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Reconfigurations of in-store shopping practices for consumers with disabilities: a mobile shopping view

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RECONFIGURATIONS OF IN-STORE SHOPPING PRACTICES FOR CONSUMERS WITH DISABILITIES: A MOBILE SHOPPING VIEW

1 INTRODUCTION

The improvement of technological devices has been influencing how consumers buy and where they buy. They starting to require more than only information, but solutions and ideas that add value to their shopping activities (Abreu and Miranda, 2019; Thaichon et al., 2018). Smartphones have become an everyday tool in people's lives (Fuentes and Svingstedt, 2017; Grewal et al., 2017; Groß, 2020). In the Brazilian context, smartphones represent the main online shopping tool for 33% of consumers, and for 74% of these, the device is used in at least one of the shopping steps (SPC, 2018).

Mobile shopping comprises the process of researching, comparing, and purchasing products and services through mobile devices (Groß, 2015, 2020). Smartphones are used by consumers as an assistant to shop activities even before, during, or after establishment visits (Cavalinhos et al., 2021; Skrovan, 2017). Recent theoretical approaches have sought to go beyond perceptions and intentions in the use of mobile phones in shopping, seeking to understand the practice of shopping with smartphones (Fuentes & Svingstedt, 2017; Groß, 2015, 2020; Holmes et al., 2014; Spaid & Flint, 2014).

The Practice Theory was adopted in different studies to understand the use of technological devices during shopping practices (Bulmer et al., 2018; Elms et al., 2016; Tran and Sirieix, 2020). Recent research has developed approximations between social practices theory and disability studies (Lamont-Robinson et al., 2018; Titch and Titchkosky, 2011; Williams et al., 2018). Understanding these activities through practices makes it possible to reassess social activities to become more inclusive, and in this way, leverage the well-being and change in the lives of people with disabilities (Williams et al., 2018). Although not always evidenced, people with disabilities (PwD) represent almost a fifth of the Brazilian population (IBGE, 2010). Despite being a representative portion of its population, few studies in the Brazilian marketing area have considered the activities of people with disabilities as consumers (Dourado and Faria, 2021; Faria and Carvalho, 2013).

In shopping activities, consumers with disabilities seek to use technological devices in the search for information, price comparison, and leisure activities (Peters and Bradbard, 2007). Former studies focus on the shopping process in hypermarkets (Damascena, 2017, 2013; Mano et al., 2015), purchasing vehicles (Faria et al., 2016), buying clothing (Klerk and Ampousah, 2002), leisure (Faria et al., 2010) and also in the use of technologies (Annett-Hitchcock and Xu, 2015; Childers and Kaufman-Scarborough, 2009). However, there is still a lack of understanding about how consumers with disabilities use smartphones during these in-store shopping activities. To resolve this gap, this study aims to understand how the use of smartphones reconfigured consumers with disabilities' in-store shopping practices.

2 THEORETICAL BACKGROUND

2.1 Mobile shopping

The use of mobile phones in retail influenced different activities within the shopping process, from research and comparison to purchases of products and services (Fuentes and Svingstedt, 2017; Groß, 2020, 2015; Holmes et al., 2014; Shankar et al., 2016; Spaid and Flint, 2014). Currently, mobile phones are used for different activities, such as banking (m-banking), learning (m-learning), payments (m-payments), and also shopping (m-shopping) (Groß, 2014; Marriott and Williams, 2016). In general, m-shopping comprises the process of researching,

comparing, and purchasing products and services through portable devices such as mobile phones and tablets (Groß, 2020, 2015).

