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## Title & summary

### **The mediating role of perceived fairness in consumers' response to post-purchase 'out of stock' in an online grocery context**

This study investigates consumer response to a retailer's substitution policy when facing post-purchase 'out of stock' (OOS) in an online grocery shopping context. Substitution policies (timeliness of OOS notification; and substituted product) can have detrimental effects on consumers' satisfaction with the retailer and behaviour response (whether to accept or reject the substitution). As post-purchased OOS indicates a failure of service, the study focuses its investigation on the mediating effects of perceived fairness (PF) of retailers' substitution policies on consumers' response. It is predicted that procedural fairness will have a stronger effect on mitigating consumers' negative OOS experience than distributive (outcome) fairness. The research will be conducted using three online scenario based experiments.

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## Introduction

Product unavailability is a common problem that consumers face when doing grocery shopping, both in store and online. When shopping in store, consumers make a choice regarding which product to replace the out-of-stock (OOS) item with, deter the purchase until the next trip or switch to another store to buy the intended products (Campo *et al.* 2000, Sloot *et al.* 2005). For online grocery shopping in the UK, consumers are often only made aware of product unavailability at their doorsteps, when the order is being delivered or, at most, being notified just a few hours before the delivery time (Thomson 2013), both of which offer no option for customers to make changes to the order. Retailers usually provide substitutions to the unavailable item and consumers are left with a choice of whether to accept the product or reject the substitution for a refund (Severs 2014). According to Mintel's report (2015), 34% of surveyed consumers respond negatively to product substitutions and 74% would like the retailer to notify them in advance.

Previous marketing and consumer's research have demonstrated a clear link between perceived fairness (PF) in predicting customers' satisfaction and behavioural responses (Goodwin and Ross 1992, Hui *et al.* 2004, Kukar-Kinney *et al.* 2007, White *et al.* 2012). The Fairness Heuristic Theory suggests that the cognitive process of PF has substantial effects on attitudes and behaviours (Lind *et al.* 1993). Empirical research, employing the mediating role of PF, has confirmed such a relationship, especially in a situation of service failure and service recovery (Goodwin and Ross 1992, Grewal *et al.* 2008). Investigating consumers' response to retailers' substitution policy through the lens of PF enables the study to identify the underlying mechanism in which negative responses might be mitigated.

Thus, this study makes two important contributions. Firstly, the study informs retailers' managerial practices to effectively design their interventions, which can result in more positive response from consumers, in the case of post purchase OOS. Secondly, by integrating the Fairness Heuristic Theory and OOS literature, the study offers a conceptual model which sheds light on the understanding of consumers' post-purchase experience. Extant retailing and marketing literature has placed more focus on consumers' choice in OOS situations prior to purchase, whilst neglecting the effects of post-purchase OOS. From the current context of the growing online grocery segment and ongoing issue of product substitution, this study fulfils both theoretical and empirical needs of addressing that gap.

In the next section, the paper will review prior literature on consumers' OOS response and subsequently, discuss our conceptual model and the underlying hypotheses. It then describes the next step of the research, which focuses on designing the experiments and data collection. It is anticipated that the research will be complete by the time of the conference in September.

## OOS response

Previous OOS studies have identified a number of behavioural responses when OOS occurs in a prior-to-purchase context. These include: switching the item (i.e. buy an item from a different brand or switch package size from the same brand as the OOS item); deter the purchase to the next shopping trip or next online order; drop all the purchases and cancel the shopping trip; or switch to another competitor store (Emmelhainz *et al.* 1991, Campo *et al.* 2000, Fitzsimons 2000, Sloot *et al.* 2005). Consumers' reactions are determined by a number of factors, such as the product, consumer and situational determinants (Campo *et al.* 2000), as well as cost factors (Corstjens and Corstjens 1995). In an online or distant shopping environment, retailers have more flexibility in mitigating negative OOS response, such as recommending a replacement (Fitzsimons and Lehmann 2004, Breugelmans *et al.* 2006),

adjusting the timing of OOS notifications (Kim and Lennon 2011, Pizzi and Scarpi 2013) or offering financial incentives to retain customers (Anderson *et al.* 2006, Kim and Lennon 2011). Such interventions are strong predictors of consumers' satisfaction and behavioural response.

