

**Do as I do, not as I think:
Disentangling the impact of different types of social norms on
customer environmental consumption**

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Abstract:

Research has shown that social norms (i.e. perceptions of other people's opinions about a specific behaviour), play an important role in shaping pro-environmental consumption. However past studies have focussed largely on subjective norms, formed by referring to known relatives such as friends and family. The present paper extends this research by investigating the impact of different types of social norms such as local norms (reference to local neighbours and communities), and by differentiating between injunctive norms (perception of other's opinions) and descriptive norms (perception of others' behaviour). The present research aims to disentangle the influence of each of these types of social norms on pro-environmental behaviour. Findings reveal that descriptive norms are the most powerful in this context. This demonstrates that social influence in pro-environmental consumption is therefore a matter of imitation of others rather than of persuasion by others.

Keywords: Environmental consumption, types of social norms

1. Introduction

Previous research demonstrates that while consumers hold broadly positive attitudes towards preservation of the environment, there are important discrepancies between these attitudes and consumption behaviour (Carrington, Neville and Whitwell 2014). This is reflected in the marketplace: “*While up to 90% of North American consumers report being concerned about the environmental impact of their purchases, for the most part, behavioral changes have not been evidenced.*” (Cleveland, Kalamas, Laroche 2012, p.294).

Social norms are considered as one of the causes of this attitude-behaviour gap. Hence, even if consumers hold specific attitudes toward environmental preservation, they may adopt non-conformance behaviour if they feel pressure of their peers (Swaim, Maloni, Napshin, and Henley, 2014). Past research in this area has largely studied the impact of one specific type of social norms, i.e. subjective norms; these represent what consumers believe their friends and family think (Leeuw, Valois, Morin, and Schmidt, 2014). However, numerous other types of social norms have been shown to influence consumers’ decisions. Local norms, for example, represent perceived thoughts and behaviours of unknown people who share the same spatial-physical locations such as neighbours or local actors (Fornara, Carrus, Passafaro and Bonnes, 2011). Past research also highlights differences between injunctive and descriptive norms, with the former reflecting a person’s beliefs about what other people think is appropriate behaviour (Cialdini, Kallgren and Reno 1991), and the latter referring to beliefs about what others do (Shultz et al. 2007).

This paper extends current research and investigates the impact of social norms on the adoption of pro-environmental behaviour. We do this by disentangling the influence of different types of social norms that consumers take into account in their social judgement. We believe that this model presents a robust conceptualisation of the impact of social norms on pro-environmental behaviour.

2. Literature Review

2.1. *The determinants of pro-environmental consumption and the attitude-behaviour gap*

A growing body of research has explored the main reasons for the adoption (or non-adoption) of environmentally-friendly consumption behaviour. Within these, consumer’s attitudes toward environmental issues are often seen as critical. More specifically, the more positive their attitudes toward environmental preservation, the more likely consumers will adopt pro-environmental consumption practices (Swaim et al., 2014; Taylor and Todd, 1997).

However research has also shown that more positive attitudes toward environmental preservation do not always lead to more environmental consumption behaviour. This has been referred to as the attitude-behaviour gap (Auger and Devinney, 2007). This gap is generally attributed to perceived behavioural effectiveness, which represents the extent to which people believe that individual actions have an impact on the world (Leary et al., 2014, Lee et al., 2014). Here, the more consumers believe their individual consumption behaviour makes a significant impact on the overall level of pollution, the more likely they are to change this behaviour.

A growing body of research has also attributed the attitude-behaviour gap to social pressure (Welsch and Kühling, 2009). For example, Griskevicius, Tybur and Van den Bergh, (2010) show that environmental consumption is sometimes conspicuously used by consumers to fulfil a status need. The role of social pressure is also supported in well-established theories such as the theory of Reasoned Action (TRA) and the theory of Planned Behaviour (TPB) (Ajzen and Fishbein, 1980). These theories show that social norms (i.e. what a person

believes others may think or do) strongly influence people’s actual behaviour, on occasion more than their own attitudes.