A large concentration of studies on m-shopping is presented in the determinants for the adoption and use of mobile phones in the shopping process (Agrebi and Jallais, 2015; Bilgihan et al., 2016; San-Martín et al., 2016, 2013; Wong et al., 2012; Yang, 2010, 2012; Zheng et al., 2019) and on the infrastructure technology (Guan et al., 2008; Hosbond and Skov, 2007; Hou and Chen, 2011; Lee and Park, 2006; Ozok and Wei, 2010; Yang et al., 2008; Zuva et al., 2012). However, as reported by Fuentes and Svingstedt (2017), little has been seeking to understand how smartphones are used during shopping. Social influences still demand further analysis to understand the role of these devices in purchases (Machado, 2020; Perini et al., 2020).

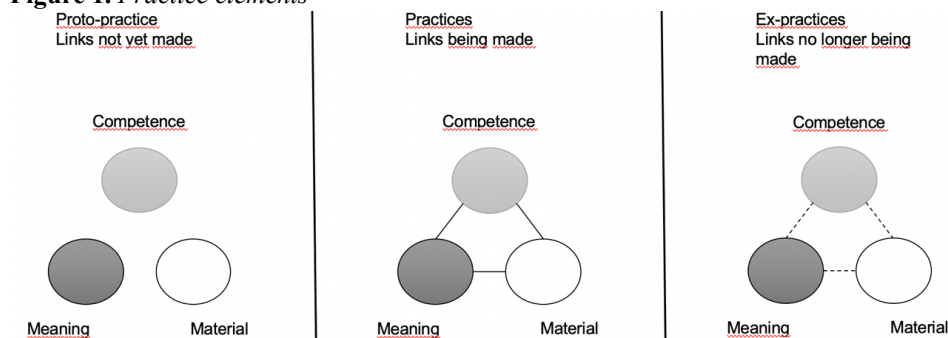
M-shopping practices are different from traditional internet shopping practices (Fuentes and Svingstedt, 2017). Previous research on the use of mobile phones in shopping practices includes these devices mainly in the pre-purchase process (Holmes et al., 2014). On the other hand, Spaid and Flint (2014) approach that this device helps in the safety experience during shopping in stores, especially for consumers who have a power disadvantage in the shopping environment. Fuentes and Svingstedt (2017) evidenced the use of devices in different places, such as at work or when displaced to the home.

The mobile shopping perspective was also adopted for the analysis of in-store shopping activities (Fuentes et al., 2017). It was identified that the devices provide new information, social scenarios, and experiences to consumers, modifying shopping activities (Fuentes et al., 2017). In addition to retail scape reconfiguration, it becomes relevant to understand how smartphones reconfigure in-store shopping practices. Cavalinhos et al. (2021) emphasize the need for retailers to propose actions that promote hedonic values to increase satisfaction and improve consumers' experience.

2.2 Social practice theory

Different perspectives are attributed to the study of practice theory (Reckwitz, 2002). Unlike other social theories that use mental contents, interactions, or discourses as a basis for carrying out studies, practice theory adopts practices as the central unit of analysis (Reckwitz, 2002). For Shove et al. (2012), social practices are composed of the association of three components at a moment in time, namely: material elements, competence elements, and meaning elements (Figure 1). These elements are more applicable for empirical analysis (Fuentes and Svingstedt, 2017).

Figure 1. Practice elements



Source: Extract from Shove et al. (2012, p. 25).

Elements change and are exchanged over time (Figure 1), therefore modifying the understanding of how a practice is constituted (Williams et al., 2018). Material elements include objects, technologies, physical entities, and the materials that objects are made. The elements

of competence, on the other hand, comprise the skills, knowledge, and techniques necessary for the performance of practices. Finally, the elements of meaning include the symbolic meanings, ideas, and aspirations involved in the performance of practices (Shove et al., 2012).

Social practices do not occur in isolation (Reckwitz, 2002; Schatzki, 2012). The interactions between the elements are overlapping and common among different activities. These can be material (equipment) or abstract (understanding) (Hui, 2017). In this way, the elements relate within and between different practices, which strengthen some complex social arrangements, as well as can separate them at certain times (Shove et al., 2012).

