Perceived probability of food waste: Influence on consumer attitudes towards and choice of sales promotions

Guillaume Le Borgne, Lucie Sirieix*, Sandrine Costa

UMR MOISA, Montpellier SupAgro, CIHEAM-IAMM, CIRAD, INRA, Univ Montpellier, 2 place Viala, 34060 Montpellier, France

A R T I C L E   I N F O

Keywords:
Food waste
Promotions
Consumer concern
Experiment
Deal proneness
Skepticism
BTGOF later

A B S T R A C T

Based on a consumer survey including two experiments with more than 400 French respondents each, this research (1), establishes that consumers’ perceived probability of waste has a significant negative effect on consumers’ attitude towards promotions and consumers’ intention to choose perishable food products (cheese and bread) on sale and (2), highlights skepticism towards the “Buy Two Get One Free later” offer. Recommendations are presented for managers and public policies, in order to reduce households’ food waste and prevent consumers from being skeptical towards new promotional mechanisms, a brand and/or, a retailer.

1. Introduction

Retailers regularly employ and spend more and more on sales promotions to increase sales volumes. Prior research has shown that promotions generate an increase in quantities purchased by consumers (Blattberg and Neslin, 1989; Nijs et al., 2001; Manning and Sprott, 2007), and an increase in consumption rate of certain products (Ailawadi and Neslin, 1998; Foubert and Gijsbrechts, 2007).

In the meantime, food waste is now becoming a major issue in the definition of a sustainable food system. Approximately a quarter of the world’s food is wasted across the food supply chain (FAO, 2011). In the United States, 31% -or 133 billion pounds- of the 430 billion pounds of the available food supply at the retail and consumer levels in 2010 went uneaten. Retail-level losses represented 10% (43 billion pounds) and consumer-level losses 21 per cent (90 billion pounds) of the available food supply (Busby et al., 2014). In 2015, the European Commission estimated annual food waste generation in the EU 27 at approximately 220 billion pounds and consumer-level losses represented 30% (ADEME, 2016).

While sustainable practices help retailers build a good image among consumers (Lavorata, 2014), promotional offers on food products are conversely often criticized and cited as a major factor of waste for households (Lyndhurst et al., 2007). These offers would tend to disturb consumers’ efforts tempting to plan and manage their food purchases in relation to their needs and stocks (Farr-Wharton et al., 2014). However, different forms of promotions may alter in different ways consumers’ attitudes towards promotions and choice. Indeed, consumers have become increasingly concerned about food waste (Evans, 2011) and may take into account the perceived probability of waste when they buy perishable products with different forms of promotion.

However, to our knowledge, no research has yet studied the potential effects of perceived probability of wasting and consumers’ concern for food waste, on consumers’ attitude towards promotions and consumers’ intention to choose perishable food products. Therefore the present study aims to respond to this need. It seeks to contribute to a better understanding of consumer’s response to different forms of promotions: BOGO50 (buy-one-get-one-50% off), BTGOF (buy-two-get-one-free) and, BTGOFL (buy-two-get-one-free-later) by addressing both deal proneness and food waste concern; it offers managerial recommendations for public policies, in order to reduce households’ food waste and for managers, in order to prevent consumers from being skeptical towards promotions, a brand and/or a retailer. This paper is structured as follows. First a conceptual framework regarding (1) consumers and sales promotions and (2) the link between food waste concern and attitudes towards promotions, is provided. This leads to a general model including hypotheses regarding attitudes towards promotions and purchase intentions. Findings from two experiments in France with two perishable food products - grated cheese and bread - are then reported and discussed. Finally, theoretical and managerial implications are exposed.

* Corresponding author.

E-mail addresses: guillaumeleborgne@gmail.com (G. Le Borgne), lucie.sirieix@supagro.fr (L. Sirieix), sandrine.costa@inra.fr (S. Costa).

https://doi.org/10.1016/j.jretconser.2018.01.004

Received 31 March 2017; Received in revised form 9 January 2018; Accepted 9 January 2018
2. Conceptual framework

2.1. Consumers and sales promotions

Prior research has demonstrated the consequences of promotional offers, on quantities purchased (Blattberg and Neslin, 1989; Nijs et al., 2001; Manning and Sprott, 2007) or more generally on purchase behaviour (Ailawadi and Neslin, 1998; Pechtl, 2004). The effects of promotions on purchases depend on factors related to the promotion itself, such as the promotional technique adopted or the perceived savings and the perceived complexity of the offer. Thus, the promotional technique influences the attitude towards a promotion. Previous studies make a distinction between monetary (based on price e.g. x% price discount or on quantity, e.g. BOGOs) and non-monetary promotions (e.g. gifts). “Free” offers such as “BOGOs” are described as always effective by Raghubir et al. (2004), who also mention that matching the promotion to the product category is necessary.