2.2. The different types of social norms

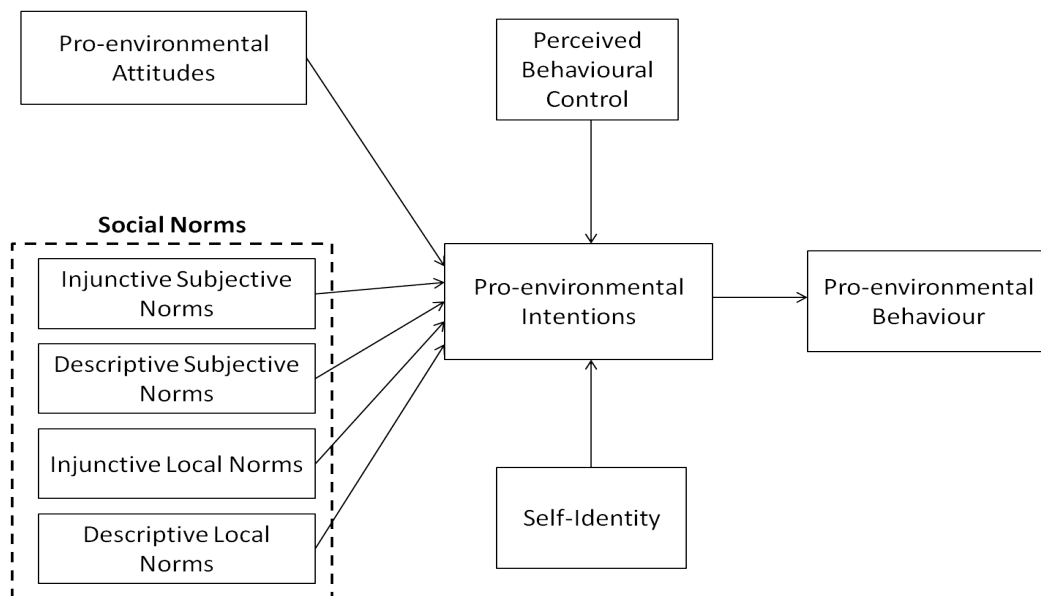
In the context of pro-environmental consumption, numerous empirical studies have used TRA and TPB to explore and highlight the important impact of social influence in shaping actual behaviour (e.g., Swaim et al., 2014). However, these studies only investigate one specific type of social pressure, i.e. the pressure that is caused by *subjective* norms, referring to consumers’ perceptions of what their personal references such as friends and family think and behave regarding environmental issues (Leeuw et al. 2014). This is an important limitation as subjective norms are just one aspect of social norms. Consumers also try to act in conformity with unknown people, solely based on the fact that they share the same spatial-physical location. This is referred to as *local* norms.

A further distinction within types of social norms is the difference between *injunctive* and *descriptive* norms. Injunctive norms reflect a person’s beliefs about what other people think is appropriate behaviour (Cialdini et al. 1991), while descriptive norms represent a person’s beliefs about what others actually do (Shultz et al. 2007). Past research shows that descriptive and injunctive norms have an independent effect on people’s behaviour and should therefore be considered separately when studying social norms models (White and Simpson 2013).

2.3. Conceptual model

Our conceptual model (see Figure 1) incorporates each kind of social norm (descriptive/normative and subjective/local norm) and disentangles their respective relationship with customer pro-environmental behaviour.

Figure 1. Conceptual Model



We define the following social norms in our model:

- Injunctive subjective norms: beliefs about what persons known to us think
- Descriptive subjective norms: beliefs about what persons known to us do
- Injunctive local norms: beliefs about what unknown local persons think
- Descriptive local norms: beliefs about unknown local persons do

We also add two additional variables to our model that are considered critical in pro-environmental consumption. The first one is self-identity, which represents the way people use to describe themselves in relation to their own behaviour (Cook, Kerr and Moore, 2002), shown as being a strong predictor of behavioural intentions (Conner and Armitate, 1998). The second one is perceived behavioural control (PBC), which represents consumer's belief about the presence or absence of external factors simplifying or impeding the performance of a specific behaviour. Here, the higher the PBC, the more likely the individual will engage in a specific behaviour (Conner and Armitage, 1998). Finally, we control for important covariates: age, gender, household composition, income, Education level and voting preference.