Practices as social activities are also represented in studies on shopping practices (Fuentes et al., 2019). Shopping as a practice has been adopted to understand the adoption of technologies in the purchasing process (Bulmer et al., 2018; Elms et al., 2016; Fuentes and Svingstedt, 2017; Tran and Sirieix, 2020), as well as sustainable shopping practices (Berg and Henriksson, 2020; Fuentes, 2015; Fuentes et al., 2019; Fuentes and Sörum, 2018). Studies have used shopping practices to understand the use of mobile devices, more specifically smartphones (Fuentes and Svingstedt, 2017).

2.3 Disability Studies

A stream of studies on people with disabilities, called Disability Studies, seeks to develop an understanding of disability being generated through cultural, political, and social factors (Beudaert, 2018; Finkelstein, 1997; Goodley, 2011). The study by Garland-Thomson (2011) presents the concept of fitting/misfitting for the understanding of disability as arising and residing in material arrangements, which are produced by human interaction, interpretations, and meanings. These ideas are related to the proposals developed by studies on social practices (Lamont-Robinson et al., 2018).

Recent studies have developed approximations between social practices theory and disability studies (Lamont-Robinson et al., 2018; Titch and Titchkosky, 2011; Williams et al., 2018). Among the topics addressed, there was a focus mainly on educational processes (Curdt and Schreiber-Barsch, 2020; Merchant et al., 2020; Schreiber-Barsch et al., 2020; Webb et al., 2020), as well as the use of technological resources to support social practices (Cranmer, 2020; Robinson, 2018; Topol, 2016; Wilson et al., 2016). Although these studies are seeking an understanding of shopping practices and the use of technologies in this process, there is a gap in the understanding of the development of these practices in studies on people with disabilities.

Although people with disabilities also have desires and consumption habits, as consumers, they still represent an underexplored market share (Burnett, 1996; Manfredini and Barbosa, 2016). In the Brazilian context, little marketing research focuses on consumers with disability (Dourado and Dias, 2021). Much of this lack of focus on their consumption habits is due to the lack of incentive by retailers to invest in adaptations and attention to this public (Faria et al., 2013; Manfredini and Barbosa, 2016; Sirirungruang and Boonyuen, 2017). For this, consumers with disabilities use different strategies to make purchases in physical stores (Damascena, 2017; Elms and Tinson, 2012). Technologies and digital retail should serve as a way to alleviate some obstacles, partially reducing the negative impacts of social exclusion (Dennis et al., 2016).

3 METHODS AND MATERIALS

The research was based on a focus group study formed by consumers with disabilities, to understand the use of smartphones in the reconfiguration of shopping practices in stores. The focus group enables the discussion of tacit knowledge and non-reflective practices (Frey and Fontana, 1991; Fuentes and Svingstedt, 2017; Halkier, 2010; Halkier and Jensen, 2011), which

are often adopted in the use of technologies, such as mobile phones (Fuentes and Svingstedt, 2017).

For the planning and realization of virtual focus groups with consumers with disabilities, different strategies for the construction of instruments were adopted (Abreu et al., 2009; Breen, 2006; Bryman, 2012; Dantas and Abreu, 2020; Leavy, 2014; Mello and Cruz, 2018). Initially, for the selection of participants and the composition of focus groups (Bryman, 2012), consumers with disabilities were grouped considering their experiences of using smartphones, allowing that groups can be formed with consumers with different knowledge and skills in using the devices (Breen, 2006; Bryman, 2012). Groups were formed from three to four consumers, making possible greater interaction with and among participants.

The selection of participants was defined by consumers who have physical disabilities and use a wheelchair for daily locomotion. According to the last Brazilian census, people with physical motor disabilities represent approximately 7% of Brazilian individuals (IBGE, 2010). Contact with participants was carried out individually on social network groups, as well as through contact indications provided by organized groups and associations. Twenty consumers with disabilities participated in the focus groups. Table 1 presents the profile of the twenty study participants.

