Frontiers in Health Informatics
ISSN-Online: 2676-7104
www.healthinformaticsjournal.com
2024; Vol 13: Issue 8
Open Access

Impact Of Mobile On Impulse Purchase

Nisha Yadav
Research Scholar, School of Management, Singhania University, Pacheri, Bari, Jhunjhunu, Rajasthan, India

Alok Kumar
Phd Dean, School of Management Studies

Cite this paper as: Nisha Yadav, Alok Kumar (2024). Impact Of Mobile On Impulse Purchase. *Frontiers in Health Informatics*, *Vol.13, No.8*, 5882-5891

ABSTRACT
While online impulse buying has attracted increasing attentions from researchers, there is still limited research that investigates consumers' impulse buying behavior across different situations. Categorizing external stimuli into three types (website, marketing and situational stimuli), our study examines their joint influences on consumers' affective and cognitive reactions as well as their online impulse buying behavior. Our empirical findings indicate that the positive effects of website stimuli and marketing stimuli on consumers' internal reactions exhibit significant variations based on a situational stimulus (i.e., a non-holiday season versus a holiday season). Specifically, consumers react more sensitively to perceived website quality to form both hedonic and utilitarian values during the non-holiday season, while they focus more on prices to judge utilitarian value rather than hedonic value during the holiday season. Furthermore, our results suggest that the cascading mediation effects of consumers' internal responses vary greatly between the non-holiday season and the holiday season.
KEYWORDS-impulse, mobile, purchase, website, consumers

INTRODUCTION
Manufacturers and retailers have always been interested in understanding impulse-buying behaviour in the grocery setting. Both recognize the growing importance of the point of sale in influencing consumers' decisions. In fact, even if grocery items are generally perceived to be low-involvement goods and the grocery shopping trip a low-involvement activity (Smith and Carsky, 1996), understanding the factors that trigger impulsive purchases is important because as many as nine out of ten shoppers occasionally buy on impulse (Cobb and Hoyer, 1986; Silvera et al., 2008). A factor that contributes to the high number of impulse purchases is the design of supermarkets that encourages such purchases (Zhang et al., 2007; Hultén and Vanyushyn, 2011).
Manufacturers have gradually shifted their strategic focus from the traditional marketing levers to in-store marketing, whereas retailers have invested many resources in shopper marketing so as to influence consumers' decisions in front of the display [1,2,3]
Despite the extensive literature available on factors that influence the consumer decision-making process inside the store and on impulse-buying behaviour (Kollat and Willett, 1967; Iyer and Ahlawat, 1987; Iyer, 1989; Inman et al., 2009; Hultén, 2012; Mohan et al., 2013;

Shankar, 2014; Wiese et al., 2015; Bellini et al., 2016; Bellini and Aiolfi, 2017, 2019), recent changes in the business and technological landscape have created a new scenario for shopping behaviour in grocery retailing. Specifically, digitalization has significantly affected the retail landscape and managers have become interested in designing new strategies that could improve their profitability by taking advantage of technological innovations (Kollmann et al., 2012; Pantano and Viassone, 2014). One of the most appealing targets for marketing managers is the customer decision-making process in the digital world (Sun and Wu, 2011; Ström et al., 2014; Ansari and Riasi, 2016).

Over the last few years, widespread mobile connectivity has significantly influenced the consumer decision-making process. This impact depends on the type of use (Sciandra and Inman, 2014). In fact, in a retail environment, mobile devices could be used both in-store and out-of-store. Consumers use their mobile outside the store to collect information before entering the point of sale. On the contrary, consumers can use their mobile in-store as a guide for shopping – for example, to check their digital shopping lists, make online price comparisons, consult digital flyers or use mobile retail apps. Recent research by PYMNTS (2019) states how, among 2,300 American consumers, 48% of those who own smartphones use them while shopping in stores. Specifically, consumers mostly use mobile devices for shopping-related activities. For instance, 46.8% use them to access in-app discounts, 43.3% look up product information, 33.6% use them to compare prices with competitors and 31.1% consult product reviews. In addition, a recent survey by Statista (2020b) stated that approximately 46% of consumers worldwide felt comfortable using their own mobile phone for in-store activities; specifically, 73% of survey respondents felt secure about using their mobile device for shopping-related activities such as looking up product information while in an in-store retail environment.

