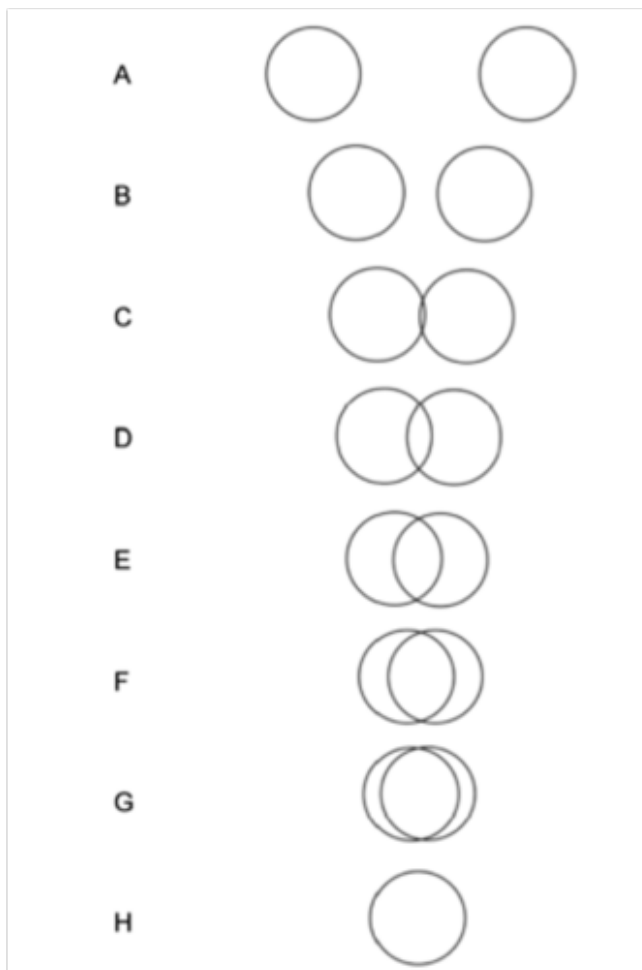
	strongly disagree		neither agree nor disagree			strongly agree	
	1	2	3	4	5	6	7
The difference between an inhabitant of my local region and a member of Ecotopia is clear-cut.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The members of the ecovillage and the inhabitants of my local region represent different groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The inhabitants of my local region and the members of Ecotopia are fundamentally different.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The members of the ecovillage and the inhabitants of my local region share common interests.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The inhabitants of my local region and the members of Ecotopia are worlds apart.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Please choose "strongly disagree" (1) on this item. (attention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

check)

The members of the ecovillage and the inhabitants of my local region belong to the same group.



An image is shown below. Imagine that the left circle represents the inhabitants of your region, and that the right circle represents the ecovillagers described in the scenario. Please select the pair of circles that best represents how close to, or distant from, you feel that the members of the ecovillage are to the inhabitants of your region. Circle pair A represents feeling the most distance, and circle pair H represents feeling the closest (overlap).





Which pair of circles best represent how close or distant you perceive the members of the ecovillage to the inhabitants of your region?

- A: far apart
- B: close, but separate
- C: very small overlap
- D: small overlap
- E: moderate overlap
- F: big overlap
- G: very big overlap
- H: complete overlap

We are interested in how you see yourself and the people in your region. To what extent do you agree with the following statements about the inhabitants of  $\{q://QID29/ChoiceTextEntryValue\}$ ? (1 = strongly disagree, 7 = strongly agree)

	strongly disagree		neither agree nor disagree			strongly agree	
	1	2	3	4	5	6	7
We, as a local region, are the type of people who act in an environmentally friendly manner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We, as a local region, see ourselves as environmentally friendly people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acting environmentally friendly is an important part of who we are as a local region.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

We would like to know if you think that there are general differences between members

and non-members of Ecotopia. In your opinion, do members of Ecotopia (-3) or non-members (3) possess the following characteristics to a greater extent or do you think that there is no difference (0)?

	exclusively members of Ecotopia		no difference			exclusively non-members	
	-3	-2	-1	0	1	2	3
caring for the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
emotionally unstable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
care about having fun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
moral (honest, trustworthy, sincere)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
open-minded	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
manipulative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
care about being successful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
put their own interests first	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
care for others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
competent (intelligent, capable)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
hardworking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
aloof	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
living a sustainable lifestyle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate to what extent to agree with the following statements. (1 = strongly disagree, 7 = strongly agree)

**"In the next six months, I want to...**

	strongly disagree		neither agree nor disagree			strongly agree	
	1	2	3	4	5	6	7
... use renewable energy sources in the household (e.g. solar panels or a heat pump)."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... donate to environmental organizations."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... reduce my car use."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... buy environmentally friendly products."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...motivate others in my region to live sustainably."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... grow my own vegetables."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## check

in this study, we asked you to imagine the ecovillage Ecotopia in your region. How easily could you imagine the ecovillage vividly?

very hardly

hardly

moderately

easily

very easily

## age & gender

As the last part of this study we want to ask about your sociodemographic data.

What is your gender identity?

- male
- female
- other
- do not wish to answer

How old are you?

### **debriefing\_thanks**

Dear participants,

Thank you for your participation!


This study looked at people's willingness to participate in ecovillages. Local initiatives can be organized in different ways. The participants were randomly divided into six groups. In the first group, participants were shown a scenario in which the members of the ecovillage were strongly morally motivated and strongly identified with their ecovillage. In the second group, a scenario was presented in which the members of the ecovillage only acted in a moderately morally motivated manner and also identified strongly with their ecovillage. In the third group, a scenario was presented in which the members of the ecovillage had mixed and sometimes non-moral reasons for their actions and strongly identified with their ecovillage. In the fourth group, a scenario was presented in which the members of the ecovillage are strongly morally motivated and strongly identify with their region and its members. In the fifth scenario, the members of the ecovillage were moderately morally motivated and strongly identified with their community and its members. In the sixth and final scenario, the members were mixed and partly non-morally motivated and identified strongly with their community and its members.

The aim is to investigate whether differences in participation in ecovillages can be explained by the perception of high moral standards and identification with a higher-level identity.

If you have any questions or comments, please contact the research team at [i.m.dirr@student.rug.nl](mailto:i.m.dirr@student.rug.nl).

Thank you again for your participation!

Powered by Qualtrics

Deutsch 

## language

Diese Umfrage ist sowohl auf Englisch als auch auf Deutsch verfügbar.  
Deutsche MuttersprachlerInnen möchten wir bitten, diese Umfrage auf Deutsch zu bearbeiten.  
Die Sprache lässt sich rechts oben auswählen.

Vielen Dank!

## Information für Teilnehmende

### Information für Teilnehmende

Was motiviert Menschen, sich in einem Ökodorf zu engagieren und sich an einer nachhaltigen Gemeinschaft zu beteiligen? Dieser Frage geht das Masterarbeitsprojekt des Doppelmasters Sustainability and Environmental Psychology an der Leuphana Universität Lüneburg und der Universität Groningen (UG) nach.

### Was wollen wir von Ihnen im Rahmen der Untersuchung wissen?

Wir sind an Ihrer Meinung zu Ökodörfern und Ihrer möglichen Rolle darin interessiert. Sie werden gebeten, sich basierend auf einem Szenario ein Ökodorf in Ihrer Region vorzustellen. Anschließend werden Sie zu Ihren Meinungen und Wahrnehmungen von diesem Ökodorf in Ihrer Region befragt. Der Fragebogen enthält auch Fragen zu Ihren Motivationen und Absichten in Bezug auf Nachhaltigkeit. Ihnen wird nach dem Zufallsprinzip eines von sechs möglichen Szenarien über ein Ökodorf vorgelegt. Dies hilft uns, besser zu verstehen, wie die Menschen über verschiedene Arten von Ökodörfern denken.