Table 1 – Research participants

Identification	Age	Sex	City/State	Deficiency	Since	Focal Group
Participant 1	27	Male	Salvador/BA	Tetraplegia	Birth	GF1
Participant 2	25	Male	Goiânia/GO	Paraplegia	Adult	GF1
Participant 3	37	Male	Coronel Vivida/PR	Paraplegia	Adult	GF1
Participant 4	28	Male	Salvador/BA	Paraplegia	Birth	GF2
Participant 5	33	Male	Santo Antônio de Jesus/BA	Tetraplegia	Adult	GF2
Participant 6	32	Male	Bauru/SP	Paraplegia	Adult	GF2
Participant 7	31	Fem	Salvador/BA	Tetraplegia	Adult	GF3
Participant 8	28	Fem	Brasília/DF	Tetraplegia	Adult	GF3
Participant 9	28	Fem	Santo André/SP	Paraplegia	Childhood	GF3
Participant 10	43	Fem	Maringá/PR	Tetraplegia	Adult	GF3
Participant 11	24	Fem	Patrocínio/MG	Paraplegia	Adult	GF4
Participant 12	30	Fem	São Paulo/SP	Paraplegia	Adult	GF4
Participant 13	30	Fem	São Carlos/SP	Paraplegia	Adult	GF4
Participant 14	31	Male	São Caetano/SP	Paraplegia	Birth	GF5
Participant 15	32	Male	Várzea Paulista/SP	Paraplegia	Adult	GF5
Participant 16	34	Male	Várzea Paulista/SP	Tetraplegia	Adult	GF5
Participant 17	36	Male	Jundiaí/SP	Tetraplegia	Adult	GF5
Participant 18	32	Fem	Santo André/SP	Paraplegia	Birth	GF6
Participant 19	48	Male	Jarinu/SP	Paraplegia	Adult	GF6
Participant 20	25	Male	Jundiaí/SP	Paraplegia	Adult	GF6

Source: Developed by authors (2021)

As for the organization of the script of questions (Krueger and Casey, 2014), four themes were organized, based on the theoretical framework, for discussion, as follows: (1) use of mobile phones in daily activities (Fuentes and Svingstedt, 2017), (2) competences for use, (3) characteristics of the devices and (4) meanings of the smartphones (Shove et al., 2012). Considering the moment of the Covid-19 pandemic during the study, and the need for social distancing measures (Brasil, 2020; Paraná, 2021; Saúde, 2020), we sought to adjust the holding of focus groups through virtual meetings. Among the advantages of this technique of online collection (Abreu et al., 2009), it allows the participation of individuals in different geographic areas, as well as the reduction of costs and speed in the collection and recording of information. Focus groups and content recording were carried out through the Google Meet virtual platform

(Abreu et al., 2009; Dantas and Abreu, 2020). Data collection took place between May and November 2021.

The method adopted for data analysis was content analysis (Bardin, 1979; Dellagnelo and Silva, 2004). Atlas.TI software was used for a better categorization of qualitative data. In the exploration and analysis of the materials, the raw data were treated so that they are meaningful and valid (Bardin, 1979; Dellagnelo and Silva, 2004). In the content analysis, we sought to perform the coding directly on the videos recorded with the participants. As exposed by Seale and Riva (2012, p. 436), videos are “multi-sensory, containing various types of information in audio and image, and these provide multiple layers of meanings”. Finally, data were organized through elaborate categories (Fuentes and Svingstedt, 2017; Shove et al., 2012). From the coded recordings, we sought to transcribe the statements that contain important and innovative elements in the categories listed.

4 RESULTS AND DISCUSSION

4.1 Shopping activities with smartphones

Shopping activities go beyond the activities carried out within the store environment, (Holmes et al., 2014; Shankar et al., 2016; Solomon, 2006), they encompass the research, evaluation and decision process, store choice, and how navigating the store, making the purchase, and the post-sales service. Similar processes are identified in shopping practices by people with disabilities (Bulmer et al., 2018; Kaufman-Scarborough and Childers, 2009; Manfredini and Barbosa, 2016). However, smartphones made it possible for the performance of these activities to be reconfigured and also extended. During conversations with consumers with disabilities, five activities were identified involving the use of smartphones.