3. Methodology

3.1. Sample Description

Our study was conducted among customers of a Water Board, a governmental body that is responsible for the management of water quality. We collected data via an online survey, which was sent to a sample of respondents from a European country. In total 207 respondents participated in the survey, 61.8% of them were *female* and 38.2% were *male*. The average *age* of the respondents was 41 years. The sample covered a broad range of *household compositions*. 73.9% had a monthly income of €2.500 or higher. Regarding the *education level* 65.7% of the participants enjoyed higher education.

3.2. Measurement (reliability and validity)

The measurement of the different constructs in this study was mostly based on well-established existing multi-item scales from previous studies. The items used to measure each construct as well as the type of scale and the source of these items is describes in Table 1.

Table 1. Variable Measurement

Construct	Items	Source
Pro- environmental Attitudes	Five 7-point items (e.g., I think that engaging in environmental behaviour is: From -3 (<i>extremely bad</i>) to +3 (<i>extremely good</i>))	(Fielding et al., 2008)
Injunctive Subjective Norms	2-item 5-point Likert scale (e.g., Most people who are important for me think that I should engage in environmental friendly behaviour)	(Fornara et al., 2011)
Descriptive Subjective Norms	2-item 5-point Likert scale (e.g., How many among the persons important for you do engage in environmental behaviour?)	(Fornara et al., 2011)
Injunctive Local Norms	2-item 5-point Likert scale (e.g., Most of my neighbours think that I should engage in environmental behaviour)	(Fornara et al., 2011)
Descriptive Local Norms	2-item 5-point Likert scale (e.g., How many among your neighbours engage in environmental friendly behaviour)	(Fornara et al., 2011)
Perceived Behavioural Control	Five 7-point items (e.g., How much control do you have over whether you engage in environmental behaviour?: From 1 (<i>very little control</i>) to 7 (<i>a great deal of control</i>))	Fielding et al. (2008)
Self-Identity	Three 7-point items (e.g., I think of myself as a person who behaves environmentally-friendly: From 1 (<i>disagree</i>) to 7 (<i>agree</i>)).	Fielding et al. (2008)
Pro-environmental behaviour	Seven 7-point items (e.g., How often do you make a special effort to buy fruits and vegetables grown without pesticides?)	Dono et al. (2010)

Internal consistency of the constructs was assessed through the calculation of composite reliability scores. An internal consistency reliability value above 0.7 is regarded as satisfactory (Nunnally and Bernstein, 1991). All constructs met this cut-off value. Moreover, a confirmatory factor analysis was conducted to establish the validity of constructs under study. Convergent validity (whether the indicators represents one and the same underlying

construct) is assessed by checking that the average variance extracted (AVE) is equal or higher than 0.5, which indicates that a latent variable is able to explain more than half of the variance of its indicators on average (Fornell and Larcker, 1981). All constructs meet this cut off value. Finally discriminant validity (whether a construct differs from measures of other constructs in the same model) is assessed by checking that the average shared variance between a construct and its indicators should be higher than the shared variance between a construct and other constructs. In this aim, the square root of the AVE for each construct should be larger than the correlation between the construct and any other construct in the model. (Fornell and Larcker, 1981). This was verified for all constructs.

3.3. Method of analysis

We used partial least squares to test the hypotheses and estimate the effects of the exogenous variables and their interactions on the criterion measure (i.e., pro-environmental behaviour). Partial least squares analysis enables the simultaneous estimation of all these relationships, without making stringent assumptions regarding the distribution of variables and sample size required by maximum likelihood techniques. We used bootstrapping (with 500 runs) as the resampling procedure and used SmartPLS 2.0 software to run the analyses.

4. Results

Table 2 provides an overview of the results.

