

Working Hard for the Environment: When Will Citizens Engage in Environmental Activism?

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Abstract

Although studies suggest that the majority of people in Western society have some awareness of the consequences humans are having on the natural environment, environmental organisations and grassroots campaigners often struggle to harness active support. One explanation advanced for this lack of engagement is that people feel as if they cannot make a difference. Yet there exist countless examples across many nations of the success of people power in preventing environmental degradation. Alternatively, it is argued that people may 'free ride' and thus benefit from the efforts of others to change the situation for the better. Although this perspective is useful in understanding the tendency of people not to participate, it does not shed light on the factors that differentiate those who do act from those who choose to 'free ride'. Developing an understanding of how to engage community members in environmental activism is crucial in achieving the goal of increasing community engagement in environmental activism. This issue was investigated using a social-psychological model of decision-making. Seventy-one environmental group members and 96 non-members completed a questionnaire assessing the model constructs. Results show that attitudes, self-identity as an activist, past environmental activism and group membership were all significant predictors of intentions to engage in environmental activism. The results also showed that the influence of attitudes and past engagement in environmental activism was moderated by environmental group membership. Practical implications of the results for engaging community members in environmental organisations are discussed.

Keywords

Activism, identity, theory of planned behaviour, social psychology, environmental

Introduction

Human activities are having devastating effects on our natural environment, from depletion of the ozone layer to climate change, logging, nuclear waste dumps and salinisation, the impact of 'progress' is proving to be devastating. The United Nations Environment Program's *Global Environment Outlook 3* reports that the net loss of global forest area during the 1990s was 94 million hectares, 80 countries (constituting 40 per cent of the world's population) were suffering from serious water shortages by the mid 1990s, and that biodiversity is being lost at a rate many times higher than that of natural extinction due to land conversion, climate change, pollution, unsustainable harvesting of natural resources and the introduction of exotic species (United Nations Environment Program 2002).

Studies suggest that the majority of people in western society have some awareness of the consequences humans are having on the natural environment (Dunlap et al. 1993), and often display concern for the problems that are occurring (Seguin et al. 1998). Despite this, environmental organisations and grassroots campaigners often struggle to harness active support (Hinkle et al. 1996; Seguin et al. 1998). Some may

speculate that this discrepancy arises simply because people feel as if they cannot make a difference, yet there exist countless examples across many nations of the success of people power in preventing environmental degradation. The 'Save Manapouri' campaign of the 1970s is one such example. In this campaign the longest petition in New Zealand history successfully stopped the government from giving into pressure from a multinational energy corporation wishing to raise the level of Lake Manapouri by eight metres for the purpose of hydroelectricity generation (Royal Forest and Bird Protection Society of New Zealand 2003).

Another more recent example is the success of the nationwide campaign to 'Save Ningaloo', a coral reef off Australia's west coast. Thousands of people attached bumper stickers to their cars, wrote letters and signed petitions, and 20,000 marched through the streets of Fremantle, Western Australia to voice their opposition to the proposed development bordering the reef (Mackenzie 2003). They succeeded. On 4 July 4 2003 the Western Australian Government announced that the development would not be permitted and that the government would seek world heritage status for the area. These are just two examples of successful campaigns against human activities that threaten the natural environment, and with the high media profile of these campaigns and their success, the belief that people cannot make a difference is unlikely to be the major reason for their failure to take action.

A common explanation for the failure of people to participate in collective action is the 'free rider' effect, the observation that all group members will benefit from any successful outcome of collective action, whether or not they actually contributed to achieving it (Simon et al. 1998). Although this perspective is useful in understanding the tendency of people not to participate, it does not shed light on the factors that differentiate those who do act from those who choose to 'free ride'. Developing an understanding of the factors that determine engagement in environmental activism is crucial in achieving the goal of increasing active participation in the environmental movement.

The goal of this paper is to describe a social-psychological model that helps us understand community members' intentions to engage in environmental activism. In the paper, environmental activism will be defined as "purposeful and effortful engagement in behaviours aimed at preserving or improving the quality of the environment, and increasing public awareness of environmental issues". These behaviours may include protesting, rallying, petitioning, educating the public, lobbying government and corporations, and participating in direct actions such as blockades or participating in voluntary conservation or revegetation work. In the following sections we briefly review past psychological research on environmental activism, describe our proposed model and a study testing the model. We conclude by discussing the implications of the findings.