The first shopping activity identified by the participants was the search for information and evaluation of alternatives. The smartphone made it possible for consumers to search for different information that was made available by sellers and establishments, both before or during shopping activities. Smartphones were considered for the sake of their practicality in searching for information when compared to other devices. Previous studies also emphasize this practicality (Dennis et al., 2016; Peters and Bradbard, 2007).

Participants identified that the search for information begins in the residential environment itself. This makes it possible for them to be better prepared about the type of product they will purchase and also how to go to stores. While shopping, mobile devices help with different activities during purchases in establishments, also as the possibility of photographing the products or even asking other family members and friends who are not accompanying them for assistance (Fuentes and Svingstedt, 2017).

The role of social networks and digital video platforms in evaluating stores and products is highlighted. Social networks made it easier for consumers to have greater contact with other consumers with disabilities, family members, or friends and also made it easier to obtain information about products and companies.

“I see it on Instagram and I already know it will fit my body, I already like it, I print it and send it to her [saleswoman]” (Participant 10) “I do this a lot, I search on YouTube even there are some unboxing of the product. I see how everything works properly. I do a lot of research before buying!” (Participant 2)

In line with the search for information, the second activity associated with the use of mobile phones and shopping practices by consumers with disabilities refers to displacement to stores. Participants highlighted different concerns when going to stores by public transport and transport via apps, or also by their vehicle. When observing public transport and transport by

app, consumers with disabilities identified the use of devices in planning schedules and in searching for available vehicles.

Some cities offer the option of taxis and vans for people with disabilities. Even with adapted vehicles, some situations still generate problems, either due to the limitation of daily use or even the need to go in the wheelchair inside vehicles. In apps, consumers adopt some strategies to avoid uncomfortable situations with drivers.

“It's often seen! When you say you are in a wheelchair, they already say that the chair does not fit. Then he arrives and says 'does the chair go with him?'. So much so that I even changed my name in the app I put [name] and in parentheses 'wheelchair'. Then if the guy wants to accept, ok! If you don't want to, that's also ready (...) To avoid this clash with them, I'll put disabled and that's it” (Participant 16)

When displaced by their vehicle, consumers seek more information about the establishment. Information such as physical access and parking spaces are previously verified with the help of mobile phones. Mobile applications such as Google Maps help with route planning.

During shopping, smartphones also reconfigure some activities. Several retailers provide QR Codes available in their establishments to get some products or services information. The devices also help consumers get more information about the products they want to buy from retailers. Through the devices, consumers can identify the availability of products in the store

“There is the issue of the digital menu, the QR Code. Which makes it a lot easier too. You just point your mobile phone camera and it comes with the menu” (Participant 2)

There are moments when shopping in the store, smartphones are used to avoid uncomfortable situations. Participants reported that salespeople do not know how to serve, or even avoid serving consumers with disabilities. The absence of salespeople training is evidenced in studies on consumers with disabilities in their purchasing activities (Baker et al., 2007; Bromley et al., 2007; Faria et al., 2013, 2010; Sirirungruang and Boonyuen, 2017).

“Few salespeople will come to you in the store, offer something. (...) Sometimes people think I don't have money. (...) They already have a look at you, who won't consume, who just go there and look and that's it” (Participant 4)

Another activity recognized, was the use of devices as a way of payment or managing financial resources. Consumers who frequently use smartphones to carry out research are more likely to use devices for payment as they have greater confidence and experience with the technology (de Kerviler et al., 2016). In addition to conventional cash and credit cards, consumers highlighted the importance of new technologies such as NFC (Near field communication). In addition to ensuring greater autonomy in carrying out shopping practices, technology makes it possible for consumers not to need to be accompanied.