As a result of this type of mobile in-store usage, consumers are more informed during the shopping trip. Consequently, using mobile devices in-store as a guide for shopping, consumers are less aware of the in-store marketing stimuli promoted by retailers, leading to fewer unplanned purchases (Bellini and Aiolfi, 2017, 2019). Our examination of the literature led us to identify several main strands on how in-store mobile usage affects retailer performance. In conducting our study, we followed the one that affirms that the use of mobile devices in relation to shopping leads to customers making fewer unplanned purchases than those who do not use mobile devices (Sciandra and Inman, 2014; Bellini and Aiolfi, 2017, 2019).[4,5,6]

Given these results, it becomes crucial to understand how mobile phones influence the decision-making process inside the store as well as the purchasing behavior of shoppers.

Prior research developed models that explained impulse-buying, but they did not consider pre-shopping factors and mobile usage (Beatty and Ferrell, 1998; Mohan et al., 2013; Bellini et al., 2017). Specifically, only a few contributions have so far shown that the degree of shopping preparation influences the behaviour of shoppers inside the store, resulting in fewer impulse purchases: the greater the tendency to plan purchases, the lower the tendency to engage in impulse-buying (Bellini et al., 2016, 2017). As stated by Bellini et al. (2017), consumers are better prepared than they were in the past and tend to limit the influence of retailers in-store. This phenomenon is further reinforced by mobile usage during the in-store shopping experience that may influence consumers, who, thanks to their pre-purchase preparation, tend

to follow their physical, mental or digital shopping list and are therefore less influenced by the retail environment (Bellini and Aiolfi, 2019). Considering the increase in pre-shopping activities and the growth of mobile device use, it is important to extend the previous models to consider these variables. Starting from the prior models (Beatty and Ferrell, 1998; Mohan et al., 2013; Bellini et al., 2017), our intention was to develop and test a comprehensive model that considers pre-shopping preparation tendency and in-store mobile usage as antecedents of impulse-buying behaviour. Specifically, we posit that both reduce the urge experienced during the shopping trip towards impulse-buying behaviour. This new model will help researchers and marketers better understand shopping behaviour in the digital world, where consumers are better prepared than they were in the past, using mobile devices both out-of-store as a tool for shopping preparation and in-store as a tool for self-regulation. To develop our impulse-buying model, we used a structural equation modelling approach that took into account the impact of mobile device use on in-store shopping behaviour.[7,8,9]

DISCUSSION

The in-store behaviour of shoppers has been of interest to researchers for over 60 years now (Kollat and Willett, 1967; Stern, 1962; Kim and Park, 1997; Underhill, 1999, 2009; Sorensen et al., 2017). Specifically, researchers' attention to the factors that influence consumer decision-making inside the store has led to several studies that have striven to advance the science of shopping (Kollat and Willett, 1967; Iyer and Ahlawat, 1987; Iyer, 1989; Inman et al., 2009; Hultén, 2012; Mohan et al., 2013; Shankar, 2014; Wiese et al., 2015; Bellini et al., 2016). Of all the aspects of shoppers' behaviour in-store, we have intentionally focused in our work on the fundamental patterns of impulse-buying behaviour, on which extensive literature exists (Muruganantham and Ravi Shankar, 2013; Venkateswara Raju et al., 2015). Within this literature, the definition we chose to analyse in our work comes from Iyer (1989), who divided impulse purchases into four categories: pure impulse-buying (defined as purchases characterized by a complete absence of planning); suggested impulse-buying (defined as a purchase that occurs when the retailer and the store itself suggest new product alternatives to satisfy a desire or a need); reminded impulse-buying (intended as a purchase that occurs when consumers only remember to buy a product they need when they are in the store in front of the display); and planned impulse-buying (defined as purchases partially planned before entering in the store – e.g. purchases for which the category has been decided in advance).