However, these effects also depend on factors related to the consumer, in particular his/her sensitivity to promotions or deal proneness (Lichtenstein et al., 1990; Laroche et al., 2001) and the beneﬁt, in particular his/her sensitivity to promotions or deal proneness. Lichtenstein et al. (1990) have deﬁned deal proneness as “a general propensity to respond to promotions predominantly because they are in deal form”. It has been suggested to consider the inﬂuence of deal proneness, on the effects of multiple unit price promotions (Manning and Sprott, 2007). Deal proneness may also be related to smart shopping, which Mano and Elliott (1997) deﬁne as investing considerable time and effort in seeking information about promotions in order to achieve price savings. However, savings are not the only beneﬁt expected from promotions. Both monetary and non-monetary reasons explain why consumers are sensitive to promotions (Chandon et al., 2006). Chandon et al. propose a model that distinguishes the utilitarian beneﬁts derived from promotions - savings, product quality - and hedonic beneﬁts - self-expression, exploration, pleasure - (Chandon et al., 2006). This model, however, focuses only on positive relationships between consumers and promotions.

Besides, consumer involvement and subjective expertise in the category might inﬂuence consumers’ attitudes towards a promotional offer (Hunt et al., 1995; Raghubir et al., 2004; Andrews, 2016). Hunt et al. (1995) examined the effects of product involvement on consumers’ responses to promotional offers. Their study reports that consumers with high levels of product involvement are more likely to experience satisfaction with their shopping experience involving a promotional offer and, subsequently, are more likely to express intentions to engage in repeat purchase behaviour of the product. Generally involvement and subjective expertise are correlated (Zaichkowsky, 1985), and subjective expertise may have the same positive effect on attitudes towards promotions.

2.2. Values and food waste concern

There already is an extensive body of research on environment or sustainability-concerned consumers (Grunert et al., 2014). The studies aiming to understand the underlying motivations of these concerned consumers highlight the inﬂuence of personal values embedded in these motivations. These values express themselves in the choice of sustainable labels (Grunert et al., 2014), socially conscious or frugal consumer behaviours (Pepper et al., 2009), organic consumption (Aertssens et al., 2009) or, fair trade products consumption (Grankvist et al., 2007). As regarding frugality, it is difﬁcult to ascertain its value antecedents, since a frugal behaviour may be a consequence of poverty or a deliberate choice. Hence, this behaviour may be associated with security concerns for some consumers and with self-transcendence values for others (Pepper et al., 2009). However, Pepper et al. show in their study that frugality is not primarily an “ethical conscious” choice and that its strongest negative predictors are income and personal materialism.

The same questions arise for food waste concern. Like frugality, food waste concern may be related to these values and may inﬂuence attitudes and behaviour. However, there is still a lack of literature investigating food waste concern.

Following the deﬁnition of environmental concern, consumers’ concern for food waste has been deﬁned as attaching importance to food waste and its consequences and as being emotionally affected by the experience of food waste or the general issue of food waste (Le Borgne et al., 2016). Like frugality which is characterized by both restraint in acquiring possessions and resourcefulness in using them (Lastovicka et al., 1999), food waste concern may lead to adopt behaviours in order not to waste (e.g. making shopping lists) or affect consumers’ attitudes towards promotions.

2.3. The link between food waste concern and attitudes towards promotion

The model proposed by Chandon et al. (2000) focuses only on positive relationships between consumers and promotions. Raghubir et al. (2004) developed an integrative model that theorizes that sales promotions have three distinct aspects: an economic aspect that provides an immediate monetary economic incentive as well as non-monetary incentives (saving time and effort to make a decision), an informational aspect that consumers use as a cue and an affective aspect that impacts how consumers feel about their shopping transaction, including both positive as well as negative feelings. Food waste concern is not included in Raghubir et al.’s model. Yet, food waste concern might affect both the economic and affective aspects in different ways. First, food waste concern may affect the probability of wasting food and money after purchasing a promotional offer; anticipated probability of wasting recovers both an economic dimension -the financial loss- and an affective dimension -the feeling of being tricked or betrayed (Binkley and Bejnarowicz, 2003). However, in the same way as frugal consumer behaviour depends on income constraints (Pepper et al., 2009), food waste concern is also related to financial concerns (Le Borgne et al., 2016).

Hence, it may also have a positive effect on deal proneness if promotional offers are perceived as a means of saving money (Quested et al., 2013; Graham-Rowe et al., 2014, Le Borgne et al., 2016).

3. Hypotheses

On the basis of the literature review, the following model including five hypotheses is proposed (Fig. 1).

Consumers’ routines with regard to planning and shopping for food are important constructs to understand consumers’ food waste (Stefan et al., 2013). Consumer food waste concern leads to more elaborated routines with regard to planning and shopping for food (Stefan et al., 2013). Consumer food waste concern leads to more elaborated planning (Le Borgne et al., 2016), including the use of shopping lists and the comparison of products, including promotional deals. Besides, consumers are motivated by saving money when it comes to food waste (Quested et al., 2013; Graham-Rowe et al., 2014; Le Borgne et al.,
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات