



Social proof in the supermarket: Promoting healthy choices under low self-control conditions



Stefanie J. Salmon^{a,c,*}, Emely De Vet^b, Marieke A. Adriaanse^c, Bob M. Fennis^a, Martijn Veltkamp^d, Denise T.D. De Ridder^c

^a Groningen University, The Netherlands

^b Wageningen University, The Netherlands

^c Utrecht University, The Netherlands

^d FrieslandCampina, The Netherlands

ARTICLE INFO

Article history:

Received 18 September 2014

Received in revised form 17 May 2015

Accepted 6 June 2015

Available online 11 June 2015

Keywords:

Self-control
Ego-depletion
Heuristics
Social proof
Food choice
Field study

ABSTRACT

Under low self-control conditions, people often favor tempting but unhealthy food products. Instead of fighting against low self-control to reduce unhealthy food choices, we aim to demonstrate in a field study that heuristic decision tendencies can be exploited under these conditions. To do so a healthy product was associated with a social proof heuristic, referring to the tendency to adopt the option preferred by others. A healthy low-fat cheese was promoted with banners stating it was the most sold cheese in that supermarket. A state of low self-control was experimentally induced in the supermarket, and compared to a high self-control condition. Participants low in self-control were more likely to buy the low-fat cheese, when this product was associated with the social proof heuristic, compared to when it was not. This suggests that under low self-control conditions, presenting social proof cues may benefit healthy purchases.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

In today's Western obesogenic food environment, tempting food products are abundantly available (French, Story, & Jeffery, 2001). People are confronted with palatable but unhealthy foods, and persuasive food advertisements, at virtually every corner of the street (French et al., 2001). Despite the introduction of healthier alternatives (e.g., light or low-fat food products), many people purchase and consume unhealthy food products (Briefel & Johnson, 2004; Nielsen, Siega-Riz, & Popkin, 2002). This makes the question imperative of how food choices are actually made and what potential exists to change behavior in the direction of healthier alternatives at point-of-choice settings.

It is often suggested that people are more prone to succumbing to unhealthy food choices when they are low in self-control, for example when they are exposed to tempting snack foods at the canteen after doing tedious tasks at work. Consequently, it is assumed that in order to resist food temptations and act in line with long term health goals, people need a sufficient level of

self-control (e.g., Hofmann, Friese, & Wiers, 2008; Schwarzer, 2008). Interventions in healthy eating behavior are typically based on the assumption that people have a sufficient level of self-control at the moment they make a food choice (Herman & Polivy, 2011). However, most food choices are made mindlessly, when people are not able or willing to exert self-control (Bargh, 2002; Wansink & Sobal, 2007).

Instead of fighting against low self-control, we aim to exploit the low self-control conditions under which most food choices are made. More specifically, we previously demonstrated that by exploiting the impulsive decision tendencies that people show under low self-control conditions, the healthy option can become the automatic and impulsive one (Salmon, Fennis, de Ridder, Adriaanse, & de Vet, 2014). With the present study, we primarily aim to test our theory under more challenging conditions. Our previous work demonstrated the beneficial effect of the social proof heuristic on food choices under low self-control conditions in a restricted lab setting, which is a highly controlled environment. With the present research we aim to demonstrate that the effect holds under complex circumstances; a noisy supermarket environment with a representative community sample. In doing so, we provide a more critical test of our theory regarding the effectiveness of heuristics. Furthermore, we will, as far as we know, for the first time experimentally induce ego-depletion outside the

* Corresponding author at: Department of Marketing, Groningen University, PO Box 800, 9700 AV Groningen, The Netherlands.

E-mail address: s.j.salmon@rug.nl (S.J. Salmon).

lab, providing more insight into the strength and robustness of the ego-depletion effect. With this, our findings add to the recent controversies surrounding the replicability of the ego-depletion phenomenon (Carter & McCullough, 2014; Hagger, Wood, Stiff, & Chatzisarantis, 2010).

After an initial act of exerting self-control (e.g., such as doing tedious tasks at work, making a range of choices, or inhibiting impulses) people are less willing or able to exert self-control on a secondary task, a phenomenon labeled ego-depletion (Baumeister, Bratslavsky, Muraven, & Tice, 1998; Inzlicht & Schmeichel, 2012; Muraven & Baumeister, 2000; Vohs et al., 2008; but see for a critical note on the strength and robustness of the ego-depletion effect Carter & McCullough, 2014; Dewitte, Bruyneel, & Geyskens, 2009; Job, Dweck, & Walton, 2010; and see for alternative mechanisms underlying the ego-depletion effect Dang, Xiao, & Dewitte, 2014; Inzlicht & Schmeichel, 2012; Kurzban, Duckworth, Kable, & Myers, 2013). Under conditions of ego-depletion, people do not have enough resources or lack the motivation to exert self-control over their behavior and decisions. Consequently, people are unwilling or unable to weigh the pros and cons of several options and make a deliberated decision. Instead, decision-making becomes more swift, automatic, and impulsive under these low self-control conditions (Fennis, Janssen, & Vohs, 2009; Hofmann, Friese, & Strack, 2009; Janssen, Fennis, Pruyn, & Vohs, 2008). People frequently favor tempting but unhealthy food products under these conditions, as these are often more appealing in the short term (Bruyneel, Dewitte, Vohs, & Warlop, 2006; Vohs & Heatherton, 2000; Wang, Novemsky, Dhar, & Baumeister, 2010).