Impulse-buying reflects the ability of retailers to generate immediate desire and redirect consumer purchases towards products or categories for which no pre-shopping intention existed. Individuals are aware of this power that retailers have and attempt to limit the effect by activating some self-control strategies. In grocery retailing, there are two ways for consumers to control their impulsiveness: define a mental budget to be followed during the shopping expedition (Heat and Soll, 1996; Stilley et al., 2010) and devote time to the preparation of the shopping trip (Heckhausen and Gollwitzer, 1987; Iyer and Ahlawat, 1987; Thomas and Garland, 1993, 2004). The shopping list, for example, is an external memory aid (Block and Morwitz, 1999) that increases the probability of correspondence between intention and action.[10,11,12]

Over the past few years, the growing penetration of digital technology has reinforced this tendency towards self-regulation, enabling individuals to prepare their shopping expedition with different tools in addition to the written shopping list (Bellini and Aiolfi, 2017, 2019).

Consumers enter the store much better prepared than in the past. Thanks to technology, consumers are now able to collect information out-of-store, carry out many and sundry pre-trip activities such as comparing the pricing, promotions and range of the various retailers. Consumers therefore enter the store with advanced knowledge and are able to shop quickly, only searching for the products they had planned to buy, guided by a digital shopping list, digital coupons or printed customized promotions (Bellini et al., 2016). Literature states that the degree of grocery shopping preparation is related to the shopper's behaviour inside the store in terms of its influence on the balance between planned and impulsive buying: the higher the degree of shopping preparation, the greater the tendency to plan purchases before entering the store, and hence the lower the tendency to engage in impulse-buying in-store (Bellini et al., 2016).

The close connection between preparatory activities and the type of product purchased has enriched the literature with a new model of shopper behaviour that considers the pre-shopping tendency amongst the factors affecting impulsive purchases (Bellini et al., 2017). From this perspective, impulsive purchases depend on individual characteristics and any number of variables that might affect any particular shopping trip. The model shows that higher pre-shopping tendencies have a direct influence on impulse-buying inasmuch as they result in fewer impulsive purchases.[13,14,15]

Impulse-buying and in-store mobile device usage

Widespread mobile connectivity and the growing penetration of mobile devices have significantly affected consumers' decision-making processes. This impact, however, depends on the type of use that is made of the technology (Sciandra and Inman, 2014). The use is defined as task-unrelated when individuals use their device in a manner that is not directly related to the focal decision task. For example, mobile usage is considered task-unrelated when consumers engage in private conversations, send personal text messages, check e-mails and surf the Web. Conversely, the use is considered task-related when individuals use their device in a manner directly related to the shopping. As far as grocery shopping is concerned, the use is task-related when consumers use the mobile device to access digital shopping lists, collect information about prices and products, scan product barcodes, compare prices, use mobile shopping applications or collect digital coupons to be redeemed in-store.

This latter type of usage can help consumers make better decisions because they are less influenced by the environment and expend less effort inside the store (Bellini et al., 2016). Therefore, digital and mobile tools may positively affect both the quality and the efficiency of purchases and decision-making processes inside the store.

From a retailer's perspective, several authors have found that in-store mobile usage affects retailer performance in a variety of ways. For example, Grewal et al. (2018) consider mobile distraction a key factor for increasing purchases and therefore profits, as customers spend more time in the store and pay much more attention to the shelves.

On the contrary, some authors (Sciandra and Inman, 2014; Bellini and Aiolfi, 2017, 2019) define the type of mobile usage more precisely (related or unrelated to the shopping goal), demonstrating that the use of mobile devices in a shopping-related manner leads customers to make fewer unplanned purchases compared to those who do not use mobile devices, as they are better equipped to stay on track while shopping.[14,15,16]

Proposed impulse-buying model

The growing penetration of mobile devices, along with increasing mobile device use in a task-related manner (Bellini and Aiolfi, 2019; PYMNTS, 2019; Statista, 2020a), provides the opportunity to revise the existing literature on impulse-buying behaviour.

The purpose of our work is to offer a model of impulse-buying which can help researchers and practitioners better understand shopping behaviour in the new retail setting, where consumers are much better prepared than in the past, using mobile devices both out-of-store as a tool for shopping preparation and in-store as a tool for self-regulation.