Past research on environmental activism

A review of the literature shows that past research investigating determinants of participation in environmental activism is scarce. Few theoretical models of environmental activism have been tested and those proposed have, to date, failed to adequately explain environmental activist behaviour. For example, a model of environmental activism by Seguin et al. (1998) predicts that perceptions of health risks will be the most proximal predictor of environmental activism. Although Seguin et al. (1998) found general support for

their model, the model only predicted two per cent of the variance in activists' behaviours. This is not surprising considering the limitations of conceptualising activism as arising from the perception of health risks, as one can readily identify instances of environmental activism in which people act despite there being no threat to their own or to the community's health. Although the researchers may argue that all environmental problems represent a threat (however distal) to human health (and indeed survival), in many cases this threat is neither certain nor sufficiently immediate to be the primary antecedent of motivated behaviour such as activism. This model also assumes that activists share the anthropocentric orientation prevalent in Western society, and does not address the possibility of biospheric orientations toward environmental preservation; that is, it does not consider the possibility that people may be motivated by a desire to protect biodiversity and life, not solely or necessarily human life (Schultz 2001).

Research by McFarlane and Boxall (2003) tested the relationship between value orientation, attitudes, knowledge, social structural (e.g. age, gender, education) and socialisation variables (e.g. dependence on the forest sector for economic livelihood, belonging to an environmental organisation), and engaging in environmental activism in Canada's forest sector. This research found that although attitudes to forest management were associated with activism, belonging to an environmental organisation was a better predictor of engaging in environmental activism than social structural variables and the other social psychological variables. The researchers suggested that developing a more complete model of activism depends on further investigation of the interactions between group membership and social-psychological determinants of engaging in environmental activism.

Although the preceding research has provided insights into factors determining involvement in activism, they lack a common theoretical framework for further investigation of these factors. One model that has been used widely to help understand pro-environmental behaviour and activism more broadly is the theory of planned behaviour.

A model for understanding environmental activism: Theory of planned behaviour

The theory of planned behaviour (TPB) (Ajzen 1985) is one of the most influential and well supported social psychological theories of human decision-making (Ajzen 1987; Armitage and Conner 2001). The basic premise of the theory (see Figure 1) is that the best predictor of behaviour is intention to perform that behaviour. In turn, TPB proposes that intentions are predicted by attitudes to the specific behaviour, subjective norms, and perceived behavioural control.

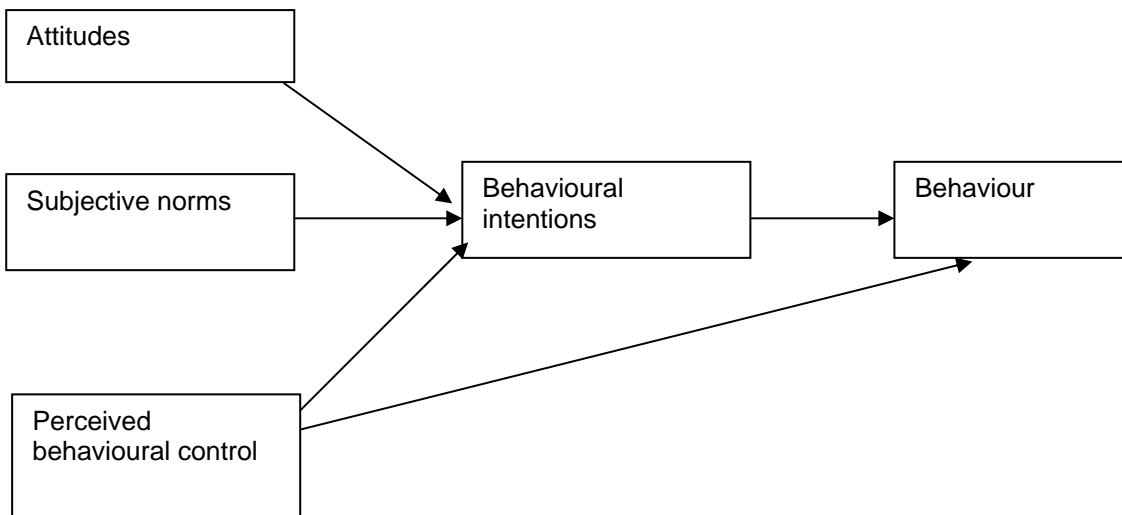


Figure 1. The theory of planned behaviour

In this model an attitude is considered to be a disposition to respond favourably or unfavourably to an object, person, institution or event (Ajzen 1988). Although there are various formal definitions of attitudes, there is general agreement that the central element of attitudes is their evaluative component. It should be noted that the attitude component of the TPB refers to an attitude to the specific behaviour (e.g. environmental activism) rather than general attitudes (e.g. toward the environment), as past research has overwhelmingly shown that general attitudes do not correlate highly with specific behaviours (need reference).

