

The role of social norms in promoting sustainable consumption

Social norms are an effective instrument to influence sustainable consumption. Consumers are exposed to social norm information when they are in a good and bad mood. This paper investigates the effect of mood (positive and negative) on the influence that both descriptive and injunctive norms have on consumers' attitudes, behavioral intentions and actual behavior towards fair trade products. Results of the two experiments show a fundamental difference between injunctive and descriptive norms. Injunctive norms lead to more positive attitudes and intentions under positive (vs. negative) mood, whereas descriptive norms lead to more positive attitudes and intentions under negative (vs. positive) mood. Furthermore, we show that this effect translates to actual (donations) behavior.

Keywords: *Social norm, mood, attitudes, intentions, donations*

Introduction

Social norms are an influential driver of consumers' preferences in different domains of everyday life (Cialdini et al., 2006; Melnyk et al., 2009) and are extensively used in marketing campaigns, as well as in political and social campaigns. Importantly, the impact of mood on the effectiveness of persuasive messages is considerable (Bless et al., 1990). It plays an important role in the way consumers learn, interpret, and remember information (Forgas, 1989) and can interfere with people's ability to process persuasive messages (Mackie & Worth, 1989). The effect of social norms on consumers' decision making depends not only on mood, but also on the formulation of the social norm. Social norms can be formulated in two distinct ways. First, through giving information about the behavior of other people (e.g., "most of my colleagues buy organic vegetables"). These are so called descriptive norms; they describe what most others do in a given situation (Cialdini et al., 1990). Second, through highlighting social rules and expectations of others (Reno et al., 1993; Lapinski & Rimal, 2005) (e.g., "my colleagues expect me to buy organic vegetables"). These are so called injunctive norms; they prescribe certain behavior in a given situation (Cialdini et al., 1990). Different reasons drive conformity to injunctive versus descriptive norms, and consumers process the information that each norm conveys differently (Prislin & Wood, 2005). Despite a large body of research on social norms (see Goldstein & Cialdini, 2009) and on the role of mood in consumer behavior (see Gardner, 1985) little is known about the effect of mood on social norms' influence. Although prior research has not examined whether the two types of social norm formulation have a different influence under good and bad mood, this paper argues and will show that there is a relation between mood and norm formulation based on the mood-protection and the mood-repair mechanisms.

Background

Each norm formulation can be differently affected by mood due to the way in which consumers process the social norm information under positive and negative mood. That is, individuals are motivated to maintain the mood when they are already in positive mood, but engage in mood repair when they are in negative mood (Hirt & McCrea, 2000). The mood-protection mechanism leads consumers to show more compliance with requests in a positive mood compared to negative mood (Forgas, 1998). Not conforming to such a request from others can lead to conflicts with those others (Stangor, 2004; Turner, 1991), and therefore can decrease the mood. Importantly, because of mood-protection and mood-repair

mechanisms, positive and negative moods can result in different effects on the amount of cognitive effort that people exert (Isen et al., 1985). When in positive mood, individuals avoid investing cognitive effort (Wegener et al., 1995). Positive mood was shown to reduce consumers' motivation to systematically process both content information and contextual cues (Bohner et al., 1992). Therefore positive mood is typically associated with more superficial processing of received information. In contrast, the mood-repair mechanism of negative mood stimulates individuals to invest cognitive effort to find ways of improving their mood (Hirt & McCrea, 2000). Therefore negative mood is associated with more cognitive elaboration (Clore et al., 1994). This difference in the amount of cognitive deliberation under positive and negative mood can lead to different perceptions of injunctive compared to descriptive social norms. Previous research has shown that injunctive norms have a smaller influence on the advocated behavior, when consumers cognitively deliberate upon them (Melnik et al., 2011). This is because injunctive norms can be perceived by consumers as a limitation to their freedom and can therefore trigger them to counter-argue (Mann & Hill, 1984). In contrast, in positive mood the mood-protection mechanism should decrease the likelihood of thoughts against such a request (Batra & Stayman, 1990). Therefore we expect the following:

H1: *Injunctive norms have a greater influence on attitudes, behavioral intentions and behavior under positive than under negative mood.*

