I was told I care about nature:
social labeling to encourage responsible behaviors in tweens

Julien Bourjot-Deparis *
PhD Candidate
Paris-Dauphine University

Karine Charry
Associate Professor
IESEG School of Management

Béatrice Parguel
CNRS Researcher
Paris Dauphine University

* Place de Lattre Tassigny 75016 Paris, julien.bourjot@gmail.com, 06.73.46.75.39
Il parait que je suis soucieux de la nature :
l’étiquetage social pour encourager les comportement responsables chez les
préadolescents

Résumé:
Ce travail traite de l’efficacité de l’étiquetage social sur la promotion de comportements pro-
environnementaux chez les enfants. Une expérimentation réalisée sur des élèves de primaire a
montré que 1 / les enfants exposés à l’étiquetage déclarent des comportements plus favorables
à l'environnement et que 2 / les enfants d’un âge intermédiaire (entre 9,5 et 11,5 ans) sont les
plus influençables par la technique, ce qui sous-tend une relation en U inversé entre
l'efficacité de l’étiquetage et l’âge des enfants. Ces résultats contribuent à une meilleure
compréhension théorique de l’étiquetage social et ont des implications en termes de politique
publique.

Mots-clés : étiquetage social, marketing social, marketing environnemental, politique
publique

I was told I care about nature :
social labeling to encourage responsible behaviors in tweens

Abstract :
We study the effectiveness of social labeling to promote pro-environmental behaviors in
children, and examine more specifically the moderating effect of children’s age. We run an
experiment on 3rd to 6th grade children and show that 1/ children exposed to a social labeling
declare more pro-environmental behaviors and that 2/ children at an intermediate age
(between 9,5 and 11,5) are the most responsive to the technique, underlying an inverted-U
relationship between social labeling effectiveness and children's age. These results contribute
to a better theoretical understanding of social labeling and suggest implications for public
policy makers.

Keywords: social labeling, social marketing, green advertising, public policy
Introduction

Defined as “providing a person with a statement about his or her personality or values (i.e. social label) in an attempt to provoke behavior that is consistent with the label” (Cornelissen et al., 2007, p.279), social labeling has been demonstrated an effective technique when stimulating individuals’ behaviors is required (Goldman et al., 1985; Miller et al., 1975). Though it has attracted limited interest from scholars and practitioners till now, its relevance has been recently invigorated by Cornelissen and colleagues (2007), who showed that labeling individuals as “eco-friendly” motivated their subsequent pro-environmental behaviors. Those authors also suggested that it is still “important to extend our understanding of social labeling effects as these are easily applicable to market socially desirable or pro-social behavior” (2007, p.286). The present research aims at extending their work to children pro-environmental behaviors, as it seems reasonable to encourage them at an early stage. Children’s cognitive development may also be an advantage in terms of impact and sustainability of the technique.

In this article, beyond demonstrating the effectiveness of social labeling in modifying children’s short term pro-environmental behaviors, we show that the promoted behaviors are adopted in the long term, an important contribution for a target that does not systematically hold stable attitudes and behaviors (Roedder John, 2008). Furthermore, the inverted-U relationship between effectiveness and age is stressed. This provides further evidence of the absence of persuasion knowledge in younger children but also supports the use of the technique for sustainable objectives considering the simplicity with which it may be applied.
1. Literature review

1.1. Social labeling

While many tactics fail achieving their persuasive objectives (Cornelissen et al., 2007), it has been shown that labeling people according to their behavior leads those individuals to behave according to the label (Cornelissen et al., 2007; Grusec and Redler, 1980; Miller et al., 1975). Interestingly, intentionality in the original behavior is not essential. Although individuals may select the most ecological TV merely for its price (and not its pro-environmental features), stressing the pro-social dimension of the behavior seems sufficient in convincing the buyers that they are involved in ecological issues (Cornelissen et al., 2007). Re-attribution of the behaviors’ motivations (although originally –and potentially– unrelated to the label) to pro-social personality traits or values would explain the behavioral changes (Grusec and Redler, 1980; Miller et al., 1975). Individuals would reconsider their actions in the light of the label and infer from the latter what their motivations were. The values or personality traits associated with the label are henceforth considered representative of the self. Re-attribution would indeed alter individual’s assessment of their own attributes and qualities, also known as self-concept (Solomon, 1983). These profound changes would be maintained overtime and would further influence subsequent behaviors (Grusec and Redler, 1980; Miller et al., 1975).

1.2. Children as target

Preadolescence represents a transitional period in children’s development (Valkenburg and Cantor, 2001), also in autonomy (Kline, 2010). Furthermore, pre-adolescents – also referred to as tweens (Goldberg et al., 2003) – are influencers of today and tomorrow (McNeal, 1992). Influencing tweens therefore means impacting individuals at stage where their autonomous behaviors will be decided upon and individuals prefer goods they have autonomously selected (Freeman and Brucks, 2002). Furthermore, tweens are a vast source of influence on their
family and peers (Valkenburg and Cantor, 2001). These various elements support the idea that targeting preadolescents when promoting pro-social behaviors is not only acceptable but advisable. Early positive experiences with the nature indeed seem at the root of environmentalists’ motivations (Collado and Corraliza, 2013).