The subjective norm component of the model highlights the role of social norms in guiding our behaviour (Ajzen 1987). Subjective norms reflect the extent to which important others are perceived to encourage or discourage engaging in a particular activity. Finally, perceived behavioural control refers to individuals' perceptions of the ease or difficulty of performing a particular behaviour. Perceived behavioural control should reflect previous experiences as well as potential barriers to engaging in the behaviour (Ajzen 1987; Ajzen 1991). The inclusion of perceived behavioural control in the model acknowledges that behaviour varies in the extent to which it is under volitional control. The general predictions of the model, then, are that to the extent that individuals hold positive attitudes toward the behaviour (e.g. environmental activism), think that there is normative support for performing the behaviour, and perceive that they can easily perform the behaviour, they should have strong intentions to perform the behaviour.

A strength of TPB is that it not only identifies important predictors in the decision-making process, but also theorises about the factors that underpin these determinants, namely attitudinal beliefs, normative beliefs and control beliefs. Drawing on an expectancy-value formulation, attitudes are proposed to arise from the expectation that a particular behaviour will be associated with certain outcomes (behavioural beliefs) weighted by the value attached to these outcomes (outcome evaluations). Similarly, subjective norms are postulated to be a function of how much a person perceives that important other referents think that they should perform the behaviour (normative beliefs), weighted by their motivation to comply with these referents (motivation to comply). Likewise, perceived behavioural control is proposed to be underpinned by beliefs

about the factors that facilitate or prevent performance of the behaviour (control beliefs) weighted by the expected impact that these factors would have if they were present (perceived power) (Ajzen 1989). In providing a framework for identifying beliefs associated with specific actions, TPB has the potential to provide important information for groups seeking to engage community members in environmental activism.

The theory of planned behaviour has been widely applied to the examination and prediction of environmentally related behaviours. It has been used to understand individual level pro-environmental behaviours such as household recycling, composting, reducing consumption of meat, water and energy, and decreasing car use (Cheung et al. 1999; Harland et al. 1999; Heath and Gifford 2002; Taylor and Todd 1995; Terry et al. 1999). It has also been used to examine environmentally-related managerial policy in organisational contexts (Cordano and Freize 2000). Although TPB has been used to help identify factors relating to other forms of activism such as participation in the women's movement and anti-nuclear protest (Fox-Cardamone et al. 2000; Kelly and Breinlinger 1995), it has not been used to investigate the determinants of engaging in environmental activism. The general success of the model in predicting pro-environmental behaviour in general, and participation in activism more specifically, points to its utility in the context of understanding environmental activism.

The inclusion of additional variables

In its original formulation, the theory of planned behaviour is a parsimonious model of human decision-making. However, many researchers have argued that, when applied to certain behaviours and contexts, other variables may also be important for understanding and predicting decision-making (e.g. Biddle et al. 1987; Cook et al. 2002; Pierro et al. 2001; Terry et al. 1999). A review of past literature suggests that for decisions about engaging in environmental activism, three additional variables may be important: past behaviour, self-identity and social identity. The latter two variables clearly highlight the role that identity, either in terms of our roles or in terms of the groups we belong to, has in helping us understand engagement in environmental activism.

Past behaviour

Due to consistent empirical findings indicating that past behaviour is a powerful predictor of intention (Norman and Conner 1996; Terry et al. 1999), we included past behaviour as a predictor in our model. The inclusion of this variable in the model allows the predictive power of TPB to be assessed over and above the influence of past engagement in environmental activism.

Self-identity

Self-identity is a construct that has recently received attention in the literature as a predictor of intentions and actual behaviour (e.g. Armitage and Conner 1999; Sparks and Guthrie 1998; Terry et al. 1999). Self-identity refers to the relatively enduring qualities that people attribute to themselves (Sparks and Guthrie 1998). Identity theory conceives the self as a social construct, specifically that there are distinct components of the self for each of the roles occupied by an individual (Stryker 1968; Stryker 1980). Thus, the self is seen as a set of identities reflecting an individual's roles in the social structure (Hogg et al. 1995). The major implication of this in the present context is that the self and the broader social structure are bound together, and consequently the self is not merely influenced by social structures but rather it is seen as "an active creator

of social behaviour” (Stryker 1968, p. 385). A role may be defined as expectations of what constitutes role-appropriate behaviour (Simon 1992), thus, having an identity (e.g. as an activist) implies behaviour, and to not engage in role-appropriate behaviour (e.g. activism) may create a state of internal tension due to conflict between identity and actions. In contrast, engaging in role-appropriate behaviours validates an individual’s role (Callero 1985), and therefore their self-identity.