For descriptive norms we do not expect that negative mood decreases their influence, because due to the mood-repair mechanism consumers are more likely to cognitively deliberate upon the messages (Clore et al., 1994), and this can actually increase the influence of descriptive norms (Melnik et al., 2011). Furthermore, the mood-repair mechanism stimulates consumers to think about solutions to improve their mood. Descriptive norms can present such a solution, by conveying information of what most others do. In such a way, descriptive norms provide "social proof" of what is likely to be effective behavior (Reno et al., 1993; Cialdini, 2006) and indicate possible beneficial behaviors (Schultz et al., 2007). This can make descriptive norms more influential under negative than positive mood. For example, it was shown that when people experience negative (vs. positive) feelings they are more likely to conform to the opinions of others (Griskevicius et al., 2006). Furthermore, descriptive social norm message with a social proof appeal ("most popular"), was persuasive when people experienced negative feelings (fear), but was counter persuasive when people experienced pleasant feelings (romantic desire) (Griskevicius et al., 2009). Therefore for descriptive norms we hypothesize:

H2: *Descriptive norms have a greater influence on attitudes, behavioral intentions and behavior under negative than under positive mood.* These hypotheses are tested in two experiments.

Experiment 1

One hundred and forty undergraduate students of Wageningen University (WUR) took part in the first experiment, which had a 2 (mood induction: negative vs. positive) × 3 (norm formulation: descriptive vs. injunctive vs. no norm) between subjects design. For *mood manipulation*, participants were asked to recall either a negative life event that created a strong and unpleasant feeling (negative mood condition), or a positive event that created a strong and pleasant feeling (positive mood condition) (cf. Arnold & Reynolds, 2009; McFarland et al., 2007). *Norm formulation* was manipulated by a short statement on the background of a neutral picture with chocolate. "Did you know that nowadays most WUR students buy fair trade chocolate?" (for descriptive norm condition), "Did you know that nowadays most WUR students think you should buy fair trade chocolate?" (for injunctive norm

condition), and “Did you know that nowadays there is a possibility to buy fair trade chocolate in any supermarket?” (for no norm condition). At the end of the experiment participants were thanked for participation and offered an opportunity to make a donation to a well-known fair trade organization “Oxfam-Novib” from their monetary reward for participation. *Attitudes* were measured with three items rated on 100-point scales (Negative – Positive, Unfavorable – Favorable, Bad – Good, $\alpha = .87$; cf. Lee & Aaker 2004). *Behavioral intentions* were measured on the same 100-point scale with two items: “Next time you need to buy chocolate, how likely is that you would buy fair trade chocolate?” (very unlikely - very likely); “I plan to buy organic fair trade chocolate in near future” (completely disagree - completely agree) (adapted from Ajzen, 2001; $\alpha = .83$). *Behavior* was measured by the amount of money that participants donated to the fair trade organization.

Results

Attitude towards fair trade chocolate. Results of an ANOVA showed a significant main effect of mood, $F(1, 135) = 18.25, p < .001, \eta^2 = .119$. Participants in a positive mood had more favorable attitudes towards fair trade chocolate ($M = 71.86$) than those in a negative mood ($M = 61.58$). Results also showed a significant main effect of norm formulation, $F(2, 135) = 5.62, p < .001, \eta^2 = .077$, and further analyses (LSD) revealed that attitudes towards fair trade chocolate were lower when it was promoted by the message without any norm ($M = 61.26$) compared to the messages containing either the descriptive ($M = 70.70; p = .002$) or injunctive norm ($M = 68.20; p = .021$). This shows that including a social norm in a persuasive message can increase the influence of the message on consumers’ attitudes. Consistent with our expectations, results showed a significant interaction effect between norm formulation and mood, $F(2, 135) = 24.94, p < .001, \eta^2 = .270$. Further analyses (LSD) revealed that for injunctive norms, attitudes were more favorable for participants who were in positive mood ($M = 78.19$) than those in negative mood ($M = 58.22; F(1, 43) = 26.72, p < .001$). For descriptive norms, attitudes towards fair trade chocolate were more favorable for participants who were in negative mood ($M = 77.43$) than those who were in positive mood ($M = 63.97; F(1, 46) = 8.35, p = .006$). Participants in the no norm condition had more favorable attitudes towards fair trade chocolate in positive mood ($M = 73.44$) than in negative mood ($M = 49.09; F(1, 46) = 39.14, p < .001$). The results for intentions were similar to the results for attitudes.

Willingness to donate. One hundred ten participants (78%) donated money for the fair trade organization. A probit regression showed that the main effects of mood, $\text{Wald}(1) = 3.23, p = .198$, and of norm formulation, $\text{Wald}(2) = 1.76, p = .185$, were not significant. As expected, the interaction between norm formulation and mood was significant, $\text{Wald}(2) = 8.96, p = .011$. In particular, participants were less willing to donate money in response to injunctive norms when they were in negative mood compared to positive mood, $b = -2.24, \text{Wald}(1) = 6.74, p = .009$. Mood did not significantly affect the influence of descriptive norms on the willingness to make a donation, $b = 1.16, \text{Wald}(1) = 2.24, p = .136$. On average participants donated half of the 3 Euros they received ($M = 1.5$ Euros). Effects of our manipulations on the donation amount were not significant.