Miller, Brickman and Bolen (1975) were among the first to highlight the effectiveness of the social labeling approach among children. In a first study, they showed that 5th grade children that were told they were neat and tidy discarded more litter in the waste basket. In a second study, they showed that telling second-graders that they were able and motivated to do well in math performed better in subsequent math tests. Grusec and Redler (1980) studied the donation of children labeled (or not) as “helpful people”. They suggested a larger efficiency of the label among 3rd (8-9 years old) and 5th grade children (10-11 years old) than among younger children, based on the commonly shared belief that children’s 8th year is critical in their development of self-perception. In the meantime, we could argue that younger children are less prone than older ones to persuasion knowledge (i.e. individuals’ ability to identify persuasive attempts and to protect themselves against those (Friestad and Wright, 1994), which has been shown to have a strong influence on the social label impact (Cornelissen et al., 2007). Persuasion knowledge is indeed related to cognitive abilities which develop with age. Although children’s understanding of the persuasive intent of commercial messages was demonstrated four decades ago (Robertson and Rossiter, 1974), their ability to activate their critical defenses and henceforth protect themselves against the persuasion attempt is still questioned (van Reijmersdal et al., 2012). Preadolescents’ cognitive capacities are still developing (Roedder John, 2008; Valkenburg and Cantor, 2001) and limited cognitive resources tend to hinder the careful processing of message characteristics that may trigger persuasion knowledge, giving more importance to peripheral cues such as social labels (Petty and Cacioppo, 1986; Cornelissen et al., 2007).
Although very interesting, the original studies of Miller, Brickman and Bolen (1975) and Grusce and Redler (1980) dealing with children’s social labeling present some limitations. First, they date back to the late 70’s, when children were quite different from what they are today (Valkenburg and Cantor, 2001). In particular, current children are said to be savvier and more likely to perceive persuasive intent than 30 years ago (Valkenburg and Cantor, 2001; Roedder-John, 2008). Second, they are based on weak experimental protocols. For instance, they do not consider the whole range of ages and therefore never offer a direct comparison between the different ages. In this respect, Grusce and Redler (1980, p.533) recognized that their “conclusions about such age changes should be considered only tentative”. Besides, they rely on complex experimental protocols, making unclear the pure effect of the mere label.

1.3. Hypotheses

The literature reviewed above show that social labeling may be a powerful tool in triggering the expected behaviors. Setting the context of this research in the promotion of pro-environmental behaviors, in line with the study of Cornelissen and her colleagues (2007), we suggest that labeling children could modify their pro-environmental behaviors in the short but also in the long term, such that:

\[ H1: \text{Childrens exposed to a pro-environmental label will report more pro-environmental behaviors than those not exposed to a pro-environmental label.} \]

Besides, considering the cognitive mechanisms of social labeling, its effectiveness should rest on two main elements. First, a modification in children self-conception of their own sensitivity and concern to ecological issues has to occur after being exposed to a pro-environmental label. Second, childrens’ usage of cognitive defenses against persuasion attempts has to remain low.
As younger childrens may not yet have a defined image (Grusec and Redler, 1980; Goldberg et al., 2003), it appears reasonable not to expect long term behavioral changes as further modifications may occur in a very malleable self-concept. Besides, as persuasion knowledge is correlated with cognitive abilities, older childrens may have started to develop some sense of manipulation when exposed to labeling. We therefore expect that:

\[ H2: \text{The effectiveness of a pro-environmental label depends on childrens age in a curvilinear way, such that it is lower among the youngest and the oldest childrens and higher at intermediate ages.} \]

2. Method

To test the hypotheses, a between-subjects design experiment was conducted in a Belgian primary school. Working in an environment that is familiar to the target is indeed highly recommended (Rust and Hyatt, 1991) and largely applied (van Reijmersdal et al., 2012).

2.1. Participant

A total of 115 Belgian children (mean age: 10 years, 53.9% girls) attending 4 different levels of primary school classes were involved in the complete data collection. The school was selected on the basis of its representativeness of the region’s population in terms of socio-economic background. Children from all classes were assigned to both the social labeling and the control conditions.

2.2. Procedure

In phase 1, one week before the experiment took place, initial data including children’s environmental perceptions were collected to enable a prior-after comparison. They indicate that there were no significant differences across the children randomly assigned to one or the
other condition during phase 2 in terms of environmental perceptions ($F_{(1,114)}=.91$, $p=.341$), age ($F_{(1,114)}=.09$, $p=.765$) or gender ($\chi^2_{(1)}=.42$, $p=.517$).