Sparks and Shepherd (1992) investigated the consumption of organic vegetables, an environmentally-related behaviour, from a theory of planned behaviour perspective with the addition of self-identification as a ‘green consumer’. The basic TPB was supported and, in addition, self-identity had a highly significant independent effect on behavioural intention, even after controlling for the effects of past consumption. The findings of this and other previous research (e.g. Cook et al. 2002; Terry et al. 1999) suggest self-identity may be important for understanding intentions to engage in environmental activism.

Social identity

Whether community members engage in environmental activism is also likely to be determined by whether they are aligned with a group that encourages and supports this type of behaviour. Although environmental groups are varied and have different agendas, most have the goal of making a difference to the environment. Thus, the norms of the group and the behaviour of group members send a powerful message that action is necessary. In support of this, past research has shown that group identification (e.g. with a political party) is an important factor in determining whether community members engage in collective action (Hinkle et al. 1996; McFarlane and Boxall 2003; Klandermans et al. 2002; Simon et al. 1998).

These findings are consistent with a social identity perspective. According to social identity theory, an individual’s self-concept is comprised of both personal and social identities (Abrams 1999; Tajfel 1981; Turner et al. 1994). Personal identities involve unique self-descriptions, whereas a social identity is the part of an individual’s self-concept that stems from membership of a social group (or groups) and comprises knowledge of that membership, as well as the value and emotional significance that the membership entails (Tajfel 1981). Identification and categorisation of the self in terms of a particular social group or category highlights the similarities shared with members of that same group and the differences between the in-group and other out-groups (Turner et al. 1994). Social identity theorists argue that the context alerts individuals to the most appropriate identity (personal or social) and that the particular identity that is salient will influence the extent to which beliefs, attitudes, and behaviour are influenced by personal characteristics or the norms of the group.

From a social identity perspective, decisions about whether to engage in environmental activism will be influenced by whether the behaviour is an aspect of a salient social identity. For individuals who are not members of an environmental group individual concerns (e.g. attitudes, perceptions of control) may be more likely to guide their decision-making, whereas for environmental group members decisions are likely to be guided more by identity-related factors (e.g. subjective norms, self-identity).

Summary of proposed model and the present study

Figure 2 shows the revised TPB model including the additional variables. The strength of the proposed model is that it draws on a well-established model of human decision-making that acknowledges the influence of rational individual-level factors (e.g. attitudes and perceived behavioural control) on our decisions, while at the same time acknowledging that for decisions about whether to engage in environmental activism, group-level factors are also likely to play a part (see Louis, Terry and Fielding in these conference proceedings).

To test the model we conducted a survey study with university students and members of environmental groups. The basic predictions of this model are that, over and above past experience of environmental activism, individuals who have positive attitudes toward environmental activism feel normative support for engaging in environmental activism, and have sense that they can easily do it, will be more likely to intend to engage in environmental activism. In addition, we predicted that having a strong sense of being an environmental activist and being a member of an environmental organisation would be important influences on individuals' intentions over and above the standard TPB variables. At a more complex level, we expected that social identity would moderate the influence of other variables in the model. We expected that for individuals who were not members of an environmental organisation, their intentions to engage in environmental activism would be influenced more strongly by individual-level variables like attitudes and perceived behavioural control. In contrast, we hypothesised that when individuals were members of an environmental organisation, group-level variables like normative support (i.e. subjective norms) and identity as an environmental activist would be stronger predictors of intentions. We also predicted that environmental group members would differ in their beliefs about environmental activism compared to non-environmental group members.