Table 2: Overview PLS models for testing hypotheses

Paths modelled			Coefficient	t-value
<i>DIRECT IMPACTS</i>				
Attitude	→	Behavioural intention	.047	.76
Injunctive subjective norms	→	Behavioural intention	.094	1.32
Descriptive subjective norms	→	Behavioural intention	.194***	2.89
Injunctive local norms	→	Behavioural intention	-.061	1.00
Descriptive local norms	→	Behavioural intention	.168**	2.44
Self-Identity	→	Behavioural intention	.421***	7.36
Perceived behavioural control	→	Behavioural intention	.178***	2.96
Behavioural intention	→	Environmental behaviour	.538***	10.63
<i>MEDIATED IMPACTS</i>				
Attitude	→	Environmental behaviour	.025	.76
Injunctive subjective norms	→	Environmental behaviour	.051	1.44
Descriptive subjective norms	→	Environmental behaviour	.104***	3.08
Injunctive local norms	→	Environmental behaviour	-.033	1.04
Descriptive local norms	→	Environmental behaviour	.091**	2.33
Self-Identity	→	Environmental behaviour	.227***	6.17
Perceived behavioural control	→	Environmental behaviour	.096***	3.09
		R^2_{Bi}	.646***	
		R^2_{Eb}	.290***	

Note: significance levels ***p<0.01, **p<0.05, *p<0.10

Consistent with the attitude-behaviour gap, we found no significant effect of attitudes toward environmental preservation on environmental behavioural intentions. Regarding social norms, our results show that both types of descriptive norms (*believes about what others do*) have an impact on intentions to perform environmental behaviour. This means that respondents were influenced by what they thought other people do, no matter whether these are *people they know* (subjective) or are unknown *local* (local). However, results reveal that

both types of injunctive norms (*believes about what others think*), local and subjective, do not have any impact on intentions to perform environmental behaviour. This means that respondents were not influenced by what they thought other people think, whatever if these people are people they know (subjective) or unknown locals (local).

Regarding the control variables, our results showed a significant positive effect of ‘perceived behaviour control’ (e.g. *the person’s belief about the presence or absence of external factors simplifying or impeding the performance of a certain behaviour*) on Behavioural Intention. In addition, Self-Identity was found to positively influence behavioural intentions. To finish, we tested the mediating of all IVs (environmental attitudes, injunctive norms, descriptive norms, perceived behavioural control and self-identity on actual pro-environmental behaviour through the mediation of effect of behavioural intentions. No additional significant effects were found: descriptive norms, perceived behavioural control and self-identity have an indirect impact on environmental behaviour, while attitudes and injunctive norms (local and subjective) do not have any impact.

5. Discussion and Implications

Our study has several important theoretical and managerial implications. First, our results show that people’s intentions to adopt environmentally-friendly behaviour are not influenced by their environmental attitudes. This confirms past research about the attitudes-behaviour gap (e.g., Swaim, Maloni, Napshin, and Henley, 2014). Second, and more importantly, our study stresses the importance of the process of social influence in the context of environmental consumption. We show that environmental behaviour is to a large extent subjective to some specific social norms. Specifically, consumers are influenced by descriptive norms, their perception of other people’s behaviour, whatever their connection with these people, ranging from close friends (descriptive subjective norms) to unknown neighbours (descriptive local norms), but not influenced by injunctive norms, their perceptions of other people’s opinions. Therefore, and this is the main theoretical contribution of the paper, social influence goes through a phenomenon of imitation of others’ behaviour rather than via conformity to what others think. This is an essential element to take into account in the use of TRA and TPB: most studies only take into account injunctive norms that, in this case, appear not to be influential. Our research shows the importance of also taking descriptive norms into account when studying social influence.

In terms of managerial implications, our results are important for every actor willing to influence consumers’ environmental behaviour, such as firms proposing more environmentally friendly products, governments attempting to change people’s behaviour, or pressure groups lobbying for a change in society. All these actors regularly use communication strategies based on social influence such as the use of opinion leaders or the picturing of “typical consumers”. Our results reveal that, when using this kind of strategy, communication should put more emphasis on the description of how all these pictured characters actually behave rather than on their attitudes or opinion. Indeed consumers will more follow how people behave rather than how they think.

Our study is of course not exempt of limitations that represent interesting areas of future research. For instance, to measure environmental behaviour, we measure declared behaviour, which can be different from the actual practices. A next step of this research could therefore be to observe actual people’s behaviour.

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