Prior studies on consumers' OOS responses also show that, despite of many differences between online and offline shopping environments, consumers' OOS reactions appear to be similar (Breugelmans *et al.* 2006). However, the distinct difference between prior-to-purchase OOS and post-purchase OOS is the freedom of choice that consumers have when deciding on a replacement. When choice is restricted to one option in post-purchase OOS, consumers tend to seek interchangeable means to satisfy their psychological needs, such as increasing the sense of self-worth (Schneider and Bowen 1999), hence, they expect a fair treatment from the retailer. It is predicted that when consumers face low control and limited choice situations, such as PP OOS, they pay more attention to retailers' procedures in resolving the issue than to the product choice itself.

### **Effects of substitution policy on perceived fairness**

Extant literature has identified justice as an important consumer need (Schneider and Bowen 1999, Chung-Herrera 2007). Consumers rely heavily on policy fairness perceptions in their evaluation of service experiences (Blodgett *et al.* 1997). PF affects consumers' satisfaction and, in turn, impacts on behavioural intentions with the service provider (Maxham III and Netemeyer 2003, Kukar-Kinney *et al.* 2007, Ringberg *et al.* 2007). PF is a multifaceted construct, encompassing three main dimensions: procedural, distributive and interactional fairness (Alexander and Ruderman 1987, Bies and Shapiro 1987, Clemmer and Schneider 1996). Procedural fairness is defined as the PF of the policies and procedures used by the service provider in handling service failure whilst distributive fairness refers to the remedy offered by the service provider (Blodgett *et al.* 1993). Interactional fairness focuses on the manner in which consumers are treated (Bies and Shapiro 1987). As for grocery delivery context, interactions between consumers and retailers' employees, a delivery person, is not as significant as in-store shopping. Therefore this study will focus on procedural and distributive fairness and control for interactional fairness.

According to the Fairness Heuristic Theory, consumers use procedural fairness information to evaluate and determine the quality of their relationship with the service provider (Lind 1995). A policy or procedure is considered fair when retailers apply logical service rules, respectful of consumers' needs and provide consumers with all of the required information (Seiders and Berry 1998). Retailers' prompt reaction in a service failure situation likely reinforces perception of self-worth when consumers feel being valued by the service provider (Seiders and Berry 1998, Schneider and Bowen 1999). Providing consumers with adequate information in a timely manner motivates consumers' judgement of procedural fairness of the service exchange (Blodgett *et al.* 1997, Schneider and Bowen 1999). Similarly, quality attributes such as consideration and retailers' knowledge of consumers also indicate procedural fairness (Namasivayam and Guchait 2013). Thus, we predict that notifying consumers with information of substitution in a timeliness manner more likely results in higher perception of (procedural) fairness and in turn impacts on satisfaction and behavioural response than notification given at delivery

In a service failure situation, consumers experience a loss (e.g. time, effort and motivation) and the company usually attempts to make up for it in the form of a recovery (Smith *et al.* 1999). Perception of fairness may explain how consumers respond to retailers' intervention (Grewal *et al.* 2008). In general, to retain customers, companies must ensure that the recovery effort provides a benefit that the consumer believes equitably makes up for his or her loss

(Adams 1965, Deutsch 1985). Previous research claims that offering financial incentives, like discounts or vouchers, as a form of compensation to consumers in OOS situation is an effective measure, but least profitable, in offsetting negative OOS response (Anderson *et al.* 2006, Kim and Lennon 2011). Providing substitution to the unavailable product, possibly at a lower price, is a form of service recovery. Remedies offered by retailers will have an influence on consumers' perception of distributive (outcome) fairness of the policy. In a situation where consumers have more choices, unsolicited recommendation of substituted products result in reactance, as the recommendation contradicts consumers' preference and increases the difficulty of decision making (Fitzsimons and Lehmann 2004). When recommendation poses a suspicion of retailers being opportunistic, such as suggesting higher priced items or selling own label products, negative response to such recommendation (Breugelmans *et al.* 2006) suggest unfair exchange. Thus, we predict that substituted products chosen by retailers have strong influence on perceived (distributive) fairness and in turn impact on satisfaction and behavioural response.

Although it is generally accepted that the procedural and distributive fairness are independent, it is the combination of these dimensions that determines consumers' overall perceptions of fairness and, therefore, their satisfaction and behaviour. Previous studies have established that procedural fairness can strengthen distributive fairness in the case of unfavourable outcomes (Brockner *et al.* 2003). As such, even if individuals do not receive the outcome they desire, they may still be satisfied with the overall result, if they perceive that the policies and procedures used to determine the outcome were fair (Lind and Tyler 1988). For example, providing explanations and mitigating circumstances strengthens the PF of layoffs (Brockner and Greenberg 1990). Goodwin and Ross Consumers (1989, 1992) found that consumers would be willing to return to an offending service provider when only a token remedy was offered, if they perceived that the procedures used to resolve the complaint were fair. Thus, it is predicted that if retailers provide consumers with timeliness information about product unavailability and substitution, negative responses from receiving unfavourable substitutions is mitigated.

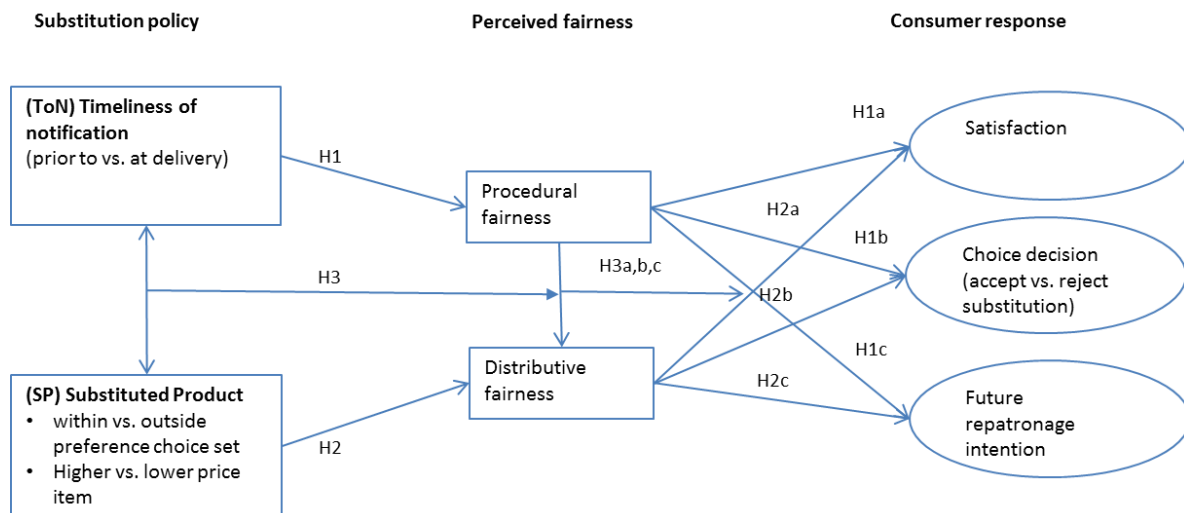
### **Mediating effects of perceived fairness on choice decision and satisfaction**

The Fairness Heuristic Theory proposes that people's satisfaction with social exchanges is determined by both the favourability of the outcome and the PF of the exchange process (Van den Bos and Lind 2002). Therefore it is predicted that PF fully explains the effects of substitution policy on consumers' choice decision and choice satisfaction.

The prominence of either procedural or distributive fairness is mostly contextual dependence. For example, in the situation of high outcome uncertainty, procedural fairness emerges as a more salient influence on individuals' satisfaction (Brockner 2002). Empirical evidence suggests that perceived procedural fairness affects trust, which in turn positively affects people's reactions to unfavourable decision outcomes (Brockner *et al.* 1997, Hui *et al.* 2004). Distributive fairness on the other hand indicates consumers' satisfaction with the outcome, which is products being substituted; hence, having direct influence on choice. Thus, we predict that consumers are likely to react positively to unfavourable substitution if the procedural fairness is perceived, whilst perceived distributive fairness more likely leads to acceptance of substitution rather than rejecting it.

We propose the following conceptual model

*Figure 1: Conceptual model*



## Method

It is anticipated that three separate online experiments will be conducted using consumer samples. Recruitment of participants will be done via a broker agency.

Study one measures the effect of the timeliness of OOS notification (ToN). It uses 2x2 between subject factorial design with ToN (prior to vs. at delivery point) x OOS (yes vs. no).

Study two investigates the effect of a substituted product (SP). This is a full factor between subject designs, with 4 variation of SP and a control scenario (no OOS).

Study three measures the interaction effect of ToN and SP. It uses 4x2 between subject factorial design with 4 variations of SP and 2 variations of ToN.

A pre-test study will be conducted to check manipulations as ToN will be used to represent procedural fairness (low vs. high) and similarly manipulations of SP will reflect distributive fairness (low vs. high).

The conceptual model and study design are currently being refined. It is anticipated that the data collection will be conducted between April and May, so by the time of the conference it is likely that the research will be completed and full result can be presented at the conference.



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