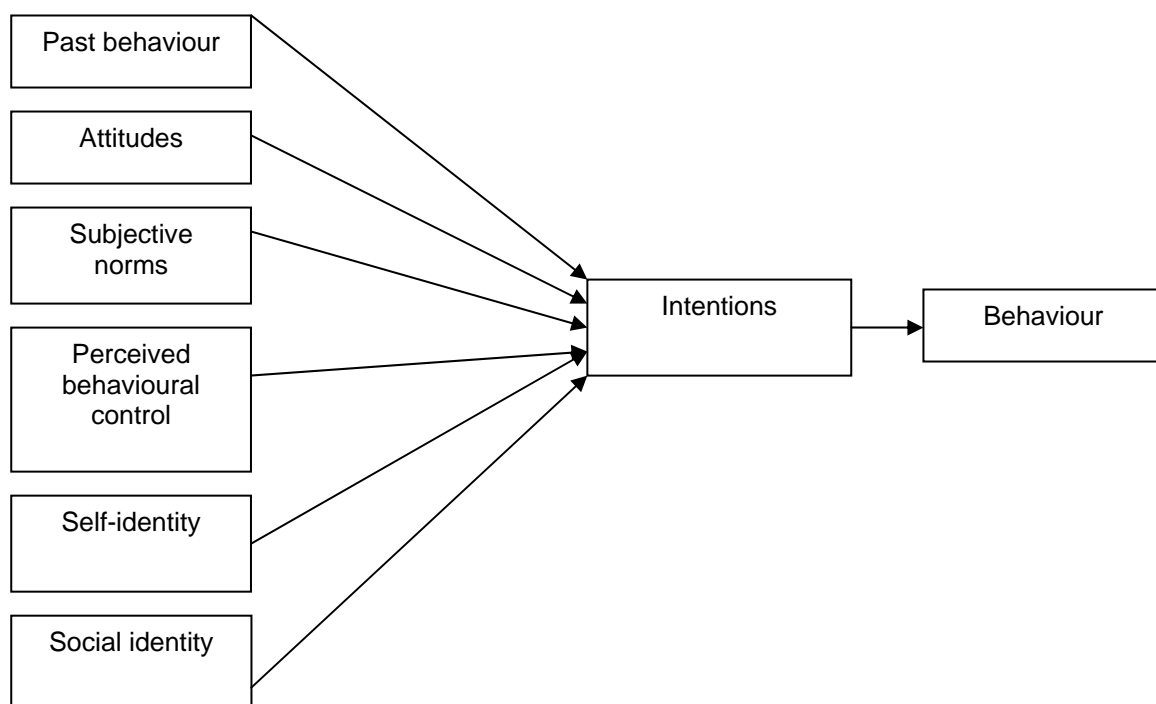


Figure 2. Proposed model of environmental activism

The study

Pilot study

An initial questionnaire was administered to 40 first-year psychology students and 13 student environmental activists. The questionnaire consisted of four items designed to elicit participants' salient beliefs associated with environmental activism. Participants were asked to nominate the advantages (benefits) and disadvantages (costs) of environmental activism, the individuals or groups (referents) that would influence their decisions about whether to engage in environmental activism and the factors that would prevent them from engaging in environmental activism (barriers).

The five most commonly mentioned benefits of engaging in environmental activism were that it would: 1) protect the environment; 2) make you feel good about yourself; 3) contribute to change; 4) help you make friends; and 5) allow you to have your opinions heard. The five most commonly cited costs were: 1) requiring time and energy; 2) being subject to stereotyping and discrimination; 3) being arrested; 4) failing to achieve goals; and 5) being associated with extremist elements. The five most salient referents identified by the elicitation study were: (1) family; (2) friends; (3) environmental groups; (4) political leaders; and (5) radical groups. Finally, six salient control beliefs (i.e. barriers) were identified. These were: (1) lack of money; (2) lack of time; (3) the type of people who are involved in activism; (4), the possibility of violence; (5) the belief that environmental activism will not make a difference; and (6) the possibility of violence.

Main study

Overall, 70 males and 99 females aged from 16-57 ($M = 22.46$, $SD = 7.38$) participated in the main survey study. The majority of participants (79.3 per cent) were tertiary students from all major Australian universities and many regional universities. Seventy-one participants identified as environmental group members and were affiliated with 46 local, national and international environmental groups and organisations. Ninety-six participants were not members of any environmental group or organisation. Broken down in terms of educational qualifications: 1.2 per cent of participants had completed primary school, 64.5 per cent had completed secondary school, 8.9 per cent had completed a trade or certificate course, 19.5 per cent had completed a diploma or degree and 5.9 per cent had a postgraduate tertiary qualification. Forty-six per cent of participants supported the Greens, 17 per cent supported Labor, 11 per cent supported the Liberal party, 7.7 per cent supported Democrats, 3 per cent supported the National party and 13 per cent supported other parties. Participants were recruited in a number of ways: through the UQ psychology participant pool in exchange for course credit; through the UQ paid participant pool; through local environmental groups; and at the Students of Sustainability conference.

What predicts intentions to engage in environmental activism?

Overall means of intentions and the predictor variables as well as correlations among the variables can be found in Appendix A. Results from an hierarchical multiple regression analysis were largely supportive of the proposed model (Table 1).¹ Consistent with previous research, past environmental activism was related to

¹ To check for the effect of age, gender, education level and political orientation, a hierarchical multiple regression analysis was conducted with the demographic variables entered at Step 1 and the remaining

greater intentions to engage in environmental activism (e.g. Norman and Conner 1996, Terry et al. 1999). Determinants of the standard TPB model (i.e. attitudes, subjective norms, perceived behavioural control) predicted a significant amount of variance in intentions over and above past behaviour. Attitudes emerged as the most important predictor of intentions with subjective norms having a marginal effect. Perceived behavioural control did not significantly predict intentions. Thus, having more positive attitudes toward environmental activism and perceiving normative support for environmental activism were related to greater intentions to engage in environmental activism.