Wir fragen auch nach Ihrem Alter und Geschlecht, um festzustellen, welche gesellschaftlichen Gruppen an dieser Untersuchung teilgenommen haben. Das Ausfüllen des gesamten Fragebogens dauert etwa 25 Minuten. Die Teilnahme ist völlig freiwillig und streng vertraulich. Sie können jederzeit aufhören, indem Sie den Fragebogen nicht (weiter) ausfüllen. Falls Sie Ihre Daten zurückziehen möchten, ist dies möglich, bis die Daten anonymisiert wurden, indem Sie [i.m.dirr@student.rug.nl](mailto:i.m.dirr@student.rug.nl) kontaktieren.

### **Wie behandeln wir Ihre persönlichen Daten?**

Ihre Umfragedaten werden auf sicheren Servern für die Dauer von mindestens 10 Jahren gemäß den UG-Richtlinien archiviert. Nur die Forschende der UG (Dr. Lise Jans) sowie die Masterstudentin (Ida Dirr) haben Zugang zu Ihren Daten. Wir können Ihre personenbezogenen Daten an Mitglieder des Forschungsteams der Leuphana Universität weitergeben. Wir werden Ihre Daten nicht an diese externen Partner weitergeben, es sei denn, es besteht ein Datenverarbeitungsabkommen zwischen der Universität Groningen und der Leuphana Universität. Eine Datenverarbeitungsvereinbarung ist ein rechtsverbindlicher Vertrag, der die Rechte und Pflichten jeder Partei in Bezug auf den Schutz personenbezogener Daten festlegt. Wenn kein Datenverarbeitungsabkommen zwischen der Universität Groningen und der Leuphana Universität besteht, werden wir Ihre Daten nur dann an diese externen Partner weitergeben, wenn sie vollständig anonymisiert sind. Das bedeutet, dass alle Ihre persönlichen Daten entfernt werden. Die Wahrscheinlichkeit, dass Sie in diesen Daten identifiziert werden können, ist daher gering. Vollständig anonymisierte Daten und aggregierte Ergebnisse werden öffentlich zugänglich gemacht.

### **Haben Sie Fragen zu Ihren Rechten als ForschungsteilnehmerIn oder zur Durchführung der Forschung?**

Sie können sich auch an die Ethikkommission der Fakultät für Verhaltens- und Sozialwissenschaften der UG wenden: [ec-bss@rug.nl](mailto:ec-bss@rug.nl).

### **Haben Sie Fragen zum Umgang mit Ihren persönlichen Daten?**

Sie können sich auch an den Datenschutzbeauftragten der UG wenden: [privacy@rug.nl](mailto:privacy@rug.nl).

Ich habe die Informationen über die Studie gelesen. Ich verstehe, worum es bei der

Untersuchung geht, was von mir verlangt wird, welche Folgen die Teilnahme haben kann, wie mit meinen Daten umgegangen wird und welche Rechte ich als TeilnehmerIn habe. Ich verstehe, dass die Teilnahme an der Studie freiwillig ist. Ich selbst entscheide mich für die Teilnahme. Ich kann die Teilnahme jederzeit und ohne Angabe von Gründen beenden. Das Beenden hat für mich keine negativen Folgen.

Sind Sie damit einverstanden, an dieser Untersuchung teilzunehmen?

- Ja, ich bin mit der Teilnahme einverstanden.
- Nein, ich bin nicht mit der Teilnahme einverstanden.

Zustimmung zur Verarbeitung meiner personenbezogenen Daten (z.B. Sona-Nummer) wie in der Studieninformation auf der vorigen Seite angegeben:

- Ja, ich bin mit der Verarbeitung meiner personenbezogenen Daten einverstanden.
- Nein, ich bin nicht mit der Verarbeitung meiner personenbezogenen Daten einverstanden.

Sind Sie sicher, dass Sie nicht in die Teilnahme einwilligen wollen? Leider können Sie in diesem Fall nicht an der Umfrage teilnehmen.

- Nein, Ich möchte nicht in die Teilnahme einwilligen.
- Ja, ich möchte doch in die Teilnahme einwilligen.

### **prv\_experience**

In einem Ökodorf leben Menschen zusammen mit dem Ziel der Nachhaltigkeit. Weltweit gibt es ca. 10.000 solcher Projekte, sowohl im städtischen als auch im ländlichen Raum.

Sind Sie mit dem Konzept eines Ökodorfs vertraut?

- Ja, ich lebe in einem Ökodorf/habe in einem Ökodorf gelebt.
- Ja, ich habe bereits von Ökodörfern gehört.



Nein, ich habe noch kein Wissen zu Ökodörfern.

## indivESI

Wie sehr stimmen Sie den folgenden Aussagen zu? (1 = stimme überhaupt nicht zu, 7 = stimme voll und ganz zu)

	stimme überhaupt nicht zu		teils, teils			stimme voll und ganz zu	
	1	2	3	4	5	6	7
Teil einer Gemeinschaft zu sein, ist ein wichtiger Teil davon, wer ich bin.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich würde mich als ehrzeigig beschreiben.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich bin der Typ Mensch, der umweltfreundlich handelt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich bin mit mir ziemlich zufrieden.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich sehe mich als eine extrovertierte Person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich bin der Typ Mensch, der immer hilfsbereit ist.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Umweltfreundlich zu handeln ist ein wichtiger Teil davon, wer ich bin.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich bin ein sehr offener Mensch.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Erfolg ist mir sehr wichtig im Leben.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ich sehe mich als eine

umweltfreundliche  
Person.



## local\_region

In dieser Studie werden wir Ihnen ein Szenario präsentieren, dass Sie sich lebhaft vorstellen sollen. Damit dieses Szenario möglichst real wirkt, möchten wir eine Region beschreiben, mit der Sie sich besonders verbunden fühlen.

**Wie lautet der Name einer Region, in der Sie leben (z.B. Ihr Stadtteil, Stadt, Landkreis, Bundesland) und mit der Sie sich am meisten identifizieren?**

**Bitte vervollständigen Sie den folgenden Satz:**

**Der Name dieser Region ist...**

## instructions

Im Folgenden werden Sie ein Szenario über ein Ökodorf lesen. Bitte lesen Sie den Text aufmerksam und stellen Sie sich das Szenario des Ökodorfs in Ihrer Region lebhaft vor. Anschließend werden wir Ihnen einige Fragen zu dem Szenario stellen.

## High\_MM\_local\_ID

Bitte stellen Sie sich vor, dass das Ökodorf Ecotopia in  $\{q://QID29/ChoiceTextEntryValue\}$  errichtet worden ist. 60 Menschen leben in dieser besonderen nachhaltigen Gemeinschaft. Unten können Sie ein Bild des Dorfes sehen.

Bitte lesen Sie den folgenden Text über das Ökodorf Ecotopia aufmerksam und stellen Sie sich das Ökodorf so lebhaft wie möglich vor. Wir werden Sie später zu Ihrer Meinung darüber befragen.

Damit Sie genug Zeit haben, den Text gründlich zu lesen, können Sie erst nach einer Minute auf "Weiter" klicken.



**Ökodorf Ecotopia: „Wir sind Teil dieser großartigen und einzigartigen Region und haben die moralische Mission, die Umwelt zu schützen.“**

Die BewohnerInnen des Ökodorfs Ecotopia betrachten nicht nachhaltige Verhaltensweisen als moralisch falsch. Das bedeutet, dass bei allen Aktivitäten der Umweltschutzgedanke leitend ist. Unter anderem bedeutet dies eine vegetarische Ernährung sowie eine nachhaltige Landwirtschaft, Kompostierung und Energieerzeugung.

Die Mitglieder von Ecotopia fühlen sich unserer Region und den dort lebenden Menschen sehr verbunden und möchten einen Beitrag zu unserer besonderen Gemeinschaft in  $\{q://QID29/ChoiceTextEntryValue\}$  leisten.

Zum Beispiel entwickelt das Ökodorf Projekte für erneuerbare Energien in  $\{q://QID29/ChoiceTextEntryValue\}$ , von denen die gesamte lokale Gemeinschaft profitiert. Dazu gehört unter anderem die Installation von kollektiv erworbenen Solarzellen auf

Gebäuden und Grundstücken des Ökodorfs. Alle Einnahmen aus dieser lokal erzeugten erneuerbaren Energie werden über einen gemeinnützigen Fonds in die lokale Gemeinschaft von  $\{q://QID29/ChoiceTextEntryValue\}$  reinvestiert.

Außerdem laden die BewohnerInnen von Ecotopia Sie herzlich zu den Veranstaltungen ein, die im Ökodorf organisiert werden, um anderen Mitgliedern der Region beizubringen, wie man nachhaltig lebt. Ecotopia organisiert Veranstaltungen zum Tag der offenen Tür und monatliche Märkte mit selbst angebauten Lebensmitteln. Darüber hinaus bieten sie für Schulen in der Umgebung Unterricht in erneuerbaren Energien und regenerativer Landwirtschaft an.

***"Es ist unsere moralische Pflicht, nachhaltig zu leben. Als EinwohnerInnen von  $\{q://QID29/ChoiceTextEntryValue\}$  fühlen wir uns stark mit unserer Region und ihren Menschen verbunden."***

Bitte beachten Sie, dass der "Weiter" Button erst nach einer Minute erscheint.

### **Low\_MM\_local\_ID**

Bitte stellen Sie sich vor, dass das Ökodorf Ecotopia in  $\{q://QID29/ChoiceTextEntryValue\}$  errichtet worden ist. 60 Menschen leben in dieser besonderen nachhaltigen Gemeinschaft. Unten können Sie ein Bild des Dorfes sehen.

Bitte lesen Sie den folgenden Text über das Ökodorf Ecotopia aufmerksam und stellen Sie sich das Ökodorf so lebhaft wie möglich vor. Wir werden Sie später zu Ihrer Meinung darüber befragen.

Damit Sie genug Zeit haben, den Text gründlich zu lesen, können Sie erst nach einer Minute auf "Weiter" klicken.



## **Ökodorf Ecotopia: "Wir sind Teil dieser großartigen und einzigartigen Region, und Umweltschutz liegt uns am Herzen."**

Die BewohnerInnen von Ecotopia hoffen, mit ihrem Lebensstil einen Beitrag zum Umweltschutz zu leisten. Unter anderem bedeutet dies den Verzicht auf Fleisch sowie eine nachhaltige Landwirtschaft, Kompostierung und Energieerzeugung.

Die Mitglieder von Ecotopia fühlen sich unserer Region und den dort lebenden Menschen sehr verbunden und wollen einen Beitrag zu unserer besonderen Gemeinschaft in  leisten.

Zum Beispiel entwickelt das Ökodorf Projekte für erneuerbare Energien in , von denen die gesamte lokale Gemeinschaft profitiert. Dazu gehört unter anderem die Installation von kollektiv erworbenen Solarzellen auf Gebäuden und Grundstücken des Ökodorfs. Alle Einnahmen aus dieser lokal erzeugten erneuerbaren Energie werden über einen gemeinnützigen Fonds in die lokale Gemeinschaft von  reinvestiert.

Außerdem laden die BewohnerInnen von Ecotopia Sie herzlich ein, an den Veranstaltungen des Ökodorfs teilzunehmen, um sich mit anderen Mitgliedern der Region über Versuche, nachhaltiger zu leben, auszutauschen. Ecotopia organisiert Veranstaltungen zum Tag der offenen Tür und monatliche Märkte mit selbst angebauten Lebensmitteln. Darüber hinaus bieten sie für Schulen in der Umgebung Unterricht in erneuerbaren Energien und

regenerativer Landwirtschaft an.

**"Wir versuchen, nachhaltig zu leben. Als EinwohnerInnen von  $\{q://QID29/ChoiceTextEntryValue\}$  fühlen wir uns stark mit unserer Region und ihren Menschen verbunden."**

Bitte beachten Sie, dass der "Weiter" Button erst nach einer Minute erscheint.

### **mix\_MM\_local\_ID**

Bitte stellen Sie sich vor, dass das Ökodorf Ecotopia in  $\{q://QID29/ChoiceTextEntryValue\}$  errichtet worden ist. 60 Menschen leben in dieser besonderen nachhaltigen Gemeinschaft. Unten können Sie ein Bild des Dorfes sehen.

Bitte lesen Sie den folgenden Text über das Ökodorf Ecotopia aufmerksam und stellen Sie sich das Ökodorf so lebhaft wie möglich vor. Wir werden Sie später zu Ihrer Meinung darüber befragen.

Damit Sie genug Zeit haben, den Text gründlich zu lesen, können Sie erst nach einer Minute auf "Weiter" klicken.



**Ökodorf Ecotopia: "Wir haben unterschiedliche Gründe für unseren Lebensstil, aber wir alle sind Teil dieser großartigen und einzigartigen Region."**

Einige ÖkodorfbewohnerInnen hoffen, mit ihrem Lebensstil einen Beitrag zum Umweltschutz zu leisten. Andere wollen Geld sparen, indem sie weniger Ressourcen verbrauchen und in erneuerbare Energien investieren.

Die Mitglieder von Ecotopia fühlen sich unserer Region und den dort lebenden Menschen sehr verbunden und möchten einen Beitrag zu unserer besonderen Gemeinschaft in  leisten.

Zum Beispiel entwickelt das Ökodorf Projekte für erneuerbare Energien in , von denen die gesamte lokale Gemeinschaft profitiert. Dazu gehört unter anderem die Installation von kollektiv erworbenen Solarzellen auf Gebäuden und Grundstücken des Ökodorfs. Alle Einnahmen aus dieser lokal erzeugten erneuerbaren Energie werden über einen gemeinnützigen Fonds in die lokale Gemeinschaft von  reinvestiert.

Außerdem laden die BewohnerInnen von Ecotopia Sie herzlich ein, an den Veranstaltungen des Ökodorfs teilzunehmen, um Erfahrungen über das Leben im Ökodorf mit anderen Mitgliedern der Region zu teilen. Ecotopia organisiert Veranstaltungen zum Tag der offenen Tür und monatliche Märkte mit selbst angebauten Lebensmitteln. Darüber hinaus bieten

sie für Schulen in der Umgebung Unterricht in erneuerbaren Energien und regenerativer Landwirtschaft an.

***“Wir alle haben unterschiedliche Motive für unseren Lebensstil. Als EinwohnerInnen von  $\{q://QID29/ChoiceTextEntryValue\}$  fühlen wir uns stark mit unserer Region und ihren Menschen verbunden.”***

Bitte beachten Sie, dass der "Weiter" Button erst nach einer Minute erscheint.

### **High\_MM\_eco\_ID**

Bitte stellen Sie sich vor, dass das Ökodorf Ecotopia in  $\{q://QID29/ChoiceTextEntryValue\}$  errichtet worden ist. 60 Menschen leben in dieser besonderen nachhaltigen Gemeinschaft. Unten können Sie ein Bild des Dorfes sehen.

Bitte lesen Sie den folgenden Text über das Ökodorf Ecotopia aufmerksam und stellen Sie sich das Ökodorf so lebhaft wie möglich vor. Wir werden Sie später zu Ihrer Meinung darüber befragen.

Damit Sie genug Zeit haben, den Text gründlich zu lesen, können Sie erst nach einer Minute auf "Weiter" klicken.





## **Ökodorf Ecotopia: "Wir sind eine großartige und einzigartige Gemeinschaft mit einer moralischen Mission zum Schutz der Umwelt."**

Die BewohnerInnen des Ökodorfs Ecotopia betrachten nicht-nachhaltige Verhaltensweisen als moralisch falsch. Das bedeutet, dass bei allen Aktivitäten der Umweltschutzgedanke leitend ist. Unter anderem bedeutet dies eine vegetarische Ernährung sowie eine nachhaltige Landwirtschaft, Kompostierung und Energieerzeugung.

Die Mitglieder fühlen sich Ecotopia und den Menschen, die dort leben, sehr verbunden und möchten einen Beitrag zu dieser besonderen Gemeinschaft leisten. Zum Beispiel entwickelt das Ökodorf Projekte für erneuerbare Energien in  $\{q://QID29/ChoiceTextEntryValue\}$ , von denen alle Mitglieder von Ecotopia profitieren. Dazu gehört unter anderem die Installation von kollektiv erworbenen Solarzellen auf den Gebäuden und Grundstücken des Ökodorfs. Alle Einnahmen aus dieser lokal erzeugten erneuerbaren Energie kommen direkt den Mitgliedern des Ökodorfs zugute.

Die BewohnerInnen von Ecotopia laden Sie herzlich zu den Veranstaltungen ein, die im Ökodorf organisiert werden, um anderen beizubringen, wie man nachhaltig lebt. Ecotopia organisiert Veranstaltungen zum Tag der offenen Tür und monatliche Märkte mit selbst angebauten Lebensmitteln. Außerdem bieten sie für Schulen in der Umgebung Unterricht in erneuerbaren Energien und regenerativer Landwirtschaft an.

***"Es unsere moralische Pflicht, nachhaltig zu leben. Als Mitglieder von Ecotopia fühlen wir uns stark mit unserem Ökodorf und seinen Menschen verbunden."***

Bitte beachten Sie, dass der "Weiter" Button erst nach einer Minute erscheint.

### **Low\_MM\_eco\_ID**

Bitte stellen Sie sich vor, dass das Ökodorf Ecotopia in  $\{q://QID29/ChoiceTextEntryValue\}$  errichtet worden ist. 60 Menschen leben in dieser besonderen nachhaltigen Gemeinschaft. Unten können Sie ein Bild des Dorfes sehen.

Bitte lesen Sie den folgenden Text über das Ökodorf Ecotopia aufmerksam und stellen Sie sich das Ökodorf so lebhaft wie möglich vor. Wir werden Sie später zu Ihrer Meinung darüber befragen.

Damit Sie genug Zeit haben, den Text gründlich zu lesen, können Sie erst nach einer Minute auf "Weiter" klicken.



## **Ökodorf Ecotopia: "Wir sind eine großartige und einzigartige Gemeinschaft, der der Umweltschutz am Herzen liegt."**

Die BewohnerInnen des Ökodorfs Ecotopia hoffen, mit ihrem Lebensstil einen Beitrag zum Umweltschutz zu leisten. Unter anderem bedeutet dies den Verzicht auf Fleisch sowie eine nachhaltige Landwirtschaft, Kompostierung und Energieerzeugung.

Die Mitglieder fühlen sich Ecotopia und den Menschen, die dort leben, sehr verbunden und möchten einen Beitrag zu dieser besonderen Gemeinschaft leisten. Zum Beispiel entwickelt das Ökodorf Projekte für erneuerbare Energien in  $\{q://QID29/ChoiceTextEntryValue\}$ , von denen alle Mitglieder von Ecotopia profitieren. Dazu gehört unter anderem die Installation von kollektiv erworbenen Solarzellen auf den Gebäuden und Grundstücken des Ökodorfs. Alle Einnahmen aus dieser lokal erzeugten erneuerbaren Energie kommen direkt den Mitgliedern des Ökodorfs zugute.

Außerdem laden die BewohnerInnen von Ecotopia Sie herzlich ein, an den Veranstaltungen des Ökodorfs teilzunehmen, um sich mit Anderen über Versuche, nachhaltiger zu leben, auszutauschen. Ecotopia organisiert Veranstaltungen zum Tag der offenen Tür und monatliche Märkte mit selbst angebauten Lebensmitteln. Darüber hinaus bieten sie für Schulen in der Umgebung Unterricht in erneuerbaren Energien und regenerativer Landwirtschaft an.

***"Wir versuchen, nachhaltig zu leben. Als Mitglieder von Ecotopia fühlen wir uns stark mit unserem Ökodorf und seinen Menschen verbunden."***

Bitte beachten Sie, dass der "Weiter" Button erst nach einer Minute erscheint.

**mix\_MM\_eco\_ID**

Bitte stellen Sie sich vor, dass das Ökodorf Ecotopia in  $\{q://QID29/ChoiceTextEntryValue\}$  errichtet worden ist. 60 Menschen leben in dieser besonderen nachhaltigen Gemeinschaft. Unten können Sie ein Bild des Dorfes sehen.

Bitte lesen Sie den folgenden Text über das Ökodorf Ecotopia aufmerksam und stellen Sie sich das Ökodorf so lebhaft wie möglich vor. Wir werden Sie später zu Ihrer Meinung darüber befragen.

Damit Sie genug Zeit haben, den Text gründlich zu lesen, können Sie erst nach einer Minute auf "Weiter" klicken.



**Ökodorf Ecotopia: "Wir haben unterschiedliche Gründe für unseren Lebensstil, aber wir sind eine großartige und einzigartige Gemeinschaft."**

Einige ÖkodorfbewohnerInnen hoffen, mit ihrem Lebensstil einen Beitrag zum Umweltschutz zu leisten. Andere wollen Geld sparen, indem sie weniger Ressourcen verbrauchen und in erneuerbare Energien investieren.

Die Mitglieder fühlen sich Ecotopia und den Menschen, die dort leben, sehr verbunden und möchten einen Beitrag zu dieser besonderen Gemeinschaft leisten. Zum Beispiel entwickelt das Ökodorf Projekte für erneuerbare Energien in  $\{q://QID29/ChoiceTextEntryValue\}$ , von denen alle Mitglieder von Ecotopia profitieren.

Dazu gehört unter anderem die Installation von kollektiv erworbenen Solarzellen auf den Gebäuden und Grundstücken des Ökodorfs. Alle Einnahmen aus dieser lokal erzeugten erneuerbaren Energie kommen direkt den Mitgliedern des Ökodorfs zugute.

Außerdem laden die BewohnerInnen von Ecotopia Sie herzlich ein, an den Veranstaltungen des Ökodorfs teilzunehmen, um Erfahrungen über das Leben im Ökodorf mit Anderen zu teilen. Ecotopia organisiert Veranstaltungen zum Tag der offenen Tür und monatliche Märkte mit selbst angebauten Lebensmitteln. Darüber hinaus bieten sie für Schulen in der Umgebung Unterricht in erneuerbaren Energien und regenerativer Landwirtschaft an.

**"Wir alle haben unterschiedliche Motive für unseren Lebensstil. Als Mitglieder von Ecotopia fühlen wir uns stark mit unserem Ökodorf und seinen Menschen verbunden."**

Bitte beachten Sie, dass der "Weiter" Button erst nach einer Minute erscheint.

### instructions\_dvs

Im Folgenden werden wir Ihnen einige Fragen zu dem Ökodorf Ecotopia stellen. Bitte stellen Sie sich das Szenario weiterhin lebhaft vor.

