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Choosing the delivery and return method in purchases: the effect of situational factors in omni-channel contexts

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\section*{ABSTRACT}

Even though retailers have engaged in many efforts to offer and integrate new alternatives for delivering and returning consumers’ purchases, it is not clear what motivates consumers to choose one option or another. Although most consumers are already familiar with options such as home delivery or pick-up locations, situational factors determine their choice among the different alternatives; no study has, however, addressed this topic before. To fill this gap, this study identifies 15 different situational factors to examine their influence on the selection of delivery and return options and the effect of consumers’ demographic characteristics. The empirical analysis is based on an online questionnaire distributed to 650 respondents (266 valid responses). In addition, this study uses MANOVA and ANOVA to determine the relationship between each situational factor and consumer characteristics. The results show that 13 situational factors have a significant impact on consumer decisions, and among them time pressure, the distance to the store and channel spill-over are the most influential factors. The results also show that situational factors significantly rely on individual characteristics. For instance, getting help from an employee is significantly more important for consumers who are under 25 years of age. The study reveals some valuable implications for retailers.

\section*{1. Introduction}

Over recent years, retailers have increased the number of purchasing channels – for example, physical stores, websites, apps, kiosks and smartphones – in order to satisfy consumers and maximise profits (Chatterjee, 2010). Over time, the boundaries between channels have vanished and shifted the retailers to a concierge model known as an omni-channel model (Ye, Lau & Teo, 2018). These changes in the retailing context have forced retailers to offer countless options to acquire and return products: regardless of whether they shop online or offline, consumers can receive products at
home, at their office or at a convenient pick-up location. As a result, over recent years, a major transformation has occurred in distribution systems. Compared to the past, when distribution systems were simple, and physical stores were the endpoint of all transactions (Baird & Kilcourse, 2011), the distribution systems have become much more complicated (Handfield, Straube, Pfohl & Wieland, 2013).

Nowadays, most retailers (79%) offer more than two purchase channels (Chatterjee, 2010). Almost 80% of them offer more than one delivery option (Capper, 2014), and 62% offer more than one return option (Charlton, 2014). Although these changes are already altering the strategies and operations of retailers, we lack a deep understanding of how consumers use these new distribution systems (Hübner, Holzapfel & Kuhn, 2016). The field needs comprehensive research on goods distribution within multiple retail channels.

To understand decisions on delivery and return options, we need to identify which factors affect delivery and returns in the consumer shopping process – ‘the process the consumer goes through, across all stages and touch points of the purchase’ (Lemon & Verhoef, 2016, p. 10). Marketing literature identifies many factors that affect consumers’ shopping decisions: consumer characteristics (personality, demographic, attributes, etc.), product characteristics (brand image, quality, size and functionality), retailer characteristics (channel retailing strategy, price strategy, etc.) and environmental factors (Belk, 1975; Brynjolfsson, Hu & Rahman, 2009). Belk (1975) divides these factors into situational and non-situational factors, and states that situational factors play a major role in consumer shopping decisions and therefore deserve special attention. Nevertheless, researchers and practitioners have focused mostly on non-situational factors and usually disregard the situational factors in studies of consumer shopping decisions, even though the literature indicates that they play a dominant role (Hand, Dall’Olmo Riley, Harris, Singh & Rettie, 2009). Thus, it is not clear what motivates consumers to choose one option over another because of the lack of understanding about why some options are preferred over others – for example, home delivery is chosen by 72% of consumers (KPMG, 2016).

Actual consumer behaviour regarding delivery and return alternatives shows the relevance of situational factors in their decisions. Reports from logistic companies reveal that in some environmental settings, such as bad weather, home delivery increases by 8.7% compared to normal weather (Snaith, 2013); or special events (e.g., Christmas), when home delivery is 20% higher than a normal day (KPMG, 2016). Taking these figures into consideration, and the fact that no previous research has studied the influence of the situational factors in the context of delivery and return, this paper attempts to shed light on the influence of these situational factors on consumers’ decisions about delivery and return options. In addition, to gain more insight into situational factors, the study examines variation in the importance of these situational factors based on individual characteristics, as suggested by Belk (1975). Such information will help retailers identify the situational factors that are more relevant to consumer decision making and thereby help them in designing their marketing strategy (Kotler, 2009) and retailing planning (Levy & Weitz, 2012). Therefore, retailers can be better prepared and more efficient in their logistics processes.
The study is organised as follows. Section 2 discusses situational factors and contains the hypotheses. Section 3 explains our methodology and data collection. Section 4 analyses the data. Finally, Section 5 presents the main findings, provides some contributions and indicates the limitations of the study.

2. Literature review

Since 1960, several studies been dedicated to understanding consumer shopping behaviour and identifying the factors that influence consumers’ shopping decisions. Belk (1975) divides them into two main groups: situational factors and non-situational factors.

Non-situational factors are ‘those general and lasting characteristics of an individual or an object’ (Zhuang, Tsang, Zhou, Li & Nicholls, 2006, p. 21): consumer characteristics, product characteristics and retailer characteristics. Several studies focus on non-situational factors in different product categories (Belk, 1975; Brynjolfsson et al., 2009).

At the same time, situational factors to which less attention has been paid so far are ‘those factors particular to a time and place of observation which do not follow from a knowledge of personal (intra-individual) or stimulus (choice alternative) attributes’ (Belk, 1975, p. 158). Situational factors relate to a specific point in time and space in a shopping situation, describing the environment for consumers when they are engaged in the shopping process (Gehrt & Yan, 2004). Belk (1975) divided these situational factors into physical surroundings, social surroundings, temporal perspective, task definition and the antecedent state in which the consumer enters this environment or that results from this environment. In addition to these factors, a multi-channel context forces the inclusion of a new factor: the influence of the previous shopping stage on the next shopping stage, known as spill-over effects (Gensler, Dekimpe & Skiera, 2007).

2.1. Situational factors in delivery and return

2.1.1. Physical settings

Physical settings are the most easily visible characteristics of a situation (Belk, 1975). This factor includes the geographic distance to the store, environmental and weather conditions, and the store’s atmosphere (Nicholson, Clarke & Blakemore, 2002).