Of importance for the model proposed in this paper, activist identity and membership in an environmental organisation (i.e. social identity), what we argue are group-level variables, contributed to the explanation of intentions over and above the standard TPB variables. Thus, the findings of the current study accord with previous research showing independent effects of self-identity on intentions and behaviour (Cook et al. 2002; Sparks and Shepherd 1992; Terry et al. 1999). Moreover, our findings are consistent with a social identity perspective in that group membership impacted on intentions to engage in environmental activism (cf. Hinkle et al. 1996; McFarlane and Boxall 2003; Klandermans et al. 2002; Simon et al. 1998). Overall, the proposed model accounted for 83 per cent of the variance in intentions to engage in the environmental activism.

Table 1. Hierarchical multiple regression analysis predicting behavioural intention

Step	Predictor	r^2	r^2 change	F	df	Sig.	β
1	Past behaviour	.62	.62	268.23	1, 162	$p < .001$.14*
2	Attitude	.71	.08	15.23	3, 159	$p < .001$.15***
	Subjective norm						.08†
	PBC						.00
3	Self-identity	.83	.12	29.29	2, 157	$p < .001$.46***
	Social identity						.25***

† $p < .10$, * $p < .05$; ** $p < .01$, *** $p < .001$

Does social identity moderate the effect of model variables?

We argued above, that membership in an environmental organisation can provide individuals with an important social identity that will guide their beliefs, attitudes, and behaviour on dimensions relevant to that identity (e.g. environmental activism). Thus, decisions about whether to engage in environmental activism are less likely to be the outcome of an individual cost-benefit analysis (as TPB argues) for environmental

model variables at Step 2. Although political orientation emerged as a significant predictor of intention at Step 1, it did not remain significant after inclusion of the model variables at Step 2. None of the other demographic variables were significant predictors of intentions. For this reason, and because demographic variables were not of theoretical interest in this study, they are not included in subsequent analyses.

group members and are more likely to be based on identity-related considerations such as perceived norms and strength of activist identity. To test this idea we conducted a hierarchical regression analysis in which we investigated the interaction of social identity with other predictors of the model.

Social identity tended to moderate the effect of attitudes and past behaviour on intentions (Table 2). Follow-up analyses revealed that attitudes were a significant predictor of intentions for environmental group members but not for non-group members. This finding is clearly contrary to our expectations. We argued that attitudes, because they are thought to be based on an individual cost-benefit analysis, would be a more important predictor for individuals who are not members of an environmental organisation. One explanation for this unexpected finding is that group members' attitudes may in fact reflect an internalised group norm and should thus serve as an important predictor of group members' intentions (Terry and Hogg 1996). In support of this position, research by Terry and Hogg (1996) showed that perceptions of the group norm significantly predicted group members' attitudes. Although this is a viable explanation for our results, it cannot be assessed in the present study as we had no measure of group norms.

Follow-up analyses of the interaction between social identity and past activism showed that engaging in past activism predicted future intentions for both members and non-members of an environmental organisation. However, it was a stronger predictor for non-members. This finding makes intuitive and theoretical sense. For example, if two people are members of the same environmental group their behaviour is likely to be guided by the norms of the group (Brown 2000; Tajfel 1981) rather than what they have done in the past. This is supported by evidence from previous studies showing that when a person is a member of a group, individual-level variables (e.g. perceived behavioural control) are not good predictors of involvement (Kelly and Breinlinger 1995; Terry and Hogg 1996). This suggests a threshold conceptualisation of involvement in activism in that once a person overcomes the barrier of joining a group their behaviour will be guided by the group and not by individual-level variables. This would explain why environmental group members' past behaviour is a less important determinant of future intentions than non-members' past behaviour.

Table 2. Hierarchical multiple regression analysis predicting behavioural intention: interactive effects of social identity

Step	Predictor	r^2	r^2 <i>change</i>	<i>F</i>	<i>df</i>	Sig.	β
1	Attitude	.83	.83	130.63	6, 157	$p < .001$.15**
	Subjective norm						.08*
	PBC						.00
	Social identity						.24***
	Self-identity						.42***
	Past behaviour						.25***
2	Identity x Attitude	.85	.02	4.24	5, 152	$p < .01$.08†
	Identity x Subjective norm						-.06
	Identity x Control						-.04
	Identity x Self-identity						-.06
	Identity x Past behaviour						-.08†

† $p < .10$, * $p < .05$, *** $p < .001$

NB: Beta coefficients for the main effects were computed after the interaction terms were entered into the equation.

Do beliefs relate to TPB determinants?

We argued above that a strength of the TPB is that it provides a methodology for identifying beliefs that are associated with environmental activism and provides a framework for understanding how these beliefs are associated with the model predictors (i.e. attitudes, subjective norms, perceived behavioural control). Consistent with this argument, attitudinal beliefs (i.e. an assessment that the identified costs and benefits will be likely outcomes of engaging in environmental activism weighted by an evaluation of the outcomes) were positively related to attitudes ($r = .44$, $p < .01$). Similarly, normative beliefs (an assessment of the extent to which the identified referents think that the respondent should engage in environmental activism weighted by respondents' motivation to comply with these referents) were positively associated with subjective norms ($r = .63$, $p < .01$). Finally, an assessment of the extent to which the identified barriers would prevent respondents from engaging in environmental activism was negatively associated with intentions ($r = -.27$, $p < .01$). The

negative correlation indicates that the more the barriers were perceived to prevent participants from engaging in environmental activism, the less control they perceived themselves to have over this behaviour. Overall, these results provide some support for TPB contention that beliefs underpin the determinants of intentions.

Do environmental group members and non-members differ in their beliefs?

We also investigated whether environmental group members and non-members differed in their beliefs about environmental activism. As Table 3 shows, in general, environmental group members rated the benefits as more likely outcomes of environmental activism and they also rated these benefits as more favourable than non-members. A somewhat different picture emerged in the judgements of the costs of engaging in environmental activism. Non-members judged the costs of requiring time and energy, being arrested and being associated with extremist elements more negatively than did group members. In general, though, there was no difference between environmental group members and non-members' judgements that the costs would be outcomes of engaging in environmental activism. The exception was the belief that environmental activism would 'require time and energy', which was rated as a more likely outcome by environmental group members than non-members. This latter finding seems to indicate a greater awareness of the reality of activism. Overall, the data points to the idea that environmental group members have a greater belief in the benefits of environmental activism and to some extent downplay any costs involved, a pattern that is supported by the overall finding that environmental group members are more likely to intend to engage in environmental activism.

It was also evident (Table 4) that environmental group members perceived greater support for engaging in environmental activism from family, friends, and radical groups than did non-members. Group members were also more likely to comply with the wishes of environmental groups and radical groups. This is a fairly complex pattern indicating that group members feel a greater sense of support for activism from their friends and family than non-members. It also shows that all respondents believe that environmental groups are pro-environmental activism, however, it is the environmental groups members who are most likely to be swayed by this message. Moreover, the norms and standards of radical groups are more likely to influence group members rather than non-members.

Finally, environmental group members judged that the type of people involved in environmental activism, the possibility of getting a criminal record, and the belief that environmental activism would not make a difference were less likely to prevent them from engaging in environmental activism than non-members (Table 5).

Table 3. Mean behavioural beliefs of participants as a function of environmental group membership

	Attitudinal beliefs			
	Outcome evaluations		Behavioural beliefs	
Costs and benefits	Non-members n = 95	Group members n = 67	Non-members n = 94	Group members n = 69
Protecting the environment	2.68	2.91**	1.21	1.88***
Making you feel good about yourself	1.83	2.19	1.61	1.74
Contributing to change	2.33	2.87***	1.22	2.23***
Making friends	1.56	2.21***	1.53	2.13***
Having opinions heard	1.52	2.18***	1.16	1.93***
Requiring time and energy	.48	1.21***	1.83	2.38**
Being subject to stereotyping/ discrimination	-1.4	-1.09	1.12	1.38
Being arrested	-2.25	-1.33***	-.54	-.04
Failing to achieve goals	-1.42	-1.43	.26	.30
Being associated with extremist elements	-1.37	-.81**	.25	.87

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

Table 4. Mean normative beliefs for participants as a function of environmental group membership

Referents	Normative beliefs		Motivation to comply	
	Non-members n = 95	Group members n = 67	Non-members n = 95	Group members n = 68
Family	-.14	.81***	4.46	4.02
Friends	.37	1.49***	4.47	4.15
Environmental Groups	2.38	2.48	3.37	4.66***
Political Leaders	-.72	-.66	2.41	2.50
Radical Groups	1.11	1.79**	2.40	3.21**

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

NB: Normative beliefs were assessed on scales ranging from -3 to +3; motivation to comply was assessed on scales ranging from 1 to 7.