Nevertheless, people are not doomed to make unhealthy food choices. We suggest that people do not necessarily need to exert self-control to make a healthy food choice under specific conditions. The impulsive choice under low self-control conditions can become a healthy one, by associating the healthy option with a heuristic (Salmon et al., 2014). Heuristics are simple decision rules that simplify the decision making process, by excluding part of the information, and hence save self-control resources (Gigerenzer & Gaissmaier, 2011; Shah & Oppenheimer, 2008). A frequently used heuristic is the social proof heuristic, referring to the tendency to adopt the option preferred by others, which can be triggered by presenting majority information on food products, like calling a certain product the 'best-selling' product, suggesting that many people bought this product on previous occasions (Cialdini, 2009; Lun, Sinclair, Whitchurch, & Glenn, 2007). Importantly, heuristics are especially effective in influencing behavior under conditions of low self-control when people do not have the capacity or motivation to make a well-deliberated decision (Fennis et al., 2009; Jacobson, Mortensen, & Cialdini, 2011; Salmon et al., 2014). For instance, under low self-control conditions students chose to complete more extra surveys when a descriptive norm told them that other students allegedly also completed extra surveys, compared to under conditions of high self-control (inducing social proof; Jacobson et al., 2011).

In the current obesogenic food environment, heuristics often seem to favor unhealthy food choices. Whereas heuristics appear to be a well-known strategy for the promotion of palatable, unhealthy foods, they seem to be rarely associated with healthy food products. Up till now, healthy products are often promoted in conscious, deliberate ways, in which for instance the healthiness of a product is emphasized, thereby relying on deliberate decision making and self-control resources at the moment of making a food choice (e.g., Bandura, 2004; Conner, Norman, & Bell, 2002). In point-of-purchase settings, the healthiness and health benefits of products are often emphasized by the use of health and nutrition claims (Kozup, Creyer, & Burton, 2003; Sloan, 2008; Urala, Schutz, & Spinks, 2011). Yet, these conscious, deliberate attempts

at promoting healthy food choices have witnessed limited success or even counterproductive effects (Finkelstein & Fishbach, 2010; Herman & Polivy, 2011; Michie, Abraham, Whittington, McAteer, & Gupta, 2009). In the present study, we will promote healthy food choices by using heuristics. We aim to build on our previous finding (Salmon et al., 2014) that low self-control conditions can be beneficial for long term health goals when heuristics favor healthy food products.

To date, there is preliminary evidence for the effectiveness of heuristics in influencing health behavior under low self-control conditions (Fennis et al., 2009; Salmon et al., 2014). Inducing the heuristic of consistency, referring to the felt need to go through with something once feeling committed to it (Cialdini, 2009), has been found to promote behaviors relevant to one's health. People were more willing to keep a health and food diary when the heuristic of consistency was induced, by asking people questions about the foods they consume, compared to when it was not (Fennis et al., 2009). Furthermore, in a recent lab study we demonstrated the influence of social proof on food choices under low self-control conditions. Participants low in self-control made more healthy food choices in a hypothetical food choice task when the heuristic of social proof was associated with the healthy choice options by presenting majority information, compared to when it was not (Salmon et al., 2014). Importantly, participants in this study were more responsive to the heuristic information under low self-control conditions. Under conditions of high self-control, there was no effect of heuristic on food choice. In sum, these studies found initial evidence for the notion that heuristics can help making the impulsive choice a healthy one.

The aim of the present study is to demonstrate that social proof heuristics can help people to make healthier food choices under low self-control conditions in a supermarket where many food choices are made, and where actual temptations and influence techniques associated with other food products are assumed to play a big role in food choices. In doing so, we aim to demonstrate the social proof effect under low self-control conditions in an ecologically valid and challenging setting among a representative sample. The heuristic of social proof was associated with a healthy low-fat cheese at the cheese department of a supermarket. We selected low-fat cheese as the target product, because previous research showed that this type of cheese is perceived by Dutch consumers to be a healthier, yet less tasty option as compared to regular cheeses (Temminghoff & Paulussen, 2012). Importantly, self-control for choosing the healthy option is only required when food products are regarded as less tasty than the unhealthy option (Salmon et al., 2014). Therefore, choosing between a cheese that is perceived to be healthier but less tasty versus variants perceived to be more indulging but less healthy, represents a self-control dilemma between the goal to eat healthily and the goal to enjoy palatable foods. In sum, we hypothesize adding social proof cues to a healthy low-fat cheese increases healthy food choices, but only for participants low in self-control.

Cues that suggested that the low-fat cheese was the most frequently selected cheese by other customers at that supermarket were presented on banners at the point-of-sale. The sales of this cheese when the heuristic was present were compared to a control period when the heuristic was removed. Moreover, a state of low self-control was experimentally induced in the supermarket and compared to a high self-control condition. By for the first time manipulating ego-depletion outside the lab, in a representative community sample, we provide more insight into the generalizability and external validity of the ego-depletion effect.

The dependent variable was whether people bought the low-fat cheese or not. It is hypothesized that under conditions of low self-control, participants would more often buy the low-fat cheese when this cheese is associated with the social proof heuristic,

Download English Version:

<https://daneshyari.com/en/article/4316928>

Download Persian Version:

<https://daneshyari.com/article/4316928>

[Daneshyari.com](https://daneshyari.com)