2.1.1.1. Geographic distance to the store. The literature on online shopping decisions states that one of the main advantages of purchasing online is the easy accessibility for purchasing goods from any location (e.g., Chocarro, Cortiñas & Villanueva, 2013). This effectively removes geographic distance as an obstacle in all stages of the shopping process. Hence, consumers who are far from a store are much more likely to use the online channel, instead of going to a store (Schröder & Zaharia, 2008). By purchasing online, consumers tend to select nearby delivery or return as the method of receiving or returning, to avoid the obstacle presented by a long distance. A DHL (2015) report shows that consumers who purchase a product from a distance prefer to select, first, delivery to their home, second, delivery to a nearby retail store and, lastly, other nearby collection locations. Hence:
H1: Distance to a store influences consumer decisions when selecting delivery and return options.

2.1.1.2. Environmental and weather conditions. Regarding environmental conditions (e.g., Murray, Finn, Leszczyc & Muro, 2008), consumers are more likely to change their purchase channel because of the difficulty of accessing an online store if delays are caused by website traffic (Gallino & Moreno, 2014); and parking availability or traffic jams if a physical store (Chocarro et al., 2013). Data from companies show that consumers tend to choose differently about delivery and return options because of such difficulties (Gallino & Moreno, 2014). For instance, during peak office hours, consumers prefer to purchase online and receive the order at their preferred location. Steinker, Hoberg and Thonemann (2016) investigated the effect of weather conditions on online sales at the Zalando company. The results in Steinker et al. (2016) indicate that the inconvenience caused by bad weather conditions leads consumers to be more likely to choose online rather than offline channels. In addition, consumers are more likely to select home delivery, as it is more inconvenient to carry the purchased product home in bad weather (Chintagunta, Chu & Cebollada, 2012). Logistics companies reveal that bad weather increases home delivery by 8.7% (Snaith, 2013) and home returns by as much as 7.4% (Lowe & Rigby, 2014). Hence, consumers are more likely to select delivery to a preferred location to avoid the inconvenience from carrying the items in bad environmental and weather conditions. Thus:

H2 & H3: Environmental and weather conditions influence consumer decisions on delivery and return options.

2.1.1.3. Store atmosphere. The store atmosphere includes external and interior store variables, as well as human variables (e.g., Chocarro et al., 2013). These characteristics can either directly or indirectly affect consumer shopping decision making. For instance, a crowded store makes consumers feel socially anxious; as a result, they will want to change their shopping process and look for another alternative, by changing the channel, product or store (Dabholkar & Bagozzi, 2002). Website design and layout characteristics also influence a consumer’s selection of an online or offline channel, because of channel risk and service quality (Montoya-Weiss, Voss & Grewal, 2003). These changes in consumer shopping decisions can happen at different stages of the shopping process (e.g., pre-purchase, purchase) (Chocarro et al., 2013). Thus, because consumers tend to avoid negative feelings related to the in-store atmosphere, it is reasonable to assume that consumers are more likely to look for an alternative for delivery and return. Thus:

H4 & H5: store atmosphere (human variables and store variables) influences consumer decisions on the delivery and return options.

2.1.2. Social settings
Social settings focus on ‘the presence of other persons, their characteristics, apparent roles and interpersonal reactions’ (Zhuang et al., 2006, p. 19). Consumers usually interact with social supports (e.g., salespersons, security) to gain more information, to
feel that they have made the right choice (Raghunathan & Corfman, 2006), and to reduce their perceived risk, anxiety and stress (Borges, Chebat & Babin, 2010). There is sufficient evidence to suggest that the presence of other people at the time of purchase has an impact on consumer shopping behaviour. For instance, interaction with a friend, relative or a casual stranger predictably reduces the perceived risk, thereby increasing consumer confidence about making the right decision regarding the channel (Chocarro et al., 2013). Consumer interaction (interacting with other people, being accompanied by someone and getting help from salespersons) can continue in delivery and returns. This suggests that in any social setting, consumers may make different selections in order to feel that they have made the right choice regarding delivery and returns. Thus:

H6 & H7 & H8: Social settings (interacting with other people, interacting with salespersons and being accompanied by someone) influence consumer decisions about delivery and return options.

2.1.3. Temporal perspective

Time is inseparable from a situation: hence, understanding the temporal perspective dimensions (time of day and time pressure) related to consumer shopping behaviour is crucial (Nicholson et al., 2002).

2.1.3.1. Time of day. Researchers have shown that, because of the opening hours of each retail channel, consumers select different channels depending on the time of day (e.g., Gehrt & Yan, 2004). In the offline channel, consumers normally have fewer opening hours and thereby more limited purchase time. Online, opening hours, however, are unlimited, 24/7, so consumers can make purchases at any time of day without any time restrictions (Schröder & Zaharia, 2008). Because of these differences in the number of hours that they are open, consumers can select different channels (Chocarro et al., 2013). The working hours for delivery and returns options are different as well, so it is reasonable to assume that the time of day may have the same impact on the selection of delivery and returns options. Belu and Marinoiu (2014) state that consumers look for an option with more convenient timing for them in terms of logistics. Therefore, consumers may select an option that is more convenient for them based on the opening hours and time window for receipt and returns. Thus:

H9: Time of day influences consumer decisions on delivery and returns options.