This experiment has thus shown that mood can either stimulate or impede the influence of social norms, depending on whether descriptive or injunctive norms are used. The proposed underlying mechanism relates to more cognitive deliberation in negative mood than in positive mood. When people are prevented from deliberation, for instance due to a high cognitive load from a competing

task, we would expect the moderating effect of mood to become smaller or even to disappear. Our second experiment tests this.

Experiment 2

The second experiment extends experiment 1 with an additional factor: cognitive load. One hundred and sixty undergraduate students took part in a 2 (mood induction: negative vs. positive) \times 2 (norm formulation: descriptive vs. injunctive) \times 2 (cognitive load: high vs. low) between subjects design. *Mood manipulation* and *norm formulations* were identical as in experiment 1, except the text was adopted for Maastricht University, where the study took place. *Cognitive load* was manipulated by asking participants to either remember a 7-digit number (high cognitive load) or a 1-digit number (low cognitive load) (cf. Gilbert & Hixon, 1991; Pendry & Macrae, 1999). Attitudes and behavioral intentions were measured using the same scales as in experiment 1.

Results

Attitude towards fair trade chocolate. An ANOVA showed a significant main effect of cognitive load $F(1, 152) = 21.98, p < .001$. Participants under high cognitive load indicated less positive attitudes towards fair trade chocolate ($M = 58.0$) than participants under low cognitive load ($M = 70.2$). Furthermore, the main effect of mood was marginally significant $F(1, 152) = 3.04, p = .083$. Participants in negative mood indicated less positive attitudes towards fair trade chocolate ($M = 61.8$) than participants in positive mood ($M = 66.4$). The results also revealed a significant three-way interaction between cognitive load, norm formulation and mood, $F(1, 152) = 5.84, p = .017$. To interpret this interaction, we examined both cognitive load conditions. Conditional for *low cognitive load condition*, results replicated those obtained in experiment 1, and showed a significant interaction effect between mood and norm formulation, $F(1, 152) = 11.39, p = .001$. Further analysis (LSD) revealed that, in line with experiment 1, for injunctive norms attitudes were more favorable for participants who were in positive mood ($M = 79.4$) than those who were in negative mood ($M = 64.6, F(1, 37) = 6.63, p = .014$). For descriptive norms attitudes were more favorable for participants who were in negative mood ($M = 73.3$) than those who were in positive mood ($M = 63.7, F(1, 42) = 4.48, p < .047$). The main effects of norm formulation and mood were not significant.

Conditional for *high cognitive load condition*, results showed a marginally significant main effect of mood only, $F(1, 152) = 3.04, p < .083$, with participants in positive mood having more favorable attitudes ($M = 61.3$) than those in negative mood ($M = 57.7$). The main effect of norm formulation, $F(1, 152) = .04, p = .851$, as well as the interaction between norm and mood, $F(1, 152) = .01, p = .922$, were not significant. Results for intentions were similar to the results obtained for attitudes. This experiment has thus shown that the enhancement of descriptive norms in negative (vs. positive) mood disappears under high cognitive load, which suggest that the effect was due to cognitive deliberation in negative mood.

Conclusion and Discussion

This study contributes to our understanding of the influence of social norms on decision making by showing how mood affects the influence of descriptive compared to injunctive norm formulations on

consumers' attitudes, purchase intentions, as well as on real behavior. The results of the two experiments show that the effect of norm formulation on attitudes, intentions and behavior depends on the mood of consumers. Facing a descriptive norm under negative mood (vs. positive mood) makes attitudes and intentions (but not behavior) more congruent with the normative message. In contrast, injunctive norms have a greater influence on attitudes, intentions and behavior under positive than under negative mood. Experiment 2 shows that the effect is due to cognitive deliberation, as the effects disappear when cognitive deliberation is hindered.

Our results indicate that social norms should be carefully chosen, and used depending on the context in which the information supported by the norm is processed by the consumer. The study has theoretical implications as well. Previously, negative mood was shown to decrease consumer's evaluations of received information and persuasive messages (Miniard et al., 1992). This paper shows that mood not only changes the responsiveness of consumers to social norms for attitudes and intentions, but it does so differently for the two norm formulations. In particular, the negative effect of bad mood on responsiveness to persuasive information can be reversed by using descriptive norm formulations rather than injunctive norms.

References

References available upon request