New forms of transactions were also identified with the use of smartphones (de Albuquerque et al., 2013). With Pix keys, which allows the instant transfer of financial resources between users and companies, payment also becomes faster. Participants highlighted the use of QR codes to make the payment. For payment, a smartphone with a camera is essential for the transaction to be carried out.

“Today, what makes it easier, what helps me... It's the fact of the QRcode. Because, for example, when I go out alone, it's a war for me to open my purse, get my wallet, take out my card, and take out the money. Then the mobile phone helps me to make a PIX, a transfer, or QR code. Today, I believe that I only take cash, when the person

comes to pay, but for everything I ask for, I ask for debit. It makes payment easier for me because it's very rare for me to have money like that in my hand" (Participant 7)

Even on the use of PIX as a form of payment, users highlight the influence of the Covid-19 pandemic as a factor that motivated the use of the devices. As a way of avoiding contact with cash, card machines, and the card itself, consumers highlighted the use of Pix as a form of security for their health.

Finally, smartphones have also transformed the way consumers with disabilities deal with spending control (Fuentes and Svingstedt, 2017). Previous studies have identified the use of devices to check financial status as well as ensure a sense of comfort in making the purchase and controlling expenses (Rezabakhsh et al., 2006; Spaid and Flint, 2014). Consumers with disabilities use banking apps to confirm the money available in their account and also to make adjustments to their credit card limit while making purchases. The possibility of password control is highlighted.

Another activity performed is to carry out feedback and post-shopping evaluations. The integration with social media platforms makes it possible to share shopping experiences with friends, family, and other consumers (Shankar et al., 2016). Fuentes and Svingstedt (2017) also identify the use of social media to keep up to date on new releases, offers, and trends. Annett-Hitchcock and Xu (2015) present how these virtual communities are important for consumers with physical disabilities to share experiences, concerns, and even problems.

"Everything that arrives, I always post. Both on my social networks the stores I buy from, and I also usually put it as a review in the stores where I bought it. (...) So when I buy something, I record a detailed video of how it is. Because I know that when someone else looks for it if it's someone like me, they'll look for what the product is like. Because I think so. If I were going to look, what do I like to see? So I end up putting all that" (Participant 12).

In addition to the product itself, consumers also seek to evaluate the establishment regarding accessibility and the service received. Some Brazilian initiatives such as “*Guia de Rodas*” and “*Biomob*” sought to develop platforms for sharing information about accessible places and establishments (Guia de Rodas, 2021; Instituto Biomob, 2021). However, the use of social networks, comments on company websites, and WhatsApp groups for sharing this information were identified by consumers. Both positive and negative comments are shared. Sharing information with other consumers with disabilities is essential, given the lack of information in the establishments' communication channels. Some retailers focus on giving information about the displacement to the business or products and services, but fewer provide information on accessibility within the stores.

4.2 Elements of Shopping Practices in Store with Smartphones

Smartphone shopping practices involve different elements from traditional shopping practices. When observing consumers with disabilities, in particular, consumers who use the wheelchair, new perceptions are presented in the use of these elements for the performance of practices, whether in the virtual environment, as well as in the practices of in-person shopping. Research participants highlighted **some material elements** of the devices that end up having a relevant impact on shopping. Among the characteristics and functionalities of smartphones, the screen and device size, the camera function, and the accessories (gadgets) used were identified.

The screen size of smartphones and, consequently, the size of the devices themselves are frequently reported. Although there is a trend toward larger devices (Chen et al., 2016; Kiran et al., 2019), participants reported some difficulties in using larger devices during shopping activities. The larger the devices, the higher frequency of drops and screen breaks was reported.

The replacement of buttons for touch screens is reported. Due to some limitations in hand and finger movements, the participants identified difficulty in typing text, increasing the volume, and even turning the device on and off. Participants use some functions to take a print of screens or photos of products they are interested in.