2.1.3.2. Time pressure. Time pressure refers to ‘the perception of time available for an individual to perform a task’ (Gehrt & Yan, 2004, p. 7). Generally, consumers who face this time pressure situation look for a convenient and rapidly available option to be able to complete the shopping process (Frasquet, Mollá & Ruiz, 2015). Thus, consumers significantly change their shopping behaviour when time is scarce, including their choice of product, store and channel, in order to save time (Gehrt & Yan, 2004). Because time-pressed consumers also seek a fast and convenient way to receive and return products (Lowe & Rigby, 2014), time-pressed consumers predictably act
differently regarding delivery and returns options in order to perceive a greater saving of time. Thus:

**H10**: Time pressure influence consumer decisions on delivery and returns options.

### 2.1.4. Task definition

Task definition refers to ‘the features of situations, such as an intent or requirement to select, shop for or obtain information about a general or specific purchase’ (Zhuang et al., 2006, p. 17). Each task is accompanied by different features based on the cognitive and motivational aspects of the purchase situation (Chocarro et al., 2013). For instance, consumers who plan to buy a gift encounter a different situation than those who plan to shop for personal use (Gehrt & Yan, 2004). Hence, depending on task definition, consumers have different features and thereby behave differently. In delivery and returns, gift shoppers tend to return their items first in the store in order to have a rapid refund and return and to avoid any inconvenience caused by other options (Gehrt & Yan, 2004). Therefore, consumers, depending on their task, may have different preferences on delivery and return options. Thus:

**H11**: Task definition influences consumer decisions on delivery and return options.

### 2.1.5. Antecedent states

Antecedent states are ‘temporary conditions which the consumer either brings to a situation or, alternatively, which may change significantly as a result of that situation’ (Nicholson et al., 2002, p. 135). They have a major impact on consumer shopping decisions (Kardes, Cronley & Cline, 2011) and include a person’s moods (e.g., anxiety, pleasantness) or physiological conditions (e.g., fatigue, illness) (Belk, 1975). Consumers who are in a bad mood tend to choose an option that makes them go out and cheer themselves up, and consumers who are tired tend to choose an option that enables them to avoid more feelings of fatigue (Chocarro et al., 2013). Accordingly, it is reasonable to assume that consumers may select delivery and returns options differently depending on their emotions and their feelings. Thus:

**H12 & H13**: Antecedent states (a person’s moods and physiological conditions) influence consumer decisions on delivery and returns options.

### 2.1.6. Spill-over effect

This situational factor comes from the impact of a previous consumer decision on the consumer’s current situation. Hence, consumers encounter new environmental settings created by a previous consumer’s decision, apart from the situational factors mentioned above (Gensler, Verhoef & Böhm, 2012). The literature proposes that spill-over effects exist and have an impact on consumer shopping decisions (e.g., Verhoef, Neslin & Vroomen, 2007). Thus, this study proposes that this additional setting also has an impact on the selection of consumer delivery and returns options, and explains two situational factors: the channel spill-over effect and the previous-stage decision spill-over effect.
2.1.6.1. Channel spill-over effect (or channel lock-in). Channel spill-over effect refers to taking into account the channel used in the previous stage of the shopping process and the probability of using the same channel in the next stage of a shopping journey (Verhoef et al., 2007). This effect mostly occurs when the following two stages of shopping happen together, and consumers prefer to use the same channel for both stages in order to avoid additional costs and improve efficiency (Xue & Harker, 2002). This cost avoidance makes the purchase channel the most important driver for consumers when they select a delivery and returns option (Verhoef et al., 2007). For instance, consumers using an offline channel tend to receive their product immediately after the purchasing stage or prefer to return purchased items to the same store from which they purchased them (Hsiao, 2009). Consequently, this purchase stage probability effect influences the selection of consumer options in the delivery and return stage. Thus:

**H14**: The channel spill-over effect influences consumer decisions on delivery and returns options.

2.1.6.2. Previous-stage decision spill-over effect. Previous-stage decision spill-over effect refers to actions that take place in the previous stages of the shopping process and affect consumer decisions in the next stage. This spill-over effect can influence consumer shopping decisions in different shopping stages (Gensler et al., 2012). Consumers may associate a certain option based on the previous-stage decision (Verhoef et al., 2007). In deliveries and returns, consumers’ decisions in the purchase stage can be the number of items purchased (Wang, Harris & Patterson, 2012). Therefore, to avoid the inconvenience of carrying many items, consumers may prefer to select an option that is more convenient for them. Thus:

**H15**: The previous-stage decision spill-over effect influences consumer decisions on delivery and returns options.

2.2. Situational factors and demographic characteristics

Even though Belk (1975) proposed that consumer demographic characteristics make consumers perceive situations differently, no research studies have examined the connection between situational factors and individual characteristics. Evidence in the real world shows this connection, however, especially in a multichannel environment. On the one hand, several reports addressing offline purchases show that demographic characteristics affect the level of importance of situational factors in shopping decisions (Nicholson et al., 2002; Verhoef & Langerak, 2001). With respect to online purchases, contradictory findings have been reported. Some reports state that online shoppers who are more affluent, well-educated and upscale perceive situations differently; other studies say the opposite. Okholm, Thelle, Möller, Basalisco and Rølmer (2013) show that different age groups behave differently. For example, Gehrt and Yan (2004) show that multi-channel shoppers who are young have a greater preference than older consumers to shop with someone. Moreover, consumers aged 18 to 40 are more likely than other age groups to feel time scarcity and consider the time of day...
as an important factor. This result is consistent with Metapack (2015), which found that young consumers select same-day delivery and prefer collection points. Semenik and Hanson (1976) found that low-income consumers buying in stores tend to be more concerned about the store’s selection of merchandise or fast checkout. Gender is also considered in other reports. Metapack (2015) showed that males are more likely to consider the time of day when making purchases. In summary, based on the evidence:

**H16:** The level of importance of situational factors in delivery is significantly different from individual characteristics.

**H17:** The level of importance of situational factors in return is significantly different among individual characteristics.

### 3. Methods

Consistent with the literature review, the theoretical framework comprises 15 situational factors, in addition to the consumers’ individual characteristics. Our study was conducted to confirm the hypotheses, using a questionnaire with two main sections: the first section on delivery and the second section on returns. Questions were adapted from Chocarro et al. (2013) with the purpose of exploring the effect of different situational factors on the selection of delivery and returns options. Before distributing the questionnaire, we conducted a pre-test on a convenience sample of 10 university students and professors. They were selected to ensure readability and a logical arrangement of questions and to confirm the translation accuracy. As a result, a few minor modifications were needed to improve comprehension of the questions.