In line with prior research, our model considers shopping enjoyment and impulse-buying tendency as individual traits (Sproles and Kendall, 1996), and the influence of positive and negative affect (Beatty and Ferrell, 1998; Bellini et al., 2017), the influence of exogenous situational variables such as time and money available (Beatty and Ferrell, 1998) and the urge to purchase impulsively (Beatty and Ferrell, 1998; Dholakia, 2000) as mediators of the influence of the other variables (i.e. positive and negative affect, shopping enjoyment, impulse-buying tendency, mobile usage) on impulse-buying behaviour.

Moreover, we include pre-purchase planning tendency among the individual characteristics already considered in existing literature (Bellini et al., 2017). Finally, filling the gap in existing literature, we include consumer mobile usage only for shoppers who use the mobile device in a shopping-related manner.[15,16]

This sub-section explains the conceptual framework of our revised model of impulse-buying behaviour

Shopping enjoyment and positive affect

Literature defines shopping enjoyment as the pleasure an individual obtains from the shopping process (Beatty and Ferrell, 1998). According to literature, shoppers who consider shopping an enjoyable activity derive pleasure from the shopping experience, so they are more likely to get psychological rewards from the shopping experience itself (Bellenger, 1980; Beatty and Ferrell, 1998; Bellini et al., 2017). Therefore, pleasure and enjoyable shopping experiences lead to positive moods in the grocery setting, as demonstrated in several studies (Beatty and Ferrell, 1998; Mohan et al., 2013; Bellini et al., 2017). These considerations lead to the following hypothesis:

H1.

The higher the level of shopping enjoyment, the higher the level of positive affect.

Shopping enjoyment and urge to purchase impulsively

According to Beatty and Ferrell (1998), we defined the urge to purchase impulsively as a state of desire that is experienced upon encountering an object in the environment. It clearly precedes the actual impulse action and, as stated in literature, it is spontaneous and sudden. Prior research states that shoppers who consider shopping an enjoyable activity derive pleasure from the shopping experience, spend more time shopping and browse for longer before making a purchase (Westbrook and Black, 1985; Beatty and Ferrell, 1998; Atulkar and Kesari, 2018). Because recreational shoppers obtain gratification from the process of shopping, they can hardly resist the urge they experience upon encountering a product in the retail environment and are more likely to engage in unplanned purchases (Rook, 1987; Beatty and Ferrell, 1998). Thus, we offer this hypothesis:

H2.

The higher the level of shopping enjoyment, the stronger the urge to purchase impulsively.

Impulse-buying tendency and urge to purchase impulsively

In line with prior research, we defined the impulse-buying tendency as a tendency to make unplanned purchases and to buy spontaneously with little or no deliberation or consideration of consequences (Beatty and Ferrell, 1998; Weun et al., 1998; Bellini et al., 2017). According to literature, shoppers with stronger impulse-buying tendencies are more likely to experience urges to buy impulsively in a retail setting (Beatty and Ferrell, 1998; Bellini et al., 2017). This leads to the following hypothesis:

H3.

The stronger the impulse-buying tendency, the stronger the urge to purchase impulsively.

Positive affect and urge to purchase impulsively

Literature states that there is a positive and direct association between positive affect and urge to purchase impulsively (Rook and Gardner, 1993; Beatty and Ferrell, 1998; Bellini et al., 2017). According to prior research, in a retail setting, a positive mood will lead to impulse-buying more than a negative mood: individuals in a positive mood have an unconstrained feeling, the desire to reward themselves and higher energy levels (Rook and Gardner, 1993). Moreover, psychological literature suggests that positive moods cause people to feel they have more freedom to act (Cunningham, 1979) and, consequently, pleasure is positively associated with the likelihood of overspending during the shopping expedition (Donovan et al., 1994). Hence, the following hypothesis:

H4.