A camera is a relevant tool on devices for the performance of shopping practices. This tool helps them to share photos with family members and other consumers and to receive guidance and opinions about the products. Consumers also frequently use cameras to scan barcodes and QR codes, to obtain information about products and services available in store. This element not only modifies the practice but is used as a complement to the services offered in store environments (Fuentes et al., 2017).

“I have a group of girls who are wheelchair users and we dance. So we have a lot of “ways” of doing that. One goes to the store... like, we’re presenting, right. And you need to buy an accessory. Then she takes a picture of all the things she has and sends it to the group. So we always do that” (Participant 12)

Another element highlighted was the use of accessories for handling. Cases, touch-screen pens, strings, and bags are used along with smartphones while shopping. Although these accessories are not developed with a focus on the use of consumers with disabilities, they are relevant in the performance of practices.

Technological infrastructure is also highlighted in the transformation of shopping practices by consumers with disabilities. The use of mobile internet and wi-fi networks is essential for consumers to obtain information during the shopping process (Fuentes and Svingstedt, 2017; Spaid and Flint, 2014). However, consumers with disabilities raise concerns about shared network security. With this, the use of mobile 4G data becomes fundamental for their purchasing practice.

In this study, we sought to **analyze two competencies**, whether in the use of the device, as well as in the performance of shopping with smartphones. Considering the development of competency for the use of mobile phones, consumers with disabilities reported that they learned to use the devices autonomously, through daily use. These strategies were also highlighted by Fuentes and Svingstedt (2017) with younger consumers.

Although the support of family members, there was an effort by consumers to learn by themselves how to use new technologies and new functions on the devices. When there is a greater difficulty, the internet and social networks also have a relevant influence on the search for development in the use of devices. With greater access to Wi-Fi networks and mobile data (3G/4G), consumers use platforms such as Youtube and Instagram to obtain information about device usage.

“It was really messing around. Because I didn’t always have people on my side. And I had to turn around. So I fiddle with the phone alone and turn around as best as I can. So today, I can move by myself. (Participant 8)

Consumers with disabilities also highlight some competencies necessary for the performance of shopping activities with smartphones. Shopping competencies proved to be similar to using the device itself. There is still a greater concentration on searching for information on the internet through videos posted on social networks and websites by other consumers.

“I search a lot on Youtube, there is the unboxing of the product. I see how everything works properly. I do a lot of research before I buy anything!” (Participant 4). “I confess that since I was in a wheelchair, accessibility at first is very difficult. Even where I used to live, I couldn’t get out. So the mobile phone and the internet became part of my body” (Participant 12).

For consumers who were not born with a mobility disability, consumers point to some hospitals and rehabilitation centers as fundamental agents in the process of developing new skills, and also in different day-to-day activities. Participation makes it possible for consumers to seek to carry out autonomous activities. In the case of shopping activities, institutions seek to take patients to use public transport and take tours in shopping malls.

Even traditional shopping activities produce different feelings in consumers and share **different meanings** (Spaid and Flint, 2014; Yang and Kim, 2012). In an analysis of the literature, it is possible to identify positive, neutral, and negative experiences during purchases (Cavalinhos et al., 2021). The incorporation of smartphones in the performance of shopping practices made it possible for consumers to share feelings and meanings of greater autonomy and independence, practicality, happiness, and trust.

When observing autonomy and independence, consumers with disabilities comment on the lack of information and closer contact with other consumers. With the aid of the devices, there was a greater possibility that new information could be obtained. Consumers seek to share information about products and places where purchases will be made.

“Today, I see that I am much more independent. It brought me this independence to really turn around and consume. Today, the mobile phone is my legs. In terms of shopping. He brought this feeling of independence to me” (Participant 10).

Devices enable individuals to overcome some barriers (Manfredini and Barbosa, 2016). Due to difficulties with accessibility in some places, consumers can obtain information about products without having to go to the establishment to research. As a result, they have greater confidence when going shopping. The device becomes an indispensable tool in the process, being used at different moments of the day-to-day.