The experiment was conducted in a separate room assigned to the study by the school. Children from the same class level were welcomed by two researchers and were presented with a cover story: find out some more about tweens’ current interests and opinions on a variety of topics such as preferences for school subjects, hobbies, etc. Then, children were thanked for their first contribution a week before with their answers to the first questionnaire. Tweens in the social label condition were then presented with the label. Using the exact same wording –adapted to the target- across classes, the same researcher stated that based on the first questionnaire, the research team had been able to identify “how respectful of the nature they were and how involved in protecting it they revealed to be”. No mention of children’s level of environmental concerns was made to the subjects in the control condition. Then, tweens were asked to fill the second questionnaire on various topics. The two researchers provided answers to individual questions, making sure that all items were fully understood. They also warranted that children offered personal answers. The average completion time was about ten minutes.

The phase 3 happened one week after the experiment and consisted in the same procedure as in phase 1. All in all, the whole study was conducted on a period of three weeks, which may be considered a significant assessment in terms of time delay for the target (Phelps and Hoy, 1996).

2.3. Measures

Children’s self-rated pro-environmental behaviors were measured in phases 1 (PEB$_1$) and 3 (PEB$_3$) on Collado and Corraliza (2013)’s scale. Four self-rated pro-environmental behaviors (PEB$_{2a}$, PEB$_{2b}$, PEB$_{2c}$, PEB$_{2d}$) were measured in phase 2 (‘‘When possible, I prefer to walk
rather than going by car to get around”, “When I wash my hands, I close the tap while I soap”, “When I drink a can of Coca-Cola, I throw it in the "good" garbage”, “When I leave a room, I turn off the light”). Children’s sensitivity and concerns to ecological issues were measured on Children’s Environmental Perceptions scale (Larson et al., 2011). All constructs were measured using 4-point Likert scales, as recommended (Peracchio and Mita, 1991) and generally applied on the target (van Reijmersdal et al., 2012).

3. Results

ANOVAs controlling for children’s environmental perceptions (as it is measured in phase 1), age and gender were run to test H1. They showed that the application of a social label enhances the four self-rated pro-environmental behaviors immediately measured in phase 2, though this increase is only significant in three cases. As an illustration, closing the tap while washing hands appeared stronger among children exposed to the social label (M=3.54 vs. 3.17; F(1,108)=5.50, p=.011). Besides, the application of a social label enhances one week later self-rated pro-environmental behaviors (M=3.08 vs. 2.76; F(1,112)=6.22, p=.007).

To test H2, we regressed self-rated pro-environmental behaviors measured in phases 2 and 3 on the manipulation, children’s age, and their interaction and used the Johnson-Neyman technique to identify the range(s) of age for which the simple effect of the manipulation was significant (Spiller et al., 2013). These analyses revealed that the application of the social label had an influence on PEB3 after 9.6 years, on PEB2b between 9.6 and 11.3 years, on PEB2c after 10.6 years and on PEB2d between 10.4 and 11.6 years.

4. Discussion

The main purpose of the paper was to demonstrate that social labeling may influence children’s adoption rate of pro-social behaviors. Building on previous research conducted on
adults (Cornelissen et al., 2007), we show that social labeling is suitable tool in addressing environmental issues with children, a task that seems particularly difficult as pro-social attitudes unfortunately do not always lead to subsequent behaviors. More specifically, children between 9 years and a half and 11 years and a half are the most responsive to the technique. Furthermore, these influences are retained overtime.

As main theoretical contribution, we show that social labeling is moderated by age. At this stage, we can only propose explanations to the limited time frame in which the technique is powerful. For instance, older children (from 11 years and a half) may have developed some abilities to identify persuasive techniques at work (i.e. acquired and used persuasion knowledge) and consequently respond negatively to the tactic. It also appears less effective with younger target, probably due to self-concept issues (Grusec and Redler, 1980).

Beyond the obvious necessity to encourage any individual’s adoption of pro-environmental behaviors (Bruni et al., 2011), increasing children’s involvement in the issue is essential to the extent that those early positive experiences with the nature seems at the root of environmentalists’ motivations. Adults who are committed to the protection of the planet indeed recall gratifying childhood experiences (Collado and Corraliza, 2013). In this respect, our findings have some managerial implications and may allow communicants to effectively target the most receptive children with a very simple technique. Nevertheless, the practice may be generalized and presented in a playful way. Advergames could for instance be used at home or at school to sensitize children to any pro-social issue (e.g. road safety, smoking, healthy eating). Furthermore, social labeling does not require negative or coercive approaches based on fear or punishment. The behaviors obtained in this way, i.e. without psychological violence, may also participate in shaping future adults. From an ethical perspective, this also seems rather encouraging and in favor of the technique, when pro-social objectives are considered.
Through this research, we expect to increase children’s concerns and pro-environmental behaviors, leading to improved experiences and stronger bond to the world’s protection, which, as with adults, requires creativity and persuasiveness. However, with this first study we have not been able to demonstrate that the long term changes in children’s behaviors is due to changes in the self-concept nor that persuasion knowledge is indeed responsible for the lack of effect. This calls for interesting and promising future studies on the subject.

References