The higher the level of positive affect, the stronger the urge to purchase impulsively.[14]

Negative affect and urge to purchase impulsively

According to a review of the literature, the effects of negative moods on behaviour are not so clear. Sometimes positive moods and negative moods produce the same effects, while other times they produce opposite effects (Clark and Isen, 1982). Generally, in a retail setting, negative affect creates a desire to withdraw from the retail environment as it makes the shoppers perceive the store as unlikely to respond to their shopping needs (Eroglu and Machleit, 1993). Because negative affect may cause withdrawal from the store, it is unlikely to result in impulsive urges

RESULTS

This study explores the impact of mobile technologies on consumer behavior in retail marketing, examining how advancements in mobile platforms have transformed shopping habits and interactions with brands. Mobile technologies have revolutionized the retail experience by providing unprecedented convenience, allowing consumers to shop at any time and from any location. This shift has led to a marked preference for mobile shopping over traditional methods, fundamentally altering consumer behavior. Key findings reveal that personalization plays a crucial role in enhancing consumer engagement and satisfaction, with mobile technologies enabling tailored recommendations and offers based on individual preferences. Access to real-time information, such as product details and price comparisons, empowers consumers to make more informed purchasing decisions, reflecting a shift towards deliberate and confident buying choices. Social media and social commerce have also become significant factors, with consumers discovering new products and brands through these platforms and benefiting from integrated shopping features. Impulse buying behavior has increased due to the convenience of mobile shopping, with promotional alerts and simplified

payment processes contributing to spontaneous purchases. The integration of mobile technologies with physical store experiences has created a more seamless shopping journey, bridging the gap between online and offline interactions. However, challenges such as privacy concerns, data security, and information overload remain significant. Consumers are increasingly aware of data collection risks and may experience fatigue from excessive marketing messages. To navigate this evolving landscape, retailers must balance the advantages of mobile technologies with addressing these challenges to effectively meet consumer needs and expectations.[15]

CONCLUSION

E-commerce businesses are always looking for ways to increase the order value and frequency. Impulse buying is a somewhat-known phenomenon, but did you know that mobile commerce enhances the probability of impulse buying? When we zoom in on the phenomenon of Impulse buying itself, it will become really clear why this is. So, we've done that for you.

Here are 3 scientific explanations for impulse buying, the reasons why mobile apps enhance it and the ways you can capitalize on this (que evil laughter):

1. Decision Fatigue

After a long day, the last thing you want to do is think. Decision Fatigue (or 'Ego Depletion') is often directly related to stress levels, the amount of sleep someone has had, exercise and/or the time of day. So when this long day is over, your customers are tired from making decisions all day and have a decreased 'willpower' to withstand impulse buying.

It is no secret that a lot of folks spent their commute home on their phone. Imagine having had a rough day and you get a push notification about your favorite brand being on sale.

Could you resist the temptation of a sweet deal, which also garners a nice mental pick-me-up?

2. Emotional Shopping

Buying, in a lot of cases, is tied to emotions. When someone makes a purchase the 'happiness-hormone' dopamine is released, giving the person a nice boost in their mental state of mind. Stress, sadness and even periods of celebration are strong triggers for impulse buying. It is even speculated that a lack of sunlight can enhance the possibility of impulse buying.

Folks spent TONS of time on their phone. It offers an escape for when they are sad, entertainment for when they are bored and help for when they are stressed.

E-commerce merchants have done holiday promotions ever since money was invented, but did you ever consider that lots of folks don't have anyone to spend holidays with? Maybe you can give them a smile, by offering them a nice promotion on something that will get them through these times with just a bit more spring in their step.

Apart from that, look at your product catalog. Which products are considered essential items and which ones are 'nice-to-have' i.e. not that necessary, but DO put a smile on someone's face.

3. Loss aversion

A lot of impulse buying occurs, because folks are afraid of missing out on something good, or as the kids call it these days; FOMO (Fear Of Missing Out). It's a bit of a given, but the old 'ONE TIME ONLY' and 'LIMITED SUPPLY' deals trigger a very ancient part of our brain that is always on the lookout to prevent hunger and death.

A bit primitive? Perhaps, but the naked truth is that essentially we are all still the same animal

that lived in caves, we just traded in our clubs for spreadsheets.

So never give customers the idea that they can ‘wait for the next promotion’. Make sure that you shift promotions on certain products and don’t repeat discounts.

Keep them on their toes; this time around it is product category A that’s discounted, but the next time a discount for product category A rolls along, might be a very long time indeed. Even if you intend to discount the same category next time around, don’t give your customer the idea that you will and capitalize fully on the FOMO!