### manipulation\_checks

Wie präsentieren sich die ÖkodorfbewohnerInnen in dem Szenario?

umweltunfreundlich	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	umweltfreundlich
intolerant	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	tolerant
aufgeschlossen	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	streng
nicht urteilend	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	urteilend
nicht moralisch motiviert	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	moralisch motiviert

uneinig         einig  
 vielseitig motiviert         einheitlich motiviert

Wie sehr stimmen Sie den folgenden Aussagen über die BewohnerInnen von Ecotopia zu? (1 = stimme überhaupt nicht zu, 7 = stimme voll und ganz zu)

	stimme überhaupt nicht zu			teils, teils			stimme voll und ganz zu
	1	2	3	4	5	6	7
Die BewohnerInnen des Ökodorfs nehmen sich selbst als Teil meiner Region wahr.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die BewohnerInnen des Ökodorfs sehen sich selbst als eine einzigartige Gruppe.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die BewohnerInnen des Ökodorfs scheinen sich stark mit meiner Region zu identifizieren.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die BewohnerInnen des Ökodorfs scheinen sich nur mit ihrem Ökodorf zu identifizieren.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nur die BewohnerInnen von Ecotopia profitieren von den Projekten des Ökodorfs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alle BewohnerInnen meiner Region können von den Projekten des Ökodorfs profitieren.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## DVs

Bitte stellen Sie sich vor, dass das Ökodorf Ecotopia in  $\{q://QID29/ChoiceTextEntryValue\}$  existiert. Bitte schätzen Sie das Ökodorf auf den folgenden Dimensionen ein:

sehr unakzeptabel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	sehr akzeptabel
sehr negativ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	sehr positiv
sehr schlecht	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	sehr gut

Bei den folgenden Fragen geht es um Ihr zukünftig geplantes Verhalten. Bitte stellen Sie sich vor, dass das Ökodorf Ecotopia in  $\{q://QID29/ChoiceTextEntryValue\}$  existiert. Wie sehr stimmen Sie den folgenden Aussagen zu? (1 = stimme überhaupt nicht zu, 7 = stimme voll und ganz zu)

	stimme überhaupt nicht zu		teils, teils			stimme voll und ganz zu	
	1	2	3	4	5	6	7
Ich möchte das Ökodorf besuchen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich bin daran interessiert, in das Ökodorf zu ziehen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bitte kreuzen Sie bei dieser Aussage "stimme überhaupt nicht zu" (1) an. (Aufmerksamkeits-Check)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich möchte im Ökodorf leben.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich möchte anfangen, in das Ökodorf involviert zu sein (Investition von Zeit, Geld etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich möchte an Aktivitäten, die vom Ökodorf organisiert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

werden, teilnehmen.

Ich möchte mehr über das Ökodorf lernen.

Wie würden Sie die BewohnerInnen von Ecotopia wahrnehmen?

sehr kalt        sehr warm

Stellen Sie sich vor, dass das Ökodorf Ecotopia in  $\{q://QID29/ChoiceTextEntryValue\}$  existiert. Wie sehr stimmen Sie den folgenden Aussagen zu? (1 = stimme überhaupt nicht zu, 7 = stimme voll und ganz zu)

	stimme überhaupt nicht zu			teils, teils			stimme voll und ganz zu
	1	2	3	4	5	6	7
Bitte kreuzen Sie bei dieser Aussage "stimme überhaupt nicht zu" (1) an. (Aufmerksamkeits-Check)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Mitglieder des Ökodorfs und die EinwohnerInnen meiner lokalen Region teilen gemeinsame Interessen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Mitglieder des Ökodorfs und die EinwohnerInnen meiner lokalen Region gehören zur gleichen Gruppe.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Zwischen den EinwohnerInnen meiner lokalen Region und den Mitgliedern von Ecotopia liegen Welten.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Der Unterschied zwischen einem Mitglied meiner lokalen Region und einem Mitglied von Ecotopia ist klar ersichtlich.



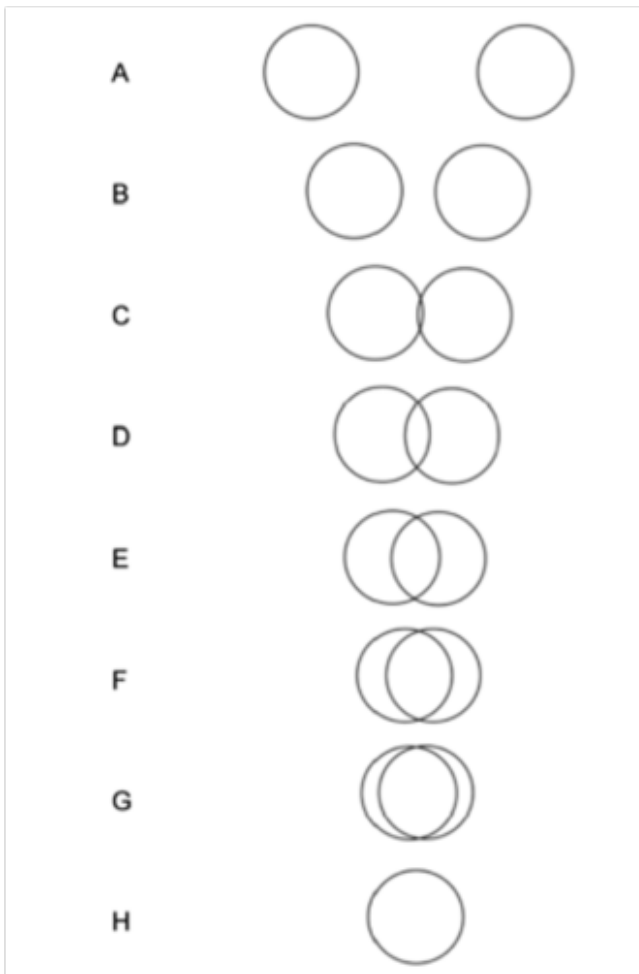
Die EinwohnerInnen meiner lokalen Region und die Mitglieder von Ecotopia unterscheiden sich grundlegend.



Die Mitglieder des Ökodorfs und die EinwohnerInnen meiner lokalen Region stellen verschiedene Gruppen dar.



Nachfolgend sehen Sie ein Bild. Stellen Sie sich vor, dass der linke Kreis die EinwohnerInnen Ihrer Region und der rechte Kreis die Mitglieder des im Szenario beschriebenen Ökodorfs repräsentiert. Wählen Sie das Kreispaar aus, das am besten darstellt, wie nah oder entfernt Sie die Mitglieder des Ökodorfes von den EinwohnerInnen der Region empfinden. Das Kreispaar A steht für das Gefühl der größten Entfernung, das Kreispaar H für das Gefühl der größten Nähe (Überschneidung).



Welches Kreispaar stellt am besten dar, wie nah oder entfernt Sie die Mitglieder des Ökodorfes von den EinwohnerInnen Ihrer Region empfinden?

- A: weit entfernt
- B: nah beieinander, aber getrennt
- C: sehr kleine Überschneidung
- D: kleine Überschneidung
- E: moderate Überschneidung
- F: große Überschneidung
- G: sehr große Überschneidung
- H: komplette Überschneidung

Uns interessiert, wie Sie sich selbst und die Menschen in Ihrer Region wahrnehmen. Wie sehr stimmen Sie den folgenden Aussagen über die EinwohnerInnen von  $\{q://QID29/ChoiceTextEntryValue\}$  zu? (1 = stimme überhaupt nicht zu, 7 = stimme voll und ganz zu)

	stimme überhaupt nicht zu			teils, teils		stimme voll und ganz zu	
	1	2	3	4	5	6	7
Wir als lokale Region sehen uns als umweltfreundliche Menschen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wir als lokale Region sind der Typ Mensch, der umweltfreundlich handelt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Umweltfreundlich zu handeln ist ein wichtiger Teil davon, wer wir als lokale Region sind.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Wir möchten gerne wissen, ob es Ihrer Meinung nach generelle Unterschiede zwischen Mitgliedern und Nicht-Mitgliedern von Ecotopia gibt. Besitzen Ihrer Meinung nach Mitglieder von Ecotopia (-3) oder Nicht-Mitglieder (3) die folgenden Merkmale in höherem Maße oder gibt es Ihrer Meinung nach keinen Unterschied (0)?

	ausschließlich Mitglieder von Ecotopia			kein Unterschied		ausschließlich Nicht-Mitglieder	
	-3	-2	-1	0	1	2	3
fleißig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
emotional instabil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
manipulativ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
umweltbewusst	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

moralisch (ehrlich, vertrauenswürdig, aufrichtig)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
kompetent (intelligent, fähig)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
unnahbar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
sorgen sich um Andere	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ihnen ist Erfolg wichtig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
führen einen nachhaltigen Lebensstil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ihnen ist Spaß wichtig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
aufgeschlossen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
stellen eigene Interesse an erste Stelle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Bitte geben Sie an, wie sehr Sie den folgenden Aussagen zustimmen. (1 = stimme überhaupt nicht zu, 7 = stimme voll und ganz zu)

### "In den nächsten sechs Monaten möchte ich..."

	stimme überhaupt nicht zu			teils, teils		stimme voll und ganz zu	
	1	2	3	4	5	6	7
... erneuerbare Energiequellen im Haushalt nutzen (z.B. Solarpanels oder eine Wärmepumpe)."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...andere in meiner Region motivieren, nachhaltig zu leben."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... mein eigenes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Gemüse anbauen."

... umweltfreundliche  
Produkte kaufen."

... Autofahrten  
reduzieren."

... an  
Umweltorganisationen  
spenden."

## check

In dieser Studie haben wir Sie gebeten, sich das Ökodorf Ecotopia in Ihrer Region vorzustellen. Wie schwer oder leicht konnten Sie sich das Ökodorf lebhaft vorstellen?

sehr schwer

ziemlich schwer

mittel

leicht

sehr leicht

## age & gender

Zum Schluss möchten wir noch Ihre soziodemografischen Daten erfassen.

Was ist Ihre Geschlechtsidentität?

- männlich
- weiblich
- andere
- keine Angabe

Wie alt sind Sie?

## debriefing\_thanks

Sehr geehrte Teilnehmende,

vielen Dank für Ihre Teilnahme!

In dieser Studie ging es um die Bereitschaft der Menschen, sich an Ökodörfern zu beteiligen. Lokale Initiativen können auf unterschiedliche Weise organisiert werden. Die Teilnehmenden wurden nach dem Zufallsprinzip in sechs Gruppen eingeteilt. In der ersten Gruppe wurde den Teilnehmenden ein Szenario gezeigt, in dem die Mitglieder des Ökodorfs stark moralisch motiviert sind und sich sehr mit ihrem Ökodorf identifizieren. In der zweiten Gruppe wurde ein Szenario vorgestellt, in dem die Mitglieder des Ökodorfs lediglich in moderater Weise moralisch motiviert handeln und sich ebenfalls stark mit ihrem Ökodorf identifizieren. In der dritten Gruppe wurde ein Szenario vorgestellt, in dem die Mitglieder des Ökodorf gemischte und teilweise nicht-moralische Gründe für ihr handeln hatten und sich stark mit ihrem Ökodorf identifizieren. In der vierten Gruppe wurde ein Szenario vorgestellt, in dem die Mitglieder des Ökodorfs stark moralisch motiviert sind und sich stark mit ihrer Region und deren Mitgliedern identifizieren. Im fünften Szenario waren die Mitglieder des Ökodorfs moderat moralisch motiviert und identifizierten sich stark mit ihrer Gemeinde und deren Mitgliedern. Im sechsten und letzten Szenario waren die Mitglieder durchmischt und teilweise nicht-moralisch motiviert und identifizierten sich stark mit ihrer Gemeinde und deren Mitgliedern.

Auf diese Weise soll untersucht werden, ob Unterschiede in der Beteiligung an Ökodörfern durch die Wahrnehmung von hohen moralischen Ansprüchen und die Identifikation mit einer übergeordneten Identität erklärt werden können.

Wenn Sie Fragen oder Anmerkungen haben, wenden Sie sich bitte an das Forschungsteam unter [i.m.dirr@student.rug.nl](mailto:i.m.dirr@student.rug.nl).

Nochmals vielen Dank für Ihre Teilnahme!

Powered by Qualtrics

## Appendix C

### Assumption Testing for MANOVA

#### No Multicollinearity

This assumption was met, as the correlations between all dependent variables were acceptable ( $r < .80$ ).

#### Multivariate Normality

This assumption was violated, as the multivariate Shapiro-Wilk Test was significant for all experimental groups ( $p < .001$ ).

#### Homogeneity of Error Variances

The Levene's Test was non-significant ( $p > .05$ ) for all dependent variables. This means that equal error variances can be assumed.

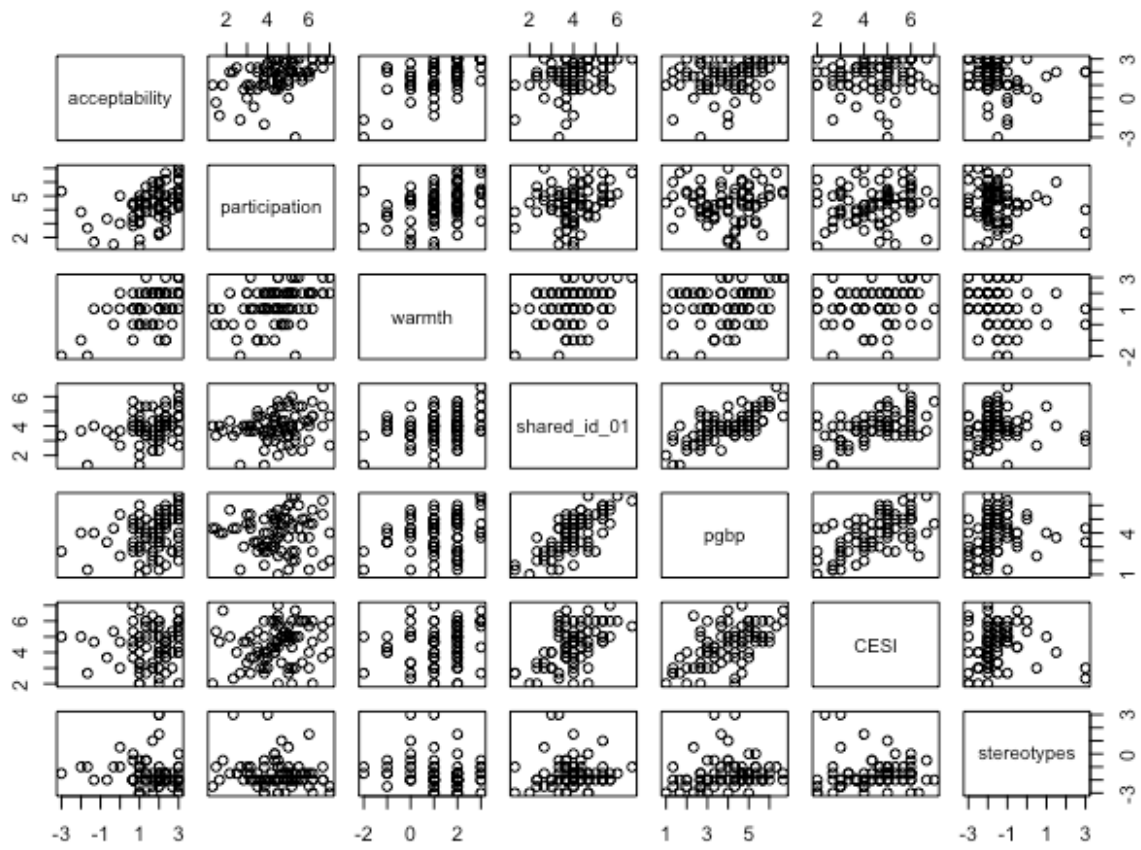
#### Homogeneity of Covariances

As Box's M-Test was not significant ( $p = .240$ ), homogeneity of covariances is given.

#### Linearity

The scatterplots for each experimental group did not show any other clear patterns other than a line. This means that the assumption of linearity is not violated. See Figures C1-6.

Figure C1

*Scatterplot of All Dependent Variables for Condition 1*



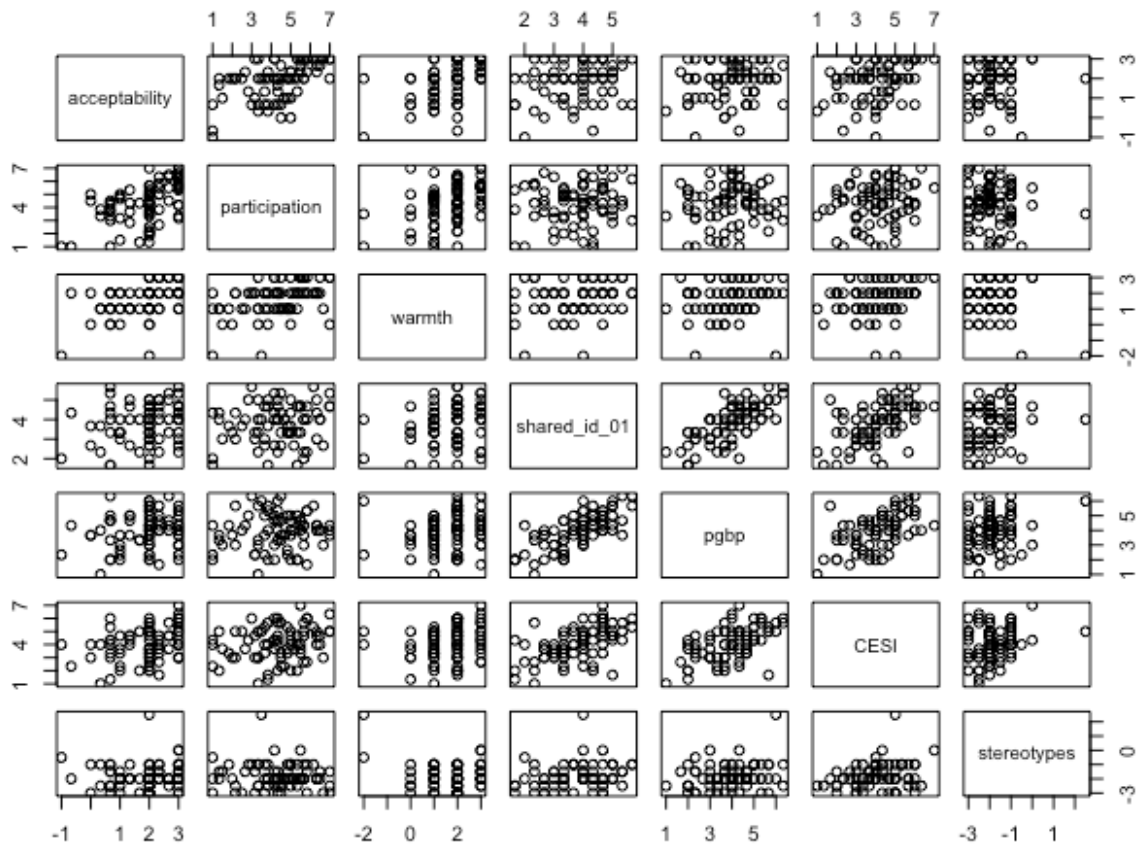
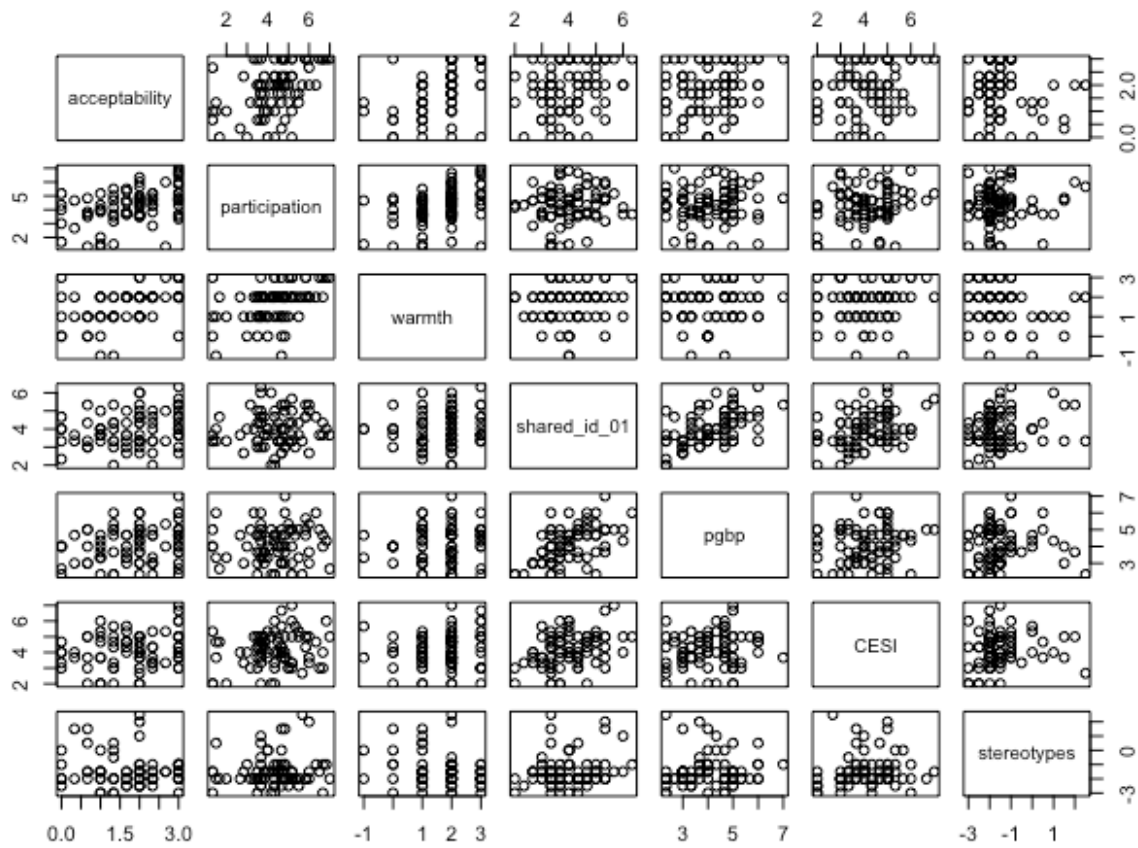
**Figure C2***Scatterplot of All Dependent Variables for Condition 2*

