Complaint behaviour in multichannel retailing: a cross-stage approach

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Abstract

Purpose – This paper analyses how the purchase channel and customer complaint goals affect the sequential choice of post-purchase complaint channels when customers experience a service failure followed by a service recovery failure (double deviation).

Design/methodology/approach – An online survey involving a scenario manipulation was conducted with 577 apparel shoppers. The study employs multi-group latent class analysis to estimate latent customer segments within both online and offline groups of shoppers and compare latent classes between the two groups.

Findings – The results show that the purchase channel has a lock-in effect on the complaint channel, which is stronger for offline buyers. Moreover, there is evidence of channel synergy effects in the case of having to complain twice: shoppers who complain in store in the first attempt turn to online channels in the second complaint attempt, and vice versa. Complaint goals shape the choice of complaint channels and define different shopper segments.

Originality/value – The present study is the first to adopt a cross-stage approach that analyses the dependencies between the purchase channel and the complaint channel used on two subsequent occasions: the first complaint after a service failure and the second following a service recovery failure.

Keywords Complaint behaviour, Channel choice, Service recovery failure, Double deviation

Paper type Research paper

Introduction

Nowadays, consumers are increasingly willing to take action and complain when they experience dissatisfaction with a company (Melancon and Dalakas, 2018). Customers react differently based on whether they purchase through offline or online channels (Chang and Chin, 2011). For example, the rate of customer complaining is higher in e-commerce than in traditional offline retailing (Sengupta et al., 2018). The digital era offers customers new complaint channels through which to communicate their dissatisfaction, such as social media (Peeroo et al., 2017). When complaints are made through online channels, the negative comments may rapidly spread to a large audience, which can seriously damage a firm’s

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This study was financed by the Spanish Research Agency, Ministry of Economy, Industry and Competitiveness’s R&D Program (Project ECO2017-83051-R). Apart from this, there are no further competing interests.

Conflict of interest statement: On behalf of all authors, the corresponding author states that there is no conflict of interest.
reputation (Melancon and Dalakas, 2018). Thus, service recovery has become a crucial issue in the current, increasingly multichannel retail environment.

The proliferation of channels and touchpoints results in more complex customer journeys (Lemon and Verhoef, 2016). Post-purchase is the final stage in the customer journey, and complaining is one of the behaviours in that stage. During such a stage, a customer might experience a service recovery failure if a firm fails to provide a satisfactory solution to his/her complaint. If the customer complains again, he/she may choose the same channel as previously or resort to a different channel. As the number of channels through which customers can interact with a firm increases, more efforts are required in order to understand customer complaint behaviour (CCB) across multiple channels (Hansen et al., 2010; Istanbulluoglu et al., 2017; Sengupta et al., 2018).

The interest in analysing CCB in online channels is growing (Van Vaerenbergh et al., 2019). However, there is a lack of research on drivers of the choice of complaint channels in the context of retail, wherein customers can use traditional offline channels together with online channels. The seminal contribution of Mattila and Wirtz (2004) demonstrated that the choice of remote versus interactive channels to voice dissatisfaction is influenced by the underlying complaint goals. When social media is added to the choice set of complaint channels, additional goals need to be considered. Moreover, the use of a channel in one shopping stage might affect the channel chosen in the next stage. This phenomenon is known as cross-stage channel dependency (Gensler et al., 2012).

The main aim of this paper is to analyse how the purchase channel and customer complaint goals affect the choice of complaint channels when the customer experiences a double deviation (i.e. a service failure followed by a service recovery failure) in a multichannel retail context. This work contributes to the literature because, as outlined by Van Vaerenbergh et al. (2019), no prior research has adopted a cross-stage approach that analyses the dependencies between the purchase channel and the complaint channel used on two subsequent occasions: the first complaint after a service failure and the second following a service recovery failure. This would help multichannel retailers to allocate resources to the design of specific recovery strategies in line with the underlying complaint goals for different segments of users of each channel.

Literature review and research framework

To accomplish the aim of this study, we review the relevant literature in different research fields. Firstly, we analyse the literature on channels that focuses on customer channel choices at different shopping stages. Secondly, we review the literature on service failure and CCB with specific reference to the goals related to the choice of complaint channels in the multichannel retail context. In line with previous multichannel segmentation studies (e.g. Konuš et al., 2008; Sands et al., 2016), the present study employs a post-hoc segmentation analysis. Segments are then not determined a priori and for this reason formal hypotheses cannot be formulated.

Channel dependencies in cross-stage channel choices

Across the different models of the shopping process (De Keyser et al., 2015; Konuš et al., 2008), three main stages appear: (1) pre-purchase, which encompasses need recognition, information search and evaluation; (2) purchase, which comprises choice, ordering and payment; and (3) post-purchase, which integrates behaviours such as product usage, customer engagement, complaints and loyalty. Post-purchase is possibly the stage that extends further in time, and the one including the widest variety of behaviours (Lemon and Verhoef, 2016).

In the transition to omnichannel, new digital channels, specifically mobile and social media, are added and the focus shifts towards the interchangeable use of channels during the
shopping process (Brynjolfsson et al., 2013; Zhang et al., 2018). The latter line of research has uncovered new patterns of channel combinations such as webrooming (search online, buy in store), showrooming (search in store, buy online), and click and collect (buy online, collect in store) (Dahana et al., 2018; Frasquet et al., 2015, 2019; Sands et al., 2016).

The dependencies between sequential channel choices have been analysed by referring to different mechanisms. Channel lock-in or the “spillover effect” refers to the extent to which a channel is able to retain shoppers from one stage of shopping to the next (Gensler et al., 2012), whereas channel synergies appear when different channels are used in subsequent stages (Lemon and Verhoef, 2016). The offline channel is believed to have strong lock-in, as it tends to retain shoppers from the search stage to the purchase stage. In contrast, webrooming behaviour is explained by the lack of lock-in of the online channel and by the cross-channel synergy of using the internet for searching and the store for purchasing (Neslin et al., 2006; Verhoef et al., 2007).

The dependencies between purchase and post-purchase channels have received less attention. Gensler et al. (2012) found only partial support for channel lock-in effects in the purchase–post-purchase sequence. They argued that purchase–post-purchase lock-in may be weak due to the temporal separation of purchase and post-purchase behaviours, unlike search and purchase behaviours. Multichannel segmentation studies (Frasquet et al., 2015; De Keyser et al., 2015; Sands et al., 2016) have concluded that physical channels have strong lock-in across all shopping stages; furthermore, they have uncovered cross-channel synergies between purchase and post-purchase, as shoppers buying online are likely to use offline channels for post-purchase. The studies in this line referred generally to post-purchase behaviours but not specifically to post-purchase complaints. An exception is the qualitative study conducted by Dalla Pozza (2014) that found that customers turn to social media channels when more traditional channels such as the physical store or the website/email provide a dissatisfactory response to a customer complaint. Dalla Pozza (2014) reported that few customers focus solely on social media to complain; instead, the majority of them use social media after several other channels have been used.

**Service failure and complaint behaviour in multichannel retailing**

In a multichannel retail environment, service failures are more likely than in a single-channel environment and are more difficult to recover (Harris et al., 2006; Reis et al., 2019). A failure or service breakdown means that customer expectations are not met and, thus, dissatisfaction occurs (Zeithaml et al., 1993). The online shopping environment is not only more prone to service failures but also more likely to lead dissatisfied customers to voice complaints (Holloway and Beatty, 2003). Service recovery is the corrective action aimed at addressing a customer complaint regarding a failed service (Grönroos, 1988). Recovery is critical because a service failure followed by a failed recovery (i.e. double deviation) leads to increased customer dissatisfaction (Maxham III and Netemeyer, 2002). Reis et al. (2019) report that in the multichannel banking context, customers are not aware of the specific ability of each channel to solve a failure; therefore, they sometimes fail to choose the best channel through which to solve a problem. Furthermore, customer dissatisfaction increases when customers need to interact through many channels in order to obtain a successful recovery.

CCB is defined as the full range of behavioural and non-behavioural customer responses to dissatisfaction regarding service failure during a consumption experience, which can be performed simultaneously or successively (Istanbulluoglu et al., 2017; Tronvoll, 2012). As far as behavioural responses are concerned, Hirschman (1970) conceptualised exit and voice. Exit refers to leaving the relationship, whereas voice concerns the decision to communicate the complaint to others. Our study focuses on voice responses aimed at the firm.

Nowadays, customers have the choice of multiple channels through which to voice a complaint. Social media is increasingly used to complain in combination with, or in place of,
other online and offline channels: the growth of the social media channel challenged the pre-existing classification of complaint channels (Grégoire et al., 2015). Clark (2013) revisited Mattila and Wirtz’s (2004) taxonomy and, based on the results of content analysis, suggested classifying social media as a “semi-interactive” type of complaint channel, sitting between interactive and remote channels: dissatisfaction is voiced to the company but can also be listened to by other customers (Dalla Pozza, 2014).

This study investigates the extent to which the channel choices for purchase and post-purchase complaints in two subsequent attempts are interdependent. Based on the literature on channel dependencies, in the first complaint action we expect stronger lock-in for offline than for online buyers; in other words, offline buyers would tend to use offline channels to complain, whereas online buyers could also turn to offline channels. In the second complaint attempt we expect to observe channel synergies, i.e. a change of channel, for both offline and online buyers. More specifically we formulate the following research questions:

RQ1. In the case of a service failure, are there channel dependencies between the purchase channel and the channel chosen for complaining?

RQ2. In the case of a service recovery failure, are there channel dependencies between the channel chosen for the first complaint attempt and for the second attempt?

Complaint goals and choice of channels

Dissatisfaction occurs when the actual experience does not meet expectations. While it is a necessary condition for complaining, it has been found to explain only a small proportion of CCB (Day, 1984); in fact, the decision to complain is dependent on additional situational and interpersonal motivational factors (Blodgett et al., 1993; Tronvoll, 2011).

When a customer decides to voice a complaint to a firm, the choice of channel through which to do so is driven by different goals. Goal theory is a motivational theory of individual behaviour developed in social psychology (Austin and Vancouver, 1996; Locke and Latham, 2002; Pervin, 1983, 1989) that has been used to understand consumer behaviour (Kopetz et al., 2012), and the consumer decision-making process in a multichannel context (Harris et al., 2018; Puccinelli et al., 2009). Goal theory postulates that a person’s behaviour is goal-directed and there are complex interactions between goals and behaviours, such that a behaviour may be driven by different goals and the same goal can lead to different behaviours (Pervin, 1983, 1989). A person’s goals are organized in a hierarchical system so that, according to the situation, one goal would get more importance than another (Locke and Latham, 2002). While customer motivations are the general energisers of behaviour, goals translate motivations into specific actions to reach the customer’s desired state (Harris et al., 2018). Goal theory has not yet been used to explain the choice of complaint channels, except for the exploratory study of Dalla Pozza (2014). Accordingly, customers would use a firm’s channels based on their expectations regarding the ability of the channels to help them reach their desired state (Dalla Pozza, 2014). By taking an action, i.e. a channel choice, the customer may pursue multiple goals, with a focal goal acting as a dominant driver and background goals interacting in order to shape the decision (Kopetz et al., 2012).

The literature on CCB has identified redress seeking and venting anger as the two main goals underlying the decision of a customer to voice a complaint directly to sellers (Mattila and Wirtz, 2004). Customers most often complain to a seller with the aim of seeking redress in the form of a replacement, repair, refund or any other kind of compensation (Blodgett et al., 1993; Istanbulluoglu et al., 2017). For instance, the study conducted by Mattila and Wirtz (2004) found that redress seeking is related to the choice of interactive channels (in their study, face-to-face and phone) versus remote channels (letter or email). The internet provides additional interactive channels through which to communicate with a firm via not only email
but also the website and social media (Istanbulluoglu et al., 2017). Social media empowers customers to complain (Grégoire et al., 2015); thus, we argue that this channel may increase the effectiveness of the redress-seeking complaint.

Anger is one of the most powerful human emotions, which arises when an event is perceived to be harmful, frustrating or unfair, and is a significant predictor of behavioural complaining (Bougie et al., 2003; Tronvoll, 2012). Venting anger is related to the desire to release frustration and unhappiness in order to feel better. Customers acting based on venting anger normally prefer to remain anonymous so as to reduce embarrassment or avoid open confrontation (Mattila and Wirtz, 2004). Thus, they would prefer to use remote channels to complain, such as social media, which is a remote channel which tends to be used following the failure of service recovery: when customers resort to social media they are typically very upset and use this channel to vent anger and frustration (Tripp and Grégoire, 2011).

Dalla Pozza (2014) found that with the emergence of social media channels, other goals of complaining to firms arise that are different from the traditional ones. Based on this, we include three additional customer goals that may drive the choice of channel through which to complain when various channels, including social media, are available: convenience, receiving social support and giving social support.

Convenience is a utilitarian shopping driver that refers to the practicality of a channel in the shopping process (Cervellon et al., 2015; Harris et al., 2018). Perceived convenience refers to the perceived ease and speed with which a customer can gather information, purchase a product or conduct post-purchase actions (Gensler et al., 2012). This positively influences the choice of online channels (Li et al., 2017; Schröder and Zaharia, 2008). Convenience appears to be especially relevant in the post-purchase stage (Gensler et al., 2012). Following Abney et al. (2017), the internet and social media provide an easy and convenient channel through which to voice a complaint to a wide audience. When customers are motivated by convenience, they will choose channels that require a little investment of resources such as time and energy to access them.

When social media is integrated with other channels, new antecedents of channel choices arise, such as social needs to connect with other customers (Dalla Pozza, 2014). Social goals of using social media relate to social support theory, which emerged in mental health literature. According to social support theory (Cobb, 1976), an individual satisfies social needs such as affection, esteem, approval, sense of belonging, identity and security through interactions with others. Social support refers to the non-professional social relations of an individual, which take the form of both formal support groups and informal helping relationships (Zheng et al., 2016). Social support theory has proved useful for studying individuals’ relationships on virtual social networks, where customers are willing to receive and share valuable information about previous shopping experiences with other users (Hajli and Sims, 2015; Shanmugam et al., 2016). Online social networks allow for an enhanced role of social support which encompasses prosocial behaviours that are reciprocal, that is, receiving and giving social support (Anderson and Agarwal, 2011). Research in marketing has found that social support motivates customers to participate in online social networks, as individuals share their experiences not only to gain support but also with the altruistic goal to help others (Munar and Jacobsen, 2014).

Based on the above, one could expect that the choice of complaint channels is influenced by specific goals that a customer wants to achieve by complaining. When the goal is to seek redress, interactive (store) or semi-interactive (social media) channels may be preferred. Recent literature links the choice of social media as a complaint channel with the goal of venting anger. Convenience has been related to the choice of online channels, although no previous research has studied its influence with specific reference to complaining. The goals of receiving and giving social support have been linked to customer participation in online social networks. According to goal theory, a situational change would make a customer
re-evaluate his/her goals, thus shaping a new course of action (Harris et al., 2018). Therefore, we expect that customer goals shaping the choice of complaint channels are affected when the first complaint is either not answered or not answered satisfactorily (service recovery failure), as the situational change will cause a reappraisal of goals. We pose an open research question to examine this matter:

RQ3. What are the roles of the customer goals of redress seeking, venting anger, convenience, and receiving and giving social support in explaining cross-stage complaint channel choices?

The research framework based on the three posed research questions is depicted in Figure 1: a dynamic view of CCB is adopted as argued by Tronvoll (2012) and Istanbulluoglu et al. (2017). Based on channel dependencies and goal theory, our research framework suggests that the interaction of different complaint goals drives complainers’ channel choices. Hence, sequential channel choices are made by offline versus online buyers when a dissatisfactory incident occurs (service failure), the buyer complains, the retailer fails to provide a satisfactory solution (double deviation), and the customer complains again. Our literature review on CCB and on channel choice revealed that redress seeking and venting anger are key consumer goals when complaining, but also that additional goals such as convenience, receiving and giving social support should be considered as complaint goals when online channels are involved.

Methodology

Data collection and measurement

An online survey was conducted in Spain with the cooperation of a professional market research institute that provided a panel of respondents who are representative of the Spanish population. Target respondents for the survey consisted of individuals who satisfied the following filtering conditions: (1) having shopped for apparel products while combining multiple channels for search and purchase; (2) having complained in the last year to any company; and (3) being users of social media.

Our survey was based on a scenario manipulation, which is common practice in literature on CCB because it provides control and avoids memory lapses (Chang and Chin, 2011; Lee and Cude, 2012; Sengupta et al., 2018). We recreated a situation describing a fictitious apparel retailer selling both in physical stores and online, with a company page on the major social media channels. The retailer offered equally accessible channels through which to complain (store, website/email, and social media). Two scenarios were created which were different as
far as the purchase channel is concerned but identical in terms of the nature of the service failure (see Appendix 1). To record the response to the service failure, respondents were asked to indicate which channel they would choose for complaining among the following three options: the store, the website/email or social media. Meanwhile, to record the response to the service recovery failure, they were asked which of those channels they would choose for complaining a second time if their first complaint were not addressed by the retailer.

The customer complaint goals of redress seeking, venting anger, convenience, receiving social support and giving social support were measured by means of seven-point Likert scales taken from previous literature, with minor adaptations when necessary (see Appendix 2).

A data-cleaning process was undertaken in order to exclude incomplete and invalid cases, with our final sample comprising 577 respondents. Respondents were mainly female (60%) with an average age of 40 years. In the last year, 39% of respondents had complained once, 36% twice, 15% three times, and 11% more than three times. Regarding the main channel for complaining, respondents declared that they employed the website/email (56%) followed by the store (25%).

**Analytic strategy**
A multi-group LCA was conducted separately for online and offline shoppers by means of Latent Gold 5.1. LCA has been used in social sciences for segmentation purposes because it is able to identify the heterogeneity of a population. It is a model-based approach that classifies cases based on the posterior probability of membership (Haughton et al., 2009). We have employed “one-step approach” LCA, which has been utilised in previous studies on multichannel segmentation (e.g. De Keyser et al., 2015). Subgroups of cases are identified based on internal variables – specifically indicators – that are employed to uncover latent segments within the general population. Additional independent variables – specifically covariates – can be included in the model to simultaneously influence the estimation of the probability of belonging to a given segment. The first step is that of identifying the general latent structure, namely the number of latent classes, in each group. Thereafter, it is key to establish whether or not the latent structure has the same measurement characteristics in each group, a concept known as measurement invariance (Collins and Lanza, 2009a).

The present study considers as indicators the two categorical variables of channel choices for complaining – namely first attempt and second attempt – in the following channels: physical store, website/email and social media. Redress seeking, venting anger, convenience, receiving social support, giving social support, sex and age were included in the model as active covariates.

**Scenario manipulation and randomisation checks**
The clarity and credibility of the scenario manipulation were discussed and evaluated as being realistic by university students. To further assess whether the scenario manipulation was credible for respondents, dissatisfaction with the described situation was measured via a scale adapted from Moliner et al. (2006). The average dissatisfaction score reported by respondents was 5.5 on a scale from 1 to 7, indicating that the situation was clearly perceived to be dissatisfying. Additionally, several statistical tests were performed to serve as randomisation checks, confirming that randomisation was correctly performed. The final sample included 286 subjects assigned to the offline purchase condition and 291 subjects assigned to the online purchase condition.

**Results**
To better assess the validity and reliability of redress seeking, venting anger, convenience, and receiving and giving social support, a confirmatory factor analysis (CFA) was conducted.
Fit indexes displayed an acceptable fit: CFI = 0.95, TLI = 0.94, RMSEA = 0.07 (0.06–0.07), $\chi^2 = 790.04$, df = 220, $p < 0.01$. Furthermore, indicators of convergent validity (factorial loadings > 0.5 and significant) and reliability (Cronbach’s $\alpha > 0.7$; AVE > 0.5, composite reliability > 0.7) displayed satisfactory values. Venting anger showed reliability values slightly below (Cronbach’s $\alpha = 0.65$ and AVE = 0.49) the specified cut-offs, albeit still acceptable (Hair et al., 2014). Factor scores from the CFA were then included in the model for the considered variables.

Multi-group LCA entails comparing online and offline buyers. As the first step of the analysis, LCA was performed for the groups, considering solutions with a number of clusters varying from 1 to 7. The employed procedure ran the algorithm with 1,000 random sets and 1,000 iterations for each number of clusters in order to avoid local minima. To determine the optimal number of clusters, we considered model fit criteria (namely BIC, CAIC, AIC3 and SABIC), the bootstrap likelihood ratio test (BLRT), and the interpretability of results based on previous studies (Collins and Lanza, 2009b; Dziak et al., 2012; De Keyser et al., 2015). Once the best number of clusters was chosen, those clusters were profiled on both indicators and covariates, thus allowing to answer the research questions.

Complaint channel choice patterns for online buyers

As far as online shoppers are concerned, Table 1 displays the different indexes for each cluster solution. The minimum value of each index provides evidence regarding the best solution. To decide upon the best number of groups, we relied upon Yang and Yang (2007), who compared BIC, AIC3, SABIC and CAIC; they found that when the number of observations is small (lower than 300), CAIC and BIC seriously underfit while AIC3 and ABIC perform better. Consequently, our choice was in favour of the five-cluster solution. To further validate this choice, we employed the BLRT with 1,000 bootstrap samples. This approach showed that the five-cluster solution provides a significant improvement upon the two-cluster solution (-2LL difference = 120.78; $p$-value < 0.01).

The significance of the model indicators and covariates was assessed by means of the Wald test. As far as the indicators are concerned, the $p$-values were lower than 0.05, thus showing that they are discriminating among the identified segments (Vermunt and Magidson, 2005) [1]. All covariates, except for sex, were reported to significantly influence the probability of belonging to the latent segments.

Table 2 displays the profile of each segment of online buyers. The conditional probabilities reveal how the clusters are related to the indicators. For instance, respondents in Cluster 1 have a 91.3% chance of choosing the website/email as the first channel choice for complaining. Therefore, the highest conditional probability within each cluster suggests that respondents in that cluster are more likely to choose the corresponding complaint channel. As far as the covariates are concerned, the comparisons below are made row-wise (Table 2).

<table>
<thead>
<tr>
<th>Cluster solutions</th>
<th>BIC(LL)</th>
<th>CAIC</th>
<th>AIC3</th>
<th>SABIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Cluster</td>
<td>1393.98</td>
<td>1360.98</td>
<td>1335.69</td>
<td>1324.79</td>
</tr>
<tr>
<td>2-Cluster</td>
<td>1219.05</td>
<td>1247.05</td>
<td>1273.44</td>
<td>1300.44</td>
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<tr>
<td>3-Cluster</td>
<td>1247.34</td>
<td>1287.34</td>
<td>1329.44</td>
<td>1368.44</td>
</tr>
<tr>
<td>4-Cluster</td>
<td>1277.44</td>
<td>1329.44</td>
<td>1384.44</td>
<td>1425.44</td>
</tr>
<tr>
<td>5-Cluster</td>
<td>1316.24</td>
<td>1360.24</td>
<td>1415.24</td>
<td>1456.24</td>
</tr>
<tr>
<td>6-Cluster</td>
<td>1344.57</td>
<td>1420.57</td>
<td>1465.57</td>
<td>1506.57</td>
</tr>
</tbody>
</table>

Table 1. Model fit criteria for LCA on online shoppers

Note(s): Values in italic are minimum values for each index
Cluster 1 is the largest. Subjects in Cluster 1 are more likely to choose the website/email in their first attempt to complain and are likely to choose the store or social media in the case of a service recovery failure (second attempt). Subjects in Cluster 1 display the highest value across all clusters of convenience and are more likely to be female. Subjects in Cluster 2 are more likely to choose the store for their first attempt to complain and the website/email or social media for their second attempt. They display the highest score across all clusters for venting anger and the lowest score for giving social support. Subjects in Cluster 3 are more likely to choose the store or social media as the first complaint channel and the website/email or social media after the service recovery failure. They exhibit the highest scores for giving and receiving social support. Subjects in Cluster 4 are more likely to employ the store or the website/email as the first complaint channel and to complain through the website/email (if the store was chosen as the first complaint channel) or the store in their second attempt (if the website/email was chosen as the first complaint channel). They show the highest score across clusters for redress seeking and have the highest age. Cluster 5 is the only group that chooses the same channel for the first and second attempts to complain, namely the website/email. As well as having the lowest age, these individuals display the lowest scores across clusters for redress seeking, venting anger and convenience as complaint goals.

**Complaint channel choice patterns for offline buyers**

As far as offline shoppers are concerned, Table 3 shows the different index values for each cluster solution. We employed the BLRT with 1,000 bootstrap samples, which demonstrated that the five-cluster solution provided a significant improvement upon the two-cluster solution (2LL difference = 127.45; $p$-value < 0.001).

The associated $p$-value of the Wald test for the indicators was lower than 0.05, thus showing that they could be considered discriminating among the identified segments (Vermunt and Magidson, 2005) [1]. All of the considered covariates were reported to significantly influence the probability of belonging to the latent segments. The results from

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cluster 1</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
<th>Cluster 5</th>
</tr>
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<tbody>
<tr>
<td>Cluster size</td>
<td>35.9%</td>
<td>22.2%</td>
<td>18.6%</td>
<td>17.7%</td>
<td>5.6%</td>
</tr>
<tr>
<td><strong>Complaint channel (first attempt)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Store</td>
<td>0.004</td>
<td>0.837</td>
<td>0.621</td>
<td>0.633</td>
<td>0.326</td>
</tr>
<tr>
<td>Website/Email</td>
<td>0.913</td>
<td>0.147</td>
<td>0.007</td>
<td>0.367</td>
<td>0.672</td>
</tr>
<tr>
<td>Social media</td>
<td>0.083</td>
<td>0.017</td>
<td>0.373</td>
<td>0.001</td>
<td>0.002</td>
</tr>
<tr>
<td><strong>Complaint channel (second attempt)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Store</td>
<td>0.453</td>
<td>0.271</td>
<td>0.199</td>
<td>0.374</td>
<td>0.006</td>
</tr>
<tr>
<td>Website/Email</td>
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<td>0.007</td>
<td>0.508</td>
<td>0.990</td>
</tr>
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<td>Social media</td>
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<td>0.305</td>
<td>0.258</td>
<td>0.119</td>
<td>0.005</td>
</tr>
<tr>
<td><strong>Covariates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Venting anger</td>
<td>5.904</td>
<td>6.512</td>
<td>5.549</td>
<td>5.762</td>
<td>3.860</td>
</tr>
<tr>
<td>Convenience</td>
<td>6.417</td>
<td>4.640</td>
<td>5.504</td>
<td>6.037</td>
<td>3.861</td>
</tr>
<tr>
<td>Receiving social support</td>
<td>3.488</td>
<td>3.547</td>
<td>4.514</td>
<td>3.648</td>
<td>4.150</td>
</tr>
<tr>
<td>Giving social support</td>
<td>4.116</td>
<td>3.672</td>
<td>4.996</td>
<td>4.701</td>
<td>4.252</td>
</tr>
<tr>
<td>Sex (female)</td>
<td>0.715</td>
<td>0.524</td>
<td>0.651</td>
<td>0.294</td>
<td>0.432</td>
</tr>
<tr>
<td>Age</td>
<td>39.507</td>
<td>37.605</td>
<td>37.648</td>
<td>46.901</td>
<td>35.865</td>
</tr>
</tbody>
</table>

**Table 2.** Profile of the segments for online buyers

Note(s): Conditional probabilities are displayed for indicators and sex, whereas means are displayed for continuous covariates to increase readability.
Table 4 allow each cluster of offline shoppers to be described by examining the conditional probabilities within each cluster and by comparing the scores of the covariates row-wise. Subjects in Cluster 1 are more likely to choose the store or the website/email in their first attempt to complain and the website/email or the store during the second attempt. They display the highest age and no extreme values for any of the complaint goals. Subjects in Cluster 2 are more likely to choose the store as the first complaint channel and the website/email in the second attempt. They display the highest score across all clusters for redress seeking and the lowest for giving and receiving social support. Subjects in Cluster 3 are likely to choose the store as the only complaint channel for the first attempt and the website/email or social media for only the second attempt. They display the highest scores for venting anger and receiving and giving social support and the lowest for convenience. Subjects in Cluster 4 will indifferently employ any of the three channels for both attempts. They show the lowest scores across all clusters for redress seeking and venting anger, the lowest age, and the lowest likelihood of being female. Finally, subjects in Cluster 5 are more likely to complain through the website/email first and the store or social media if a service recovery failure occurs. Cluster 5 displays the highest score across all clusters in terms of convenience and the highest likelihood of including females.

The role of the purchase channel within complaint channel choice patterns
The LCA described above uncovered the same number of clusters, namely five, for both online and offline buyers. Thus, we proceeded to the second step of the multi-group LCA: assessing measurement invariance. To this aim, a heterogeneous model in which item response probabilities are free to vary between groups (model 1) has been compared pairwise with three other models:

1. A homogeneous model wherein item response probabilities are constrained between online and offline buyers; in other words, they have the same meaning (model 2).

2. Two partially heterogeneous models that constrain only certain item response probabilities between online and offline buyers. Model 3 constrains item response probabilities for the second complaint channel choice indicator only, whereas model 4 constrains the first complaint channel choice variable only.

These models have been compared using statistical indexes (Collins and Lanza, 2009a; Dziak et al., 2012). In terms of statistical indexes, the abovementioned information criteria – namely BIC, CAIC, AIC3 and SABIC – have been employed together with the likelihood ratio (LR) chi-square statistic (Collins and Lanza, 2009a).

The heterogeneous model, namely model 1, fits the data better than do the other models: no measurement invariance can be established (see Table 5). Latent classes should be interpreted in each group in a different manner because they are structurally different: there

<table>
<thead>
<tr>
<th>Cluster solutions</th>
<th>BIC(LL)</th>
<th>CAIC</th>
<th>AIC3</th>
<th>SABIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Cluster</td>
<td>1149.53</td>
<td>1153.53</td>
<td>1138.90</td>
<td>1136.84</td>
</tr>
<tr>
<td>2-Cluster</td>
<td>1136.68</td>
<td>1152.68</td>
<td>1094.18</td>
<td>1085.94</td>
</tr>
<tr>
<td>3-Cluster</td>
<td>1164.65</td>
<td>1192.65</td>
<td>1090.28</td>
<td>1075.86</td>
</tr>
<tr>
<td>4-Cluster</td>
<td>1193.10</td>
<td>1233.10</td>
<td>1086.86</td>
<td>1066.26</td>
</tr>
<tr>
<td>5-Cluster</td>
<td>1212.84</td>
<td>1264.84</td>
<td>1074.72</td>
<td>1047.94</td>
</tr>
<tr>
<td>6-Cluster</td>
<td>1251.92</td>
<td>1315.92</td>
<td>1081.93</td>
<td>1048.97</td>
</tr>
<tr>
<td>7-Cluster</td>
<td>1287.25</td>
<td>1363.25</td>
<td>1085.40</td>
<td>1046.25</td>
</tr>
</tbody>
</table>

Table 3.
Model fit criteria for LCA on offline shoppers

Note(s): Values in italic are minimum values for each index
are qualitative differences between online and offline buyers and, for this reason, quantitative comparisons in terms of the size of latent classes are meaningless. This provides further support for the effect of the purchase channel on complaint channel choice patterns.

**Discussion of results**

**Theoretical implications**

This study has investigated the cross-stage dependencies between the purchase channel, the channel used to complain in the case of a service failure, and the subsequent complaint channel chosen when a service recovery failure occurs, adopting the perspective of goal theory to explore the roles of a variety of customer complaint goals. Our results allow to make the following contributions. Firstly, we contribute to the body of literature on multichannel customer behaviour by focusing on the dependencies between purchase and post-purchase stages within the customer journey in a retail context. Secondly, we contribute to the literature on CCB by analysing the choice of complaint channels including social media when
double deviation occurs. Goal theory helps to understand how the interaction of different complaint goals directs the choice of channel to complain in a multichannel context.

The first research question investigated the lock-in effect of both offline and online channels between the purchase stage and the first complaint attempt when a service failure occurs. We found that when a purchase is made offline, the majority of customers remain with the offline channel through which to complain (Clusters 1, 2 and 3, representing 67% of the sample, exhibit this behaviour). By referring specifically to the post–purchase activity of complaining, our study extends the findings of De Keyser et al. (2015), Frasquet et al. (2015), and Sands et al. (2016), who found a strong lock-in effect of the offline channel between purchase and broadly defined post–purchase activities. In the case of online purchases, the lock-in effect is weaker, as only Clusters 1 and 5 (representing 41% of the sample) choose the online channel through which to complain when there is an incident with an online purchase. This is an interesting finding which is not in line with the results found by Lee and Cude (2012), who concluded that online buyers prefer online channels for complaining.

The second research question explored the choice of channels through which to complain when the first complaint attempt did not receive a satisfactory answer, i.e. double deviation. Here it is evident that the lock-in effect of the offline channel does not extend to the second attempt to complain; in fact, offline buyers who choose to complain in the store in the first attempt switch to online channels (website/email or social media) to make a second complaint. Along the same lines, those who prefer the website/email in the first attempt will turn to the store or social media in the second attempt. In the case of purchases made online the same effect arises; however, there are some peculiarities, as customers who use the website to complain in the first attempt now turn to the store or social media in the second attempt to a greater extent than do offline buyers (which is clearly the case with Cluster 1, comprising 36% of the sample). Thus, synergy effects exist between channels in the case of having to complain twice. These findings are in accordance with the qualitative studies conducted by Dalla Pozza (2014) and Tripp and Grégoire (2011), which suggested that customers turn to social media channels when a complaint made through more traditional offline and online channels does not receive a satisfactory response. Our findings related to this research question are quite unique, as the sequential choices of complaint channels in relation to the purchase channel have not been analysed by means of quantitative studies previously.

Finally, the third research question of the study related to the roles of a variety of complaint goals that emerge in the context of multichannel retailing – redress seeking, venting anger, convenience, receiving social support and giving social support – in explaining the sequential choices of complaint channels. Our conclusion is that a variety of goals shape complaint channel choices and define different segments of customers who use channels in different ways. Furthermore, our results support the literature on CCB that argues that redress seeking and venting anger are the strongest complaint goals. The results suggest that redress seeking is a dominant goal for the segments choosing the store for complaining in the first attempt. This is consistent with the finding of Mattila and Wirtz (2004) that redress-seeking complainers prefer interactive channels. Venting anger is present in those customers who purchase offline and use the store to complain in the first attempt and social media in the second attempt. This is in line with other studies (e.g. Grégoire et al., 2015; Tripp and Grégoire, 2011) indicating that customers would use social media to vent anger following a failure of service recovery. Our results show that channel convenience is clearly associated with the use of the website for complaining, both for offline and for online buyers. Although no previous study has tested the effect of channel convenience on complaint channel choices, this result is in line with Gensler et al. (2012), who found convenience to be particularly relevant in the post–purchase stage. Using social media has been reported to be associated with the customer goals of receiving and giving social support (Munar and Jacobsen, 2014). As far as offline buyers are concerned, Cluster 4 bases the preference towards
online channels upon social support. Online buyers also show this pattern: Cluster 3, which is composed of customers who use social media most frequently (taking the first and second attempts together), displays the highest scores for receiving and giving social support.

Managerial implications

Our results offer relevant implications to manage customer complaints across multiple channels for apparel multichannel retailers and retailers in similar settings. Online channels empower customers; in fact, by developing online complaint systems, the number of customers who voice dissatisfaction increases. This is an opportunity for retailers, as they can become more aware of service failures and act accordingly (Robertson, 2012; Tripp and Grégoire, 2011). Retailers should integrate customer complaint records across channels in order to be able to have a unique view of complainers and track the sequence of channels used. Complaint management teams should be aware of possible goals driving customers to specific channels, as these call for different answers. Our findings regarding the different complaint goals associated with channel use offer some clues. Given the finding that different customers prefer different channels for complaining, companies could act proactively and communicate the full variety of channels available and highlight the strengths and performance records of each channel (e.g. number of queries solved in one day, average waiting times), even specifying what is the best option for a first or second attempt. Where CRM systems are in place, it is evident that enriching customer records with data regarding individual customer complaint channel choices could be beneficial for targeted activities and to the relationship between firms and customers.

Another interesting conclusion of our study is that a new role for the store has emerged in the current retail context. The store is the preferred channel for voicing dissatisfaction to firms in the case of both online and offline purchases, particularly when customers are motivated by redress seeking and venting anger. Face-to-face interaction should offer increased opportunities to successfully recover dissatisfied customers; otherwise, anger is likely to escalate and customers could turn to online channels through which to complain, extending their negative opinions to other customers if complaints are voiced through social media.

Therefore, multichannel retailers would benefit from considering the store to be a customer service centre for online shoppers, not only to manage deliveries or returns of products purchased online but also as a touchpoint for listening to customer issues related to purchases made through any channel. Furthermore, this study offers implications for pure online players. As online buyers seem to prefer solving issues face to face rather than through online channels, particularly when they seek redress or want to vent anger, online retailers have the opportunity to also use physical stores as a touchpoint for customer complaint management, as well as adding interactive video services to their online channels that allow customers to engage in face-to-face interaction online with a company employee.

Limitations and future research

Although this study contributes to the literature on channels and CCB, it has several limitations. We focused on voicing complaints to the firm only, whereas other complaint responses exist such as exit, or complaining to third parties. In terms of complaint channels, future studies could extend the number of available complaint channels and differentiate between social media platforms. Moreover, in light of the COVID-19 pandemic and changes in the availability of channels for customers (e.g. physical stores that are closed and retailers that offer new online customer support services), it would be interesting to explore if new patterns and customer goals emerge in channel choices for complaining. What is more, it
would be interesting to study emerging channels for complaining such as the aforementioned video customer service.

Another limitation of the study is related to the research design: a scenario manipulation was employed, which could be less effective in evoking customer emotions with respect to a “real” service failure. Moreover, a scenario manipulation in an online experiment could not completely capture the extent of emotions and cognitive processes that arise in the real-world journey from a service failure to a service recovery failure. Further research is encouraged to employ different methodology such as the critical incident technique. Our study performs an exploratory segmentation focused on apparel retailing only and on a service failure related to product quality – further research could study complaint channel choices in other settings and situations.

Note
1. Information on parameters and related tests is available upon request.

References


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Appendix 1

Scenario Manipulation

Scenario A
You need to buy some pants for a special occasion. One afternoon you decide to go shopping and, after visiting several stores, in one of them you see the perfect pants. You have bought before in this store and you know that they also have an online store, and a profile on the main social networks. The pants are more expensive than you planned to spend, but not much more, and they are worth it, so you decide to buy them in that store.

You wear them on that special occasion and they get stained, so you have to wash them. To do this, you read the informative label that is found on garments, and proceed accordingly.

But what is your surprise when, after washing, you realize that the seam is falling apart; it is as if the thread with which the pants were sewn was gone... It is clear that you will not be able to use them again!

You decide to complain to the company.

Scenario B
You need to buy some pants for a special occasion. One afternoon you decide to look for your pants on the websites of different stores and, after visiting the websites of several stores, in one of them you see the perfect pants. You have bought before in the online channel of this store, and you know that it also has physical stores, and a profile on the main social networks. The pants are more expensive than you planned to spend, but not much more and they are worth it, so you decide to buy them on that website.

You wear them on that special occasion and they get stained, so you have to wash them. To do this, you read the informative label that is found on garments, and proceed accordingly.

But what is your surprise when, after washing, you realize that the seam is falling apart; it is as if the thread with which the pants were sewn was gone... It is clear that you will not be able to use them again!

You decide to complain to the company.

Second part of the scenario (same text for A and B)

If your complaint through the desired channel did not receive any satisfactory answer, which channel would you choose to complain a second time? You can choose the same channel you employed before for complaining or you can select another channel.
<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Std. loadings</th>
<th>Z</th>
<th>p-value</th>
<th>Cronbach's alpha</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redress seeking: Maxham III and Netemeyer (2002)</td>
<td>When I voice a complaint, I expect the company to respond timely</td>
<td>0.83</td>
<td>23.51</td>
<td>&lt;0.0001</td>
<td>0.90</td>
<td>0.69</td>
<td>0.90</td>
</tr>
<tr>
<td></td>
<td>When I voice a complaint, I expect the company to address it fairly</td>
<td>0.85</td>
<td>24.75</td>
<td>&lt;0.0001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>When I complain about a defective product I expect the company to refund or replace it</td>
<td>0.85</td>
<td>24.46</td>
<td>&lt;0.0001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>When I complain I expect the company to make up for the tort</td>
<td>0.80</td>
<td>22.34</td>
<td>&lt;0.0001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Voicing a complaint is a way to make my dissatisfaction public</td>
<td>0.60</td>
<td>13.79</td>
<td>&lt;0.0001</td>
<td>0.65</td>
<td>0.49</td>
<td>0.66</td>
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<tr>
<td></td>
<td>Complaining helps me to get anger off my chest (item dropped)</td>
<td>0.82</td>
<td>18.40</td>
<td>&lt;0.0001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Voicing a complaint is a way to react to a situation that was unfair</td>
<td>0.83</td>
<td>11.27</td>
<td>&lt;0.0001</td>
<td>0.82</td>
<td>0.69</td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td>Complaining through [the chosen channel] is the fastest way of</td>
<td>0.83</td>
<td>11.36</td>
<td>&lt;0.0001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>complaining (item dropped)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Receiving social support: Zheng et al. (2016)</td>
<td>0.65</td>
<td>17.22</td>
<td>&lt;0.0001</td>
<td>0.94</td>
<td>0.72</td>
<td>0.95</td>
</tr>
<tr>
<td></td>
<td>When I participate in social media, I feel accepted by my contacts</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I know that my contacts on social media are there when I need them</td>
<td>0.84</td>
<td>24.80</td>
<td>&lt;0.0001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>My contacts on social media comfort me when I feel bad</td>
<td>0.87</td>
<td>26.27</td>
<td>&lt;0.0001</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>My contacts on social media share useful information with me (item dropped)</td>
<td>0.85</td>
<td>25.41</td>
<td>&lt;0.0001</td>
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<tr>
<td></td>
<td>My contacts on social media make me feel valued</td>
<td>0.85</td>
<td>25.41</td>
<td>&lt;0.0001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>My contacts on social media express concern about my situation</td>
<td>0.90</td>
<td>27.93</td>
<td>&lt;0.0001</td>
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<td></td>
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<td></td>
<td>I know I can rely on my contacts on social media</td>
<td>0.86</td>
<td>25.70</td>
<td>&lt;0.0001</td>
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<tr>
<td></td>
<td>My contacts on social media encourage me not to give up when I face a problem</td>
<td>0.90</td>
<td>27.95</td>
<td>&lt;0.0001</td>
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<td></td>
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<tr>
<td>Construct</td>
<td>Item</td>
<td>Std. loadings</td>
<td>Z</td>
<td>p-value</td>
<td>Cronbach’s alpha</td>
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<td>CR</td>
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<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Giving social support: <em>Zheng et al.</em> (2016)</td>
<td>With my behaviour in social media I show my contacts that I accept them</td>
<td>0.80</td>
<td>23.17</td>
<td>&lt;0.0001</td>
<td>0.96</td>
<td>0.76</td>
<td>0.96</td>
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<td></td>
<td>I comfort my contacts on social media when they feel bad</td>
<td>0.89</td>
<td>27.11</td>
<td>&lt;0.0001</td>
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<tr>
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<td>I try to put myself in the shoes of my contacts on social media when something goes wrong for them</td>
<td>0.89</td>
<td>27.25</td>
<td>&lt;0.0001</td>
<td></td>
<td></td>
<td></td>
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<td>I share useful information with my contacts on social media</td>
<td>0.67</td>
<td>18.03</td>
<td>&lt;0.0001</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>I make my contacts on social media feel valued</td>
<td>0.91</td>
<td>28.54</td>
<td>&lt;0.0001</td>
<td></td>
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<td></td>
<td>I expressed concern about the situation of my contacts on social media</td>
<td>0.90</td>
<td>27.76</td>
<td>&lt;0.0001</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>I show my contacts on social media that they can rely on me</td>
<td>0.91</td>
<td>28.37</td>
<td>&lt;0.0001</td>
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<td>I encourage my contacts on social media not to give up when they face a problem</td>
<td>0.93</td>
<td>29.61</td>
<td>&lt;0.0001</td>
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