Following Chocarro et al. (2013), we asked respondents to rate the magnitude of the influence of those factors on them when selecting a delivery or returns option. Thus, respondents needed to indicate their level of agreement with a series of statements using a five-point scale from ‘strongly disagree’ to ‘strongly agree’. The analysis of the data is based on the calculation of a score for each statement, summing the values selected from each respondent. The most influential situational factors were selected from the highest scores obtained in this exploratory analysis. The results give information about which situational factors are the most influential in the selection of delivery and returns options. The second part of the analysis uses the demographic questions – gender, age and educational level – to analyse the influence of those factors in the selection of the most relevant situational factors. To do so, the study uses multivariate analysis of variance (MANOVA) and analysis of variance (ANOVA)

#### 3.1. Participants and data collection

The survey was conducted in Spain in June 2017. The web-based questionnaire was distributed to 650 randomly selected nationwide respondents by email obtained via retail managers, social network groups (e.g., Facebook, WhatsApp), and students, staff and faculty at universities, schools (subjects, leisure clubs, etc.). Of the 650
questionnaires distributed, a total of 266 responses were received, which represents a response rate of 49.92%. Subsequently, we omitted 56 responses because the respondents did not complete the questionnaire. To ensure that the samples were fairly representative of the mean and variance of the Spanish national population (2017), we ran one-sample Z tests and chi-square tests. The results of these tests with $\alpha = 0.05$ showed that the mean and variance of the samples were fairly representative of the Spanish national population’s mean, $Z (\mu = 39.518, \sigma = 11.56) = -0.1524$ and chi-square $= 0.0445$. Moreover, the demographic details showed that approximately 56% were males and the remainder were females, which shows that the data were nearly gender-balanced. The age distribution of this sample was as follows: 35.7% were 24 years of age or less, 42.48% between 25 and 39 and around 21.80% were over 40. The age categorisation was aligned with Metapack (2015). The sample had a somewhat higher proportion of better-educated respondents. Over half (64.66%) had a higher level of education or had completed a bachelor’s degree, master’s degree or PhD.

4. Data analysis and results

4.1. Selecting the most influential situational factors and influencing consumers’ decisions

To obtain the most influential situational factor in the selection of delivery and returns options, we used the data collected in the questionnaire in each section. Because our exploratory study does not show the negative or positive influence of the factor, like Chocarro et al. (2013), the centre scale (neither agree nor disagree) was excluded from the measurement. The centre scale was, however, used to compare the final score of each situational factor. Tables 1 and 2 show the final scores obtained from the analysis, in addition to the percentage of participants per response scale for each situational statement in the delivery and returns sections. The final result not only highlights the most influential situational factors but also shows which factors

| Table 1. Results of the exploratory study on delivery |
|--------------------------------------------------|
| Delivery                                         |
| Strongly disagree                  Disagree                  Neither agree nor disagree | Agree | Strongly agree | Final score |
|----------------------|----------------|-----------------|----------------|----------------|-------------|
| Geographic distance to store (Physical settings) | 1.50           | 5.64            | 11.28          | 43.23          | 38.35       | 64.29       |
| Time pressure (Temporal perspective)            | 1.50           | 3.38            | 13.16          | 45.11          | 36.84       | 62.59       |
| Channel spill-over effect (Spill-over effect)   | 5.26           | 8.27            | 17.29          | 39.85          | 29.32       | 58.65       |
| Person’s moods (Antecedent states)              | 2.26           | 8.27            | 23.31          | 39.85          | 29.32       | 58.65       |
| Time of day (Temporal perspective)              | 3.01           | 8.27            | 13.53          | 49.62          | 25.56       | 57.52       |
| Environment influence (Physical settings)       | 2.63           | 6.39            | 16.92          | 45.86          | 28.20       | 56.95       |
| Previous-stage spill-over effect (Spill-over effect) | 4.14           | 13.53           | 21.43          | 37.22          | 23.68       | 53.20       |
| Human variables (Physical settings)             | 11.28          | 14.29           | 24.44          | 37.97          | 12.03       | 49.44       |
| Weather conditions (Physical settings)          | 10.53          | 19.17           | 33.46          | 27.82          | 9.02        | 43.05       |
| Store variables (Physical settings)             | 16.54          | 25.56           | 34.59          | 19.17          | 4.14        | 43.05       |
| Interacting with other people (Social settings) | 12.78          | 23.68           | 34.59          | 22.56          | 6.39        | 42.29       |
| Interacting with salespersons (Social settings) | 8.27           | 16.92           | 32.33          | 33.83          | 8.65        | 42.29       |
| Person’s physiological cond. (Antecedent states)| 13.91          | 19.92           | 39.47          | 18.05          | 8.65        | 41.54       |
| Being accompanied by someone (Social settings)  | 16.92          | 21.05           | 40.98          | 15.79          | 5.26        | 40.60       |
| Task definition (Task definition)               | 7.52           | 22.18           | 39.10          | 23.68          | 7.52        | 37.97       |

Source: Authors.
influence the selection of consumer delivery and returns options and which factors do not (see Table 3).

In the delivery section, the three most influential factors selected were: temporal setting: time pressure; physical setting: distance to store; and the spill-over effect: channel spill-over effect. Because it was possible to score the situational factors based on the demographic characteristics, three other highest scores were selected for each demographic characteristic. The final results from both sides (from general categorisation and each demographic characteristic) showed the same result. Regarding the influence of situational factors in the selection of consumer delivery options, the result showed that all of the hypotheses were supported, except two situational factors: task definition (H11) and having someone accompany the shopper (H8). This result was obtained by combining the final score with the centre score. The results clearly showed that these two factors are not related to consumer decisions when they are selecting a delivery option. (See Table 1).

In the returns section, the most influential situational factors were similar to those in the delivery section: temporal setting: time pressure; physical setting: distance to store; and spill-over effect: channel spill-over effect. As in the delivery section, the three most influential situational factors in each demographic characteristic were similar to those in the main result. Regarding the influence of situational factors in the selection of consumer return options, the results showed the same outcome as those in the delivery section. All of the hypotheses were supported, except two situational factors: task definition (H11) and having someone accompany the shopper (H8). The results clearly showed that these two factors are not relevant to consumer decisions in selecting returns options. (See Table 2).

| Table 2. Results of the exploratory study on returns |
|-----------------------------------------------|
| Returns                                      | Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree | Final score |
| Time pressure (Temporal perspective)          | 1.50             | 3.01     | 9.77                        | 43.23 | 42.48         | 67.11       |
| Geographic distance to store (Physical settings) | 0.75             | 6.39     | 13.16                       | 42.86 | 36.84         | 62.22       |
| Channel spill-over effect (Spill-over effect) | 8.65             | 13.16    | 19.92                       | 38.35 | 19.92         | 54.32       |
| Person’s moods (Antecedent states)           | 3.76             | 12.03    | 16.92                       | 48.87 | 18.42         | 52.63       |
| Environment influence (Physical settings)    | 7.52             | 16.54    | 21.05                       | 36.47 | 18.42         | 52.44       |
| Interacting with salespersons (Social settings) | 4.14             | 10.53    | 23.68                       | 37.22 | 24.44         | 52.44       |
| Human variables (Physical settings)          | 12.03            | 15.79    | 22.56                       | 35.71 | 13.91         | 51.69       |
| Time of day (Temporal perspective)           | 4.14             | 10.53    | 23.31                       | 41.73 | 20.30         | 50.56       |
| Previous-stage spill-over effect (Spill-over effect) | 3.01             | 13.16    | 27.44                       | 35.34 | 21.05         | 48.31       |
| Store variables (Physical settings)          | 24.06            | 25.56    | 31.95                       | 13.91 | 4.51          | 48.31       |
| Interacting with other people (Social settings) | 7.14             | 17.67    | 26.32                       | 33.83 | 15.04         | 47.93       |
| Weather conditions (Physical settings)       | 12.41            | 19.55    | 31.95                       | 26.32 | 9.77          | 45.11       |
| Person’s physiological cond. (Antecedent states) | 15.41            | 21.05    | 36.84                       | 19.92 | 6.77          | 42.67       |
| Being accompanied by someone (Social settings) | 13.91            | 24.81    | 39.85                       | 16.92 | 4.89          | 39.66       |
| Task definition (Task definition)            | 5.64             | 16.92    | 38.72                       | 28.57 | 10.15         | 38.53       |

Source: Authors.

| Table 3. Summary of the hypotheses results |
|-------------------------------------------|
| Supported | Rejected |
| Hypotheses on delivery | H1–H7, H9, H10, H12–H15 | H8, H11 |
| Hypotheses on returns | H1–H7, H9, H10, H12–H15 | H8, H11 |

Source: Authors.
Task definition and some of the factors in social settings were not selected among these three key factors. This was due to their not being that relevant to the delivery and return stages. Nevertheless, the two most relevant settings (physical and temporal) were consistent with those that emerged in other exploratory studies by Nicholson et al. (2002) and Chocarro et al. (2013), although those exploratory studies comprised consumers’ channel selection behaviour. This result showed that these two settings are important in consumer shopping decisions at each stage of the consumer shopping journey.

4.2. Situational importance and demographic characteristics

4.2.1. Situational importance in delivery section and demographics

H16, which states that the importance of each situational factor varies across individual demographics, was partially supported. Moreover, the univariate analysis showed a significant result for some situational factors.

4.2.1.1. Age. A separate ANOVA was run for each situational factor with an alpha level of 0.05. There were significant differences between age groups in getting help from employees \((F (2, 263) = 3.460, p = 0.033, \text{partial } \eta^2 = 0.026)\). The result showed that respondents under 25 years of age scored higher than other groups, which indicated that getting help from an employee had significant differences among young respondents. In addition, the results showed that the climate had more significant differences among 25- and 40-year-old respondents than other age groups \((F (2, 263) = 3.342, p = 0.037, \text{partial } \eta^2 = 0.025)\). Moreover, in the remaining situational factors, the differences between different age groups were not significant. (See Table 4).

4.2.1.2. Gender. The results showed that tests and the null hypothesis from the observed covariance matrices of the dependent variables were equal across gender groups. In multivariate tests, in Wilks’s lambda tests, the \(p\)-value is more than 0.05, and the null hypothesis was not rejected, which indicated the absence of a significant difference between males and females when considered jointly with those dependent

| Situational factor | Age < 25 (Mean) | 24 ≤ Age < 40 (Mean) | 40 ≤ Age (Mean) | F-value |
|-------------------|----------------|---------------------|----------------|---------|
| Getting help from an employee | 1.19 | 0.81 | 0.9 | 3.460 |
| Climate | 1.01 | 1.03 | 1.03 | 3.342 |

Note: Wilks’s lambda = 0.805, \(F (32, 496), p = 0.006\), partial \(\eta^2 = 0.103\), \(p < 0.05\).

Source: Authors.

| Situational factor | Female (Mean) | Male (Mean) | F-value |
|-------------------|---------------|-------------|---------|
| Store atmosphere (store variables) | 1.13 | 0.87 | 3.941 |

Note: Wilks’s lambda = 0.938, \(F (16, 249), p = 0.434\), partial \(\eta^2 = 0.062\), \(p < 0.05\).

Source: Authors.
variables. Wilks’s lambda equals 0.938, and then $F(16, 249), P = 0.434$ and partial $\eta^2 = 0.062$. Univariate analysis with an alpha level of 0.05, however, indicated significant differences between males and females in store atmosphere (store variables) ($F(1, 264) = 3.941, p = 0.48$, partial $\eta^2 = 0.15$). This indicates that females scored higher than males. In the remaining situational factors, however, no significant differences emerged between gender groups. (See Table 5).

4.2.1.3. Educational level. A separate ANOVA was conducted for each situational factor with an alpha level of 0.05. The results showed a significant difference between educational groups in getting help from an employee ($F(1, 264) = 9.514, p = 0.002$, partial $\eta^2 = 0.035$), in the consumer’s feelings status (e.g., being tired) ($F(1, 264) = 5.067, p = 0.025$, partial $\eta^2 = 0.019$), and in store atmosphere (store variables) ($F(1, 264) = 5.111, p = 0.25$, partial $\eta^2 = 0.019$). The results indicated that lower educational level in these three situational factors scored higher than higher educational level. Moreover, no significant differences were found between different educational level groups and the remaining situational factors. (See Table 6).

4.2.2. Situational importance in returns section and demographics

H17, stating that importance of situational factors in the returns section varies across demographic characteristics, was totally supported. Univariate analysis showed a significant result in some situational factors.

4.2.2.1. Age. A separate ANOVA was conducted for each situational factor, with each ANOVA evaluated at an alpha level of 0.05. Significant differences were found between age groups in getting help from an employee ($F(2, 263) = 4.571, p = 0.011$, partial $\eta^2 = 0.019$), and respondents under 25 years of age scored higher than other age groups. In addition, in consumer’s feelings status ($F(2, 263) = 3.189, p = 0.043$, partial $\eta^2 = 0.024$), respondents under 25 years of age scored higher than other age groups. The result also indicated no significant differences between different age groups and other remaining situational factors. (See Table 7).

4.2.2.2. Gender. Univariate analysis with an alpha level of 0.05 indicated significant differences between males and females about in-store atmosphere (store variables) ($F(1, 264) = 5.596, p = 0.48$, partial $\eta^2 = 0.21$). In fact, females scored higher than males and, as in the other sections, no significant differences emerged between different gender groups and other situational factors. (See Table 8).

Table 6. ANOVA results for differences between educational level characteristic and situational importance

| Situational factor                                | Higher education (Mean) | Lower education (Mean) | $F$-value |
|---------------------------------------------------|--------------------------|------------------------|-----------|
| Getting help from an employee                     | 0.82                     | 1.24                   | 9.514     |
| Consumer’s feelings status                        | 1.47                     | 1.80                   | 5.067     |
| Store atmosphere (store variables)                | 0.87                     | 1.18                   | 5.111     |

Note: Wilks’s lambda = 0.890, $F(16, 249), p = 0.019$, partial $\eta^2 = 0.110$, $p < 0.05$.

Source: Authors.
4.2.2.3. Educational level. A separate ANOVA was obtained for each situational factor with an alpha level of 0.05. The results showed a significant difference between educational groups in the interaction with other people ($F(1, 264) = 8.715, p = 0.003$, partial $\eta^2 = 0.032$) and in getting help from an employee ($F(1, 264) = 12.126, p = 0.001$, partial $\eta^2 = 0.044$). This showed that lower educational level scored higher than higher educational level. Moreover, the results showed no significant differences between different educational level groups and other situational factors. (See Table 9).

5. Discussion and contribution

Situational factors have usually been ignored in consumer behaviour research, both in general and in specific contexts, such as consumer shopping behaviour, despite a strong recommendation from previous researchers (e.g., Hand et al., 2009). Moreover, no one has explored the impact of these situational factors in the context of the selection of consumer delivery and returns options. Hence, this study investigates the possible influence, based on Belk’s (1975) framework, of 15 situational factors in decisions on delivery and returns options in the apparel sector by exploratory study and through a discussion of its analytical results.

The preliminary results show that situational factors play a major role in decisions about delivery and returns options. This result also reveals 13 situational factors that particularly affect consumers’ selection of delivery and returns options. In addition, it identifies the most influential factors in delivery and returns, including time pressure, distance to store and the channel spill-over effect, and is consist with previous research (Chocarro et al., 2013; Collier, Moore, Horky & Moore, 2015; Nicholson
et al., 2002), although those exploratory studies cover consumers’ channel selection behaviour. According to the findings, firstly, distance to store is an important determinant, so one recommendation for practitioners is to collect the addresses of consumers, because this will help practitioners to understand whether consumers would be more willing to go to the store or ask for home delivery or returns, and thereby lead them to develop a strategy in which more geographic areas have different delivery and returns options. Secondly, and similarly, regarding time pressure, the likelihood of choosing one delivery and returns option or just returns option might vary depending on whether it is a workday or over the weekend, when people feel less time pressure. Practitioners could design different options in which consumers perceive different levels of time pressure. Third, the spill-over effect says that the way in which people make purchases affects how they prefer to obtain the product. In context, this might affect business models, including the use of showrooms, in which consumers are willing to go to the store to view products but cannot obtain them there and, instead, have to wait for delivery to receive their purchases.

The second major findings are seen between situational factors and demographic characteristics. With respect to deliveries, the results show some situational factors that significantly affect different groups of demographic characteristics. For instance, getting help from an employee is significantly important for consumers who are under 25 years of age. These consumers typically prefer to select a delivery option in which they can receive more help from an employee because they do not have enough experience in selecting a delivery option. Moreover, analyses of age characteristics show that the weather is another situational factor that is significantly important for consumers over 40 years of age. In fact, consumers over 40 years of age are more concerned about the weather than those who are younger. In terms of gender characteristics, the results show that store variables are the most important factor for females. A common explanation is that females do more window shopping than males (Holmberg & Ohnfeldt, 2010); hence they prefer to go to a store rather than buying online. Lastly, in terms of educational level, situational factors such as getting help from an employee, consumer’s feelings status (i.e., being tired) and store atmosphere are significantly important among those with a lower educational level because consumers with a higher educational level tend to use different sources for obtaining assistance, instead of getting help from employees (Frasquet et al., 2015).

Likewise, the results significantly show that the importance of these situational factors depends on individual characteristics. For instance, getting help from an employee is significantly important among consumers less than 25 years of age when selecting a returns option. This finding indicates that, as with delivery, young consumers prefer to obtain more information from an employee because they may have less experience in selecting a returns option. At the same time, consumers over 40 show that feelings status (i.e., being tired) is an important factor in choosing a returns option. A typical reason is that those in this age group have lower energy than other age groups, therefore feelings status (i.e., being tired) affects their decisions about returns options. In terms of gender, as with delivery, the store atmosphere is significantly important for females in selecting a returns option because they shop more than males (Holmberg & Ohnfeldt, 2010). Last but not least, in terms of
educational level, the results show that interaction with other people and getting help from an employee are two situational factors that are important for those with a lower educational level. This result implies that consumers with a lower educational level acquire knowledge from others when they want to select a returns option.

This study makes a number of distinct and significant research contributions. First, in an academic context, it covers the shortcomings of previous research on the impacts of situational factors on consumer decision making about delivery and returns options. Covering this area offers a cognitive improvement about behaviour concerning decision making on consumer delivery and returns options. In addition, examining the impact of situational factors helps to identify the most influential situational factors and explicitly incorporates them into other research designs. The second contribution, in terms of methodological approach, is the design of an experimental study and exploratory analysis, which allows it to identify the key drivers in decision making on delivery and return options. Third, in terms of practice, it helps logistics planners to develop better strategies in a retail setting. Practitioners, particularly those in Spain, can benefit from this study in several ways. In general, logistics designers can take situational factors into consideration when designing delivery and return options in apparel. Logistics designers’ efforts may be geared up to create or alter particular delivery or return options, for example, to motivate specific shoppers to select particular delivery or returns options. As a result, retailers can be better prepared and use a more efficient logistics process.

6. Study limitations and suggestions for future studies

This study suffers from four main limitations. First, this study is based on an exploratory method that does not include information about the positive or negative influence of situational factors. Other methods must be used instead to demonstrate the direction of the influence of each situational factor. Second, this study obtained a low response rate that may have resulted from the length of the questionnaire. The demographic profile, however, showed that the data obtained are approximately representative of the Spanish population. Third, the delivery and returns options included only two alternatives – home delivery/returns and delivery/returns at another location – because of our simplifying the questionnaire and data. The option for delivery/returns at another location could, however, be divided into two other formats, such as a third-party location and retailer location. Finally, this study investigated only one product category. Future research might consider different products such as electronic items, which are top-selling items for online retailers, and it is easy to translate the in-store experience to the online environment, so that the results can be generalised.

Disclosure statement

No potential conflict of interest was reported by the authors.

Note

1. http://www.ine.es.
References

Baird, N. & Kilcourse, B. (2011). Omni-channel fulfillment and the future of retail supply chain benchmark report executive summary. Retrieved from http://www.scdigest.com/assets/reps/Omni_Channel_Fulfillment.pdf

Belk, R. W. (1975). Situation variables and consumer behavior. Journal of Consumer Research, 2(3), 157–164. doi:10.1086/208627

Belu, M. G. & Marinoiu, A. (2014). A new distribution strategy: The omnichannel strategy. The Romanian Economic Journal, 52(1), 117–134.

Borges, A., Chebat, J. C., & Babin, B. J. (2010). Does a companion always enhance the shopping experience? Journal of Retailing and Consumer Services, 17(4), 294–299. doi:10.1016/j.jretconser.2010.02.007

Brynjolfsson, E., Hu, Y., & Rahman, M. S. (2009). Battle of the retail channels: How product selection and geography drive cross-channel competition. Management Science, 55(11), 1755–1765. doi:10.1287/mnsc.1090.1062

Capper, T. (2014). Are delivery options part of your e-commerce strategy? Retrieved from http://onlineownership.com/delivery-options-part-e-commerce-strategy/

Charlton, G. (2014). Multichannel retailers need to work on their returns policies [Econsultancy]. Retrieved from https://econsultancy.com/blog/64801-multichannel-retailers-need-to-work-on-their-returns-policies/

Chatterjee, P. (2010). Causes and consequences of ‘order online pick up in-store’ shopping behavior. The International Review of Retail, Distribution and Consumer Research, 20(4), 431–448. doi:10.1080/09593969.2010.504009

Chintagunta, P. K., Chu, J., & Cebollada, J. (2012). Quantifying transaction costs in online/offline grocery channel choice. Marketing Science, 31(1), 96–114. doi:10.1287/mksc.1110.0678

Chocarro, R., Cortiñas, M., & Villanueva, M. L. (2013). Situational variables in online versus offline channel choice. Electronic Commerce Research and Applications, 12(5), 347–361. doi:10.1016/j.elerap.2013.03.004

Collier, J. E., Moore, R. S., Horky, A., & Moore, M. L. (2015). Why the little things matter: Exploring situational influences on customers’ self-service technology decisions. Journal of Business Research, 68(3), 703–710. doi:10.1016/j.jbusres.2014.08.001

Dabholkar, P. A. & Bagozzi, R. P. (2002). An attitudinal model of technology-based self-service: Moderating effects of consumer traits and situational factors. Journal of the Academy of Marketing Science, 30(3), 184–201. doi:10.1177/009703002030003001

DHL (2015). Shop the world! Consumer attitudes towards global distance selling. Retrieved from http://www.dhl.com/content/dam/Campaigns/Mail_Campaigns/GMStudy2014/pdf/shop_the_world-en.pdf

Frasquet, M., Mollá, A., & Ruiz, E. (2015). Identifying patterns in channel usage across the search, purchase and post-sales stages of shopping. Electronic Commerce Research and Applications, 14(6), 654–665. doi:10.1016/j.elerap.2015.10.002

Gallino, S. & Moreno, A. (2014). Integration of online and offline channels in retail: The impact of sharing reliable inventory. Management Science, 60(6), 1434–1451. doi:10.1287/mnis.2014.1951

Gehrt, K. C. & Yan, R.-N. (2004). Situational, consumer, and retailer factors affecting Internet, catalog, and store shopping. International Journal of Retail & Distribution Management, 32(1), 5–18. doi:10.1108/09590550410515515

Gensler, S., Dekimpe, M. G., & Skiera, B. (2007). Evaluating channel performance in multichannel environments. Journal of Retailing and Consumer Services, 14(1), 17–23. doi:10.1016/j.jretconser.2006.02.001

Gensler, S., Verhoef, P. C., & Böhm, M. (2012). Understanding consumers’ multichannel choices across the different stages of the buying process. Marketing Letters, 23(4), 987–1003. doi:10.1007/s11002-012-9199-9
Hand, C., Dall’Olmo Riley, F., Harris, P., Singh, J., & Rettie, R. (2009). Online grocery shopping: The influence of situational factors. *European Journal of Marketing, 43*(9/10), 1205–1219. doi:10.1108/03090560910976447

Handfield, R., Straube, F., Pfohl, H.-C., & Wieland, A. (2013). Trends and strategies in logistics and supply chain management [DVV Media Group GmbH]. Retrieved from https://www.bvl.de/misc/filePush.php?id=21777

Holmberg, J. & Ohnfeldt, R. (2010). *The female fashion consumer behaviour*. Handelshogskolan Vid Goteborgs Universitiet.

Hsiao, M.-H. H. (2009). Shopping mode choice: Physical store shopping versus e-shopping. *Transportation Research Part E: Logistics and Transportation Review, 45*(1), 86–95. doi:10.1016/j.tra.2008.06.002

Hübner, A., Holzapfel, A., & Kuhn, H. (2016). Distribution systems in omni-channel retailing. *Business Research, 9*(2), 255–296. doi:10.1007/s40685-016-0034-7

Kardes, F. R., Cronley, M. L., & Cline, T. W. (2011). *Consumer behavior*. Mason, IA: South-Western Cengage Learning. Retrieved from https://books.google.es/books/about/Consumer_Behavior.html?id=nnew7nJ6000C

Kleijnen, M., de Ruyter, K., & Wetzels, M. (2007). An assessment of value creation in mobile service delivery and the moderating role of time consciousness. *Journal of Retailing, 83*(1), 33–46. doi:10.1016/j.jretai.2006.10.004

Kotler, P. (2009). *Marketing management*. Essex: Pearson Prentice Hall. Retrieved from https://books.google.es/books?id=8VDYaWzc9MgC

KPMG, L. (2016). Omnichannel retail survey 2016, Retrieved from https://assets.kpmg.com/content/dam/kpmg/pdf/.../omnichanel-retail-survey-2016.pdf

Lemon, K. N. & Verhoef, P. C. (2016). Understanding customer experience and the customer journey. *Journal of Marketing, (JM-MSI Special Issue)*, 1–62.

Levy, M. & Weitz, B. A. (2012). *Retailing management* (8th ed.). New York: McGraw-Hill/Irwin.

Lowe, R. & Rigby, M. (2014). Barclays: The last mile exploring the online purchasing and delivery journey. UK. Retrieved from https://www.home.barclays/content/dam/barclayspublic/docs/BarclaysNews/2014/September/the-last-mile-report.pdf

Metapack (2015). *Delivering consumer choice: 2015 state of eCommerce delivery*. London. Retrieved from http://www.relacioncliente.es/pdf/20151119011121.pdf

Monsuwé, T. P. Y., Dellaert, B. G. C., & Ruyter, K. D. (2004). What drives consumers to shop online? A literature review. *International Journal of Service Industry Management, 15*(1), 102–121. doi:10.1108/09564230410523358

Montoya-Weiss, M. M., Voss, G. B., & Grewal, D. (2003). Determinants of online channel use and overall satisfaction with a relational, multichannel service provider. *Journal of the Academy of Marketing Science, 31*(4), 448–458. doi:10.1177/00920700303254408

Murray, K. B., Finn, A., Leszczyc, P. P., & Muro, F. D. (2008). The effect of weather on consumer spending. *Association for Consumer Research, 35*, 697–698.

Nicholson, M., Clarke, I., & Blakemore, M. (2002). ‘One brand, three ways to shop’: Situational variables and multichannel consumer behaviour. *The International Review of Retail, Distribution and Consumer Research, 12*(2), 131–148. doi:10.1080/09593960210127691

Okholm, H. B., Thelle, M. H., Möller, A., Basalisco, B., & Rølmer, S. (2013). E-commerce and delivery: A study of the state of play of EU parcel markets with particular emphasis on e-commerce [European Commission, DG Internal Market and Services]. Retrieved from http://ec.europa.eu/internal_market/post/doc/studies/20130715_ce_e-commerce-and-delivery-final-report_en.pdf

Raghunathan, R. & Corfman, K. (2006). Is happiness shared doubled and sadness shared halved? Social influence on enjoyment of hedonic experiences. *Journal of Marketing Research, 43*(3), 386–394. doi:10.1509/jmkr.43.3.386

Schröder, H. & Zaharia, S. (2008). Linking multi-channel customer behavior with shopping motives: An empirical investigation of a German retailer. *Journal of Retailing and Consumer Services, 15*(6), 452–468. doi:10.1016/j.jretconser.2008.01.001
Snaith T. (2013). Bad weather means good business for delivery firms. Retrieved from http://skill-web.co.uk/blog/transport-and-logistics/bad-weather-means-good-business-for-delivery-firms/

Steinker, S., Hoberg, K., & Thonemann, U. W. (2016). The value of weather information for e-commerce operations. *International Journal of Laboratory Hematology*, 38(1), 42–49.

Verhoef, P. C. & Langerak, F. (2001). Possible determinants of consumers’ adoption of electronic grocery shopping in the Netherlands. *Journal of Retailing and Consumer Services*, 8(5), 275–285. doi:10.1016/S0969-6989(00)00033-3

Verhoef, P. C., Neslin, S. A., & Vroomen, B. (2007). Multichannel customer management: Understanding the research-shopper phenomenon. *International Journal of Research in Marketing*, 24(2), 129–148. doi:10.1016/j.ijresmar.2006.11.002

Wang, C., Harris, J., & Patterson, P. G. (2012). Customer choice of self-service technology: The roles of situational influences and past experience. *Journal of Service Management*, 23(1), 54–78. doi:10.1108/09564231211208970

Xue, M. & Harker, P. T. (2002). Customer efficiency: Concept and its impact on e-business management. *Journal of Service Research*, 4(4), 253–267. doi:10.1177/1094670502004004003

Ye, Y., Lau, K. H., & Teo, L. K. Y. (2018). Drivers and barriers of omni-channel retailing in China: A case study of the fashion and apparel industry. *International Journal of Retail and Distribution Management*, 46(7), 657–689.

Zhuang, G., Tsang, A. S. L., Zhou, N., Li, F., & Nicholls, J. A. F. (2006). Impacts of situational factors on buying decisions in shopping malls. *European Journal of Marketing*, 40(1/2), 17–43. doi:10.1108/03090560610637293