Figure C3

*Scatterplot of All Dependent Variables for Condition 3*

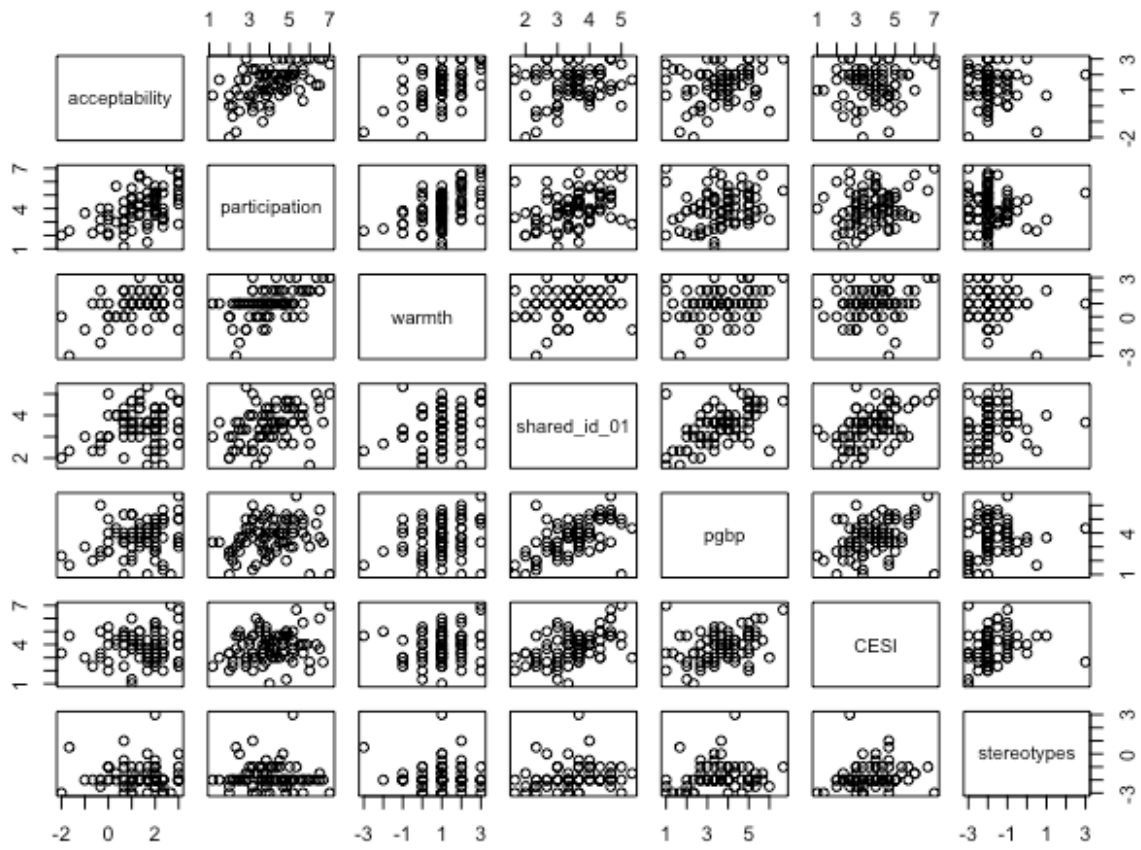
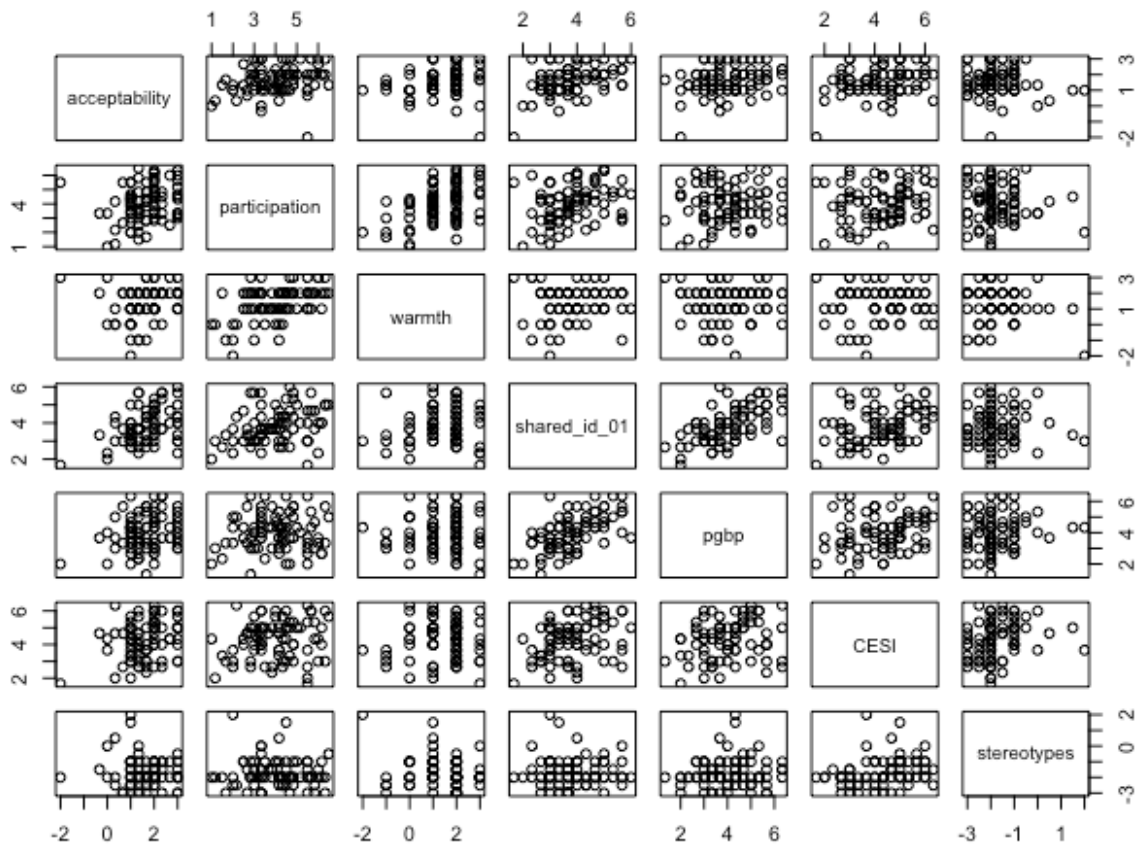
**Figure C4***Scatterplot of All Dependent Variables for Condition 4*

Figure C5

*Scatterplot of All Dependent Variables for Condition 5*



## Appendix D

### Means and Standard Deviations of the Main Variables Across All Conditions

	Identification with the Local Region			Identification with the Ecovillage		
	High Moral	Moderate Moral	Mixed	High Moral	Moderate Moral	Mixed
	Motivation	Motivation	Motivation	Motivation	Motivation	Motivation
Cognitive Evaluation	1.62 (1.22)	1.87 (0.96)	1.84 (0.91)	1.39 (1.10)	1.63 (0.90)	1.71 (0.94)
Behavioral Evaluation	4.45 (1.28)	4.34 (1.45)	4.35 (1.30)	4.05 (1.29)	4.02 (1.31)	4.10 (1.39)
Affective Evaluation	1.25 (1.16)	1.64 (1.05)	1.69 (0.94)	1.01 (1.13)	1.38 (1.06)	1.58 (1.11)
Shared Identity	3.96 (1.00)	3.80 (0.99)	4.00 (0.93)	3.53 (0.84)	3.83 (0.96)	3.68 (0.89)
PGBP	3.97 (1.36)	3.95 (1.21)	4.12 (1.07)	3.68 (1.23)	4.01 (1.15)	3.89 (1.13)
Environmental Group Identity	4.46 (1.25)	4.09 (1.28)	4.16 (1.09)	3.83 (1.16)	4.29 (1.15)	4.00 (1.26)
Stereotypes	-1.53 (1.13)	-1.81 (0.88)	-1.48 (1.10)	-1.76 (0.95)	-1.72 (0.93)	-1.65 (1.02)

*Note.* PGBP: Perceived group boundary permeability. Standard deviation in brackets.