M-commerce utilizes the unique position of being in your customers hands and pockets. They are carrying you around with them everywhere they go, which creates massive opportunities, but also a responsibility. You have the opportunity to wield this knowledge for maximum profit, but ideally by enhancing your customers' day.[16]

REFERENCES

1) "What is impulse buying?". Businessdictionary.com. Retrieved 2011-12-22.
2) Czarnecka, Barbara; Schivinski, Bruno (2019-08-08). "Do Consumers Acculturated to Global Consumer Culture Buy More Impulsively? The Moderating Role of Attitudes towards and Beliefs about Advertising". Journal of Global Marketing. 32 (4): 219–238. doi:10.1080/08911762.2019.1600094. ISSN 0891-1762. S2CID 182181403.
3) Muhammad, Abubakar Sadiq; Adeshola, Ibrahim; Isiaku, Labaran (2023-09-14). "A mixed study on the "wow" of impulse purchase on Instagram: insights from Gen-Z in a collectivistic environment". Young Consumers. 25: 128–148. doi:10.1108/YC-04-2023-1728. ISSN 1747-3616.
4) Rook, Dennis W. (1987). "The Buying Impulse". Journal of Consumer Research. 14 (2): 189–199. doi:10.1086/209105. ISSN 0093-5301. JSTOR 2489410.
5) Zhang, Yinlong; Shrum, L. J. (2009). "The Influence of Self-Construal on Impulsive Consumption". Journal of Consumer Research. 35 (5): 838–850. doi:10.1086/593687. ISSN 0093-5301.
6) Podoshen, Jeffrey S.; Andrzejewski, Susan A. (2012). "An Examination of the Relationships Between Materialism, Conspicuous Consumption, Undecided Purchase, Impulse Buying, and Brand Loyalty". Journal of Marketing Theory and Practice. 20 (3): 319–333. doi:10.2753/MTP1069-6679200306. ISSN 1069-6679. JSTOR 23243709. S2CID 154989526.
7) Stern, Hawkins (1962). "The Significance of Impulse Buying Today". Journal of Marketing. 26 (2): 59–62. doi:10.2307/1248439. ISSN 0022-2429. JSTOR 1248439.
8) Are you an impulse buyer? Archived 2015-08-28 at the Wayback Machine Accessed May 2010.
9) Mattila, Anna S.; Wirtz, Jochen (2008-01-01). "The role of store environmental stimulation and social factors on impulse purchasing". Journal of Services Marketing. 22 (7): 562–567. CiteSeerX 10.1.1.582.5252. doi:10.1108/08876040810909686. ISSN 0887-6045.
10) Czarnecka, Barbara; Schivinski, Bruno; Schivinski, Sarap (2020). "How values of individualism and collectivism influence impulsive buying and money budgeting: the mediating role of acculturation to global consumer culture". Journal of Consumer Behaviour. 19 (5): 505–522. doi:10.1002/cb.1833. ISSN 1479-1838. S2CID 218924348.
11) Clover, Vernon T. (1950). "Relative Importance of Impulse-Buying in Retail Stores". Journal of Marketing. 15 (1): 66–70. doi:10.2307/1247083. ISSN 0022-2429. JSTOR 1247083.
12) Study Shows Consumers May be Swayed by Distraction Newswise, Retrieved on July 16, 2008.
13) Veronica Cruz Impulse spending reduced if you get organized Market Business News, Retrieved on February 12, 2014.
14) "Tempting Shopping, Children and Impulse Buying - David Vernon, March 2007". Kindredcommunity.com. Archived from the original on 2016-07-10. Retrieved 2011-12-22.

15) Richter, Paul (1984-03-28). "Macintosh Takes Lead In Sales Race". The Cincinnati Enquirer. Los Angeles Times. pp. B-1, B-2. Retrieved 2019-05-05.
16) Eagle, L.; Czarnecka, B.; Dahl, S.; Lloyd, J. (2021). Marketing communications (Second ed.). Abingdon, Oxon: Routledge. ISBN 978-1-003-08929-2. OCLC 1149246969.