Table 5. Mean control beliefs for participants as a function of environmental group membership

Barriers	Non-members n = 95	Group members n = 68
Lack of money	3.18	3.60
Lack of time	6.43	5.34
The type of people who are involved in activism	4.27	3.27***
Possibility of getting a criminal record	4.48	3.37***
Belief that it will not make a difference	4.04	2.74***
Possibility of violence	4.32	3.87

*** $p < .001$

Summary and conclusions

In this paper we presented a model that identifies determinants of engaging in environmental activism. Identification of these factors is important to any groups seeking to engage and harness the support of community members for the good of the environment. Overall, the model was successful in predicting intentions to engage in environmental activism accounting for a large amount of the variance in intentions.

Although we must be cautious about the extent to which we generalise from our results considering the largely student sample, our results nevertheless point to factors that are important when considering ways for community groups to gain greater engagement in environmental activism.

Our findings show that past engagement in environmental activism is a predictor of future intentions. Previous research has also found support for the predictive power of past behaviour. However, this has usually been in relation to behaviours that are habit-forming (Aarts et al. 1998). As activism is unlikely to be habitual, the strength of the relationship between past environmental activism and future intentions may lie in the development of a more realistic assessment of the benefits and costs of activism/or the development of an activist identity. Regardless of underlying process, the findings suggest that once people are engaged in environmental activism they are more likely to keep doing it. This indicates that methods and strategies that can simply get people started may be enough to keep them going.

Findings from the belief-based measures of the model also indicate that convincing community members of the benefits of engaging in environmental activism may be a more fruitful strategy than downplaying the costs. This pattern is consistent with other research that we have conducted examining the beliefs underlying decisions to engage in environmentally sustainable behaviour (Fielding et al. in press).

Although models of human decision-making have focussed on rational individual-level variables as predictors of intentions and behaviour, our findings show limited support for the predictive power of these factors. Instead, group-level factors like social identity, self-identity and, to a lesser extent, subjective norms were key determinants of intentions to engage in environmental activism. Theoretically this makes sense — once individuals join and identify with an environmental group, the norms of the group will guide attitudes and behaviour on relevant dimensions (Hogg and Abrams 1988). One dimension relevant to environmental groups is the extent to which individuals are expected to engage in activities beneficial to the environment. Having an activist self-identity also contributes to engagement; once being an activist becomes an integral part of the self-concept, to not engage in this type of behaviour could result in discomfort and dissonance. Thus, self-identity speaks to the adage that ‘we are what we do’.

Although our findings suggest that identity, either social identity or self-identity can facilitate intentions to engage in environmental activism, the results also suggest that identity considerations could act as a barrier. Being associated with extremist elements was cited as a cost of environmental activism and non-group members evaluated this cost more negatively than group members. The type of people involved in environmental activism was cited as a barrier to engaging in environmental activism and, again, non-members reported that this was more likely to prevent them from engaging in this type of action. These results give some indication that negative stereotypes of environmental activists could make engaging in activism unattractive to some. For these community members, there may be a desire to distance rather than engage with others involved in environmental activism. Environmental and community organisations may be able to overcome this negative image by highlighting the diversity of activities encompassed in environmental activism and the diversity of people engaged in these activities.

In this paper we have proposed a theoretical framework for understanding intentions to engage in environmental activism. The framework draws on a well-established social psychological model of decision-making and incorporates additional variables relating to past behaviour, social identity and self-identity. Although the research has limitations in that the sample was predominantly university students and no measures of actual behaviour were able to be collected, it nevertheless highlights the importance of identity when trying to understand why citizens might or might not become engaged in environmental activism.

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Appendix 1. Descriptive data for measures included in regression analyses (means, standard deviations, Cronbach's alpha coefficients and bivariate correlations)

Variable	M	SD	1	2	3	4	5	6	7
1. Past behaviour	2.94	2.04	a						
2. Attitude	1.81	1.08	.47**	(.90)					
3. Subjective norm	1.08	1.29	.51**	.52**	(.88)				
4. Control	5.42	1.05	.33**	.33**	.21**	(.80)			
5. Self-identity	4.10	1.93	.79**	.53**	.51**	.36**	(.90)		
6. Group membership	.43	.50	.70**	.46**	.38**	.35**	.70**	a	
7. Intention	4.41	2.13	.79**	.61**	.54**	.37**	.86**	.77**	(.98)

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

^a Cronbach's alpha not computed; single item measure.

NB: Cronbach's alpha coefficients shown along main diagonal. Past behaviour, perceived behavioural control, self-identity, and intention measured on 1–7 point.