Another understanding shared among consumers is practicality. The use of smartphones during shopping practices is also a consequence of utilitarian motivations (Cavalinhos et al., 2021), in a search for greater efficiency and process control. One of the situations identified as greater practicality provided through smartphones was in making payments. The devices also allow users to keep card data and passwords available.

Likewise, the use of smartphones during shopping activities also presents participants with hedonic feelings, like happiness. This feeling is manifested through the possibility of interacting with other people about shopping interests, through the possibility of avoiding some uncomfortable situations in non-accessible places, and also through enabling discoveries. Devices work as a way to provide entertainment, whether for shopping (Fuentes and Svingstedt, 2017) or even for using the devices while shopping in stores (Fuentes et al., 2017).

Another meaning shared among consumers refers to trust in shopping activities using smartphones. Devices provide greater security in different activities during purchases (Fuentes and Svingstedt, 2017; Spaid and Flint, 2014). Consumers can feel more secure about the purchase they are making when they get more information from the devices. This trust is also related to the possibility of keeping personal information on the devices, such as card numbers and passwords.

On the other hand, the participants also demonstrated some negative meanings in shopping practices. Feelings of technology dependence, worry, and sadness were identified. Consumers emphasize the time spent on the daily use of the device. Many of them seek to program moments of distancing from the device.

“The time I spend on my mobile phone has taken away from me things I used to do. (...) Because then, you are there on Instagram and those ads appear. Then you're like, 'My God, it's cheap! I'm going to buy'. What are you going to buy for? Will use? But it was cheap. Then you go and buy” (Participant 18).

Finally, there are situations in which consumers point out some concerns about device features. It is related to the payment process for purchases through the devices. The risk-benefit duality has a strong impact on smartphone payment activity (de Kerviler et al., 2016). As banking and credit card information is entered into applications, some participants still have reservations about using it for this purpose.

5 GENERAL CONCLUSION

In this section, we seek to report some contributions evidenced during the development of the analysis, as well as during the contact made with the participants. When evaluating the smartphone, a gap identified in the theoretical framework highlights the absence of studies with an analysis of shopping practices by consumers with disabilities. They represent a significant portion of the Brazilian population, however, with little attention directed to their shopping needs.

The devices, as central elements in the development of these activities, made it possible for consumers to seek alternative skills to assist in making shopping. It is integrated into activities within the establishment, in contact with other consumers with disabilities or family members through calls, messages, and video calls, or the collection of product information through QR codes. Payment methods and financial control are also reconfigured. New technologies such as NFC, PIX, or financial applications are often adopted with the use of mobile phones during shopping. Finally, evaluations are carried out both during purchases and after shopping practices, mainly as a way to guide other consumers with disabilities about products and establishments.

When considering the practice elements, the devices reconfigure the practices within the establishments. Among the material elements presented, the use of mobile phone cameras, the use of accessories, and the use of mobile data/wi-fi networks stand out. The competence elements comprise both the development of skills and knowledge for the use of the devices, as well as competencies for the use of the devices during purchasing activities. Social networks and online video platforms have made it easier for consumers with disabilities to access new content, as well as share experiences with each other.

Finally, different meanings were identified in the use of devices during shopping practices in stores. Considering the positive aspects, smartphones allow consumers with disabilities to develop greater autonomy, independence, and trust. Utilitarian and hedonic values are positively associated with mobile shopping practices in stores. On the other hand, devices also generate feelings of anxiety due to the exaggerated use of devices in daily activities and concerns related to data security, especially when making payments.

Some limitations were relevant during the development of this study. There would be no way not to expose the limitations caused by Covid-19. Some adjustments were necessary to align the research with a new scenario. Video calls made it possible to contact consumers with disabilities in various Brazilian regions, even considering the need for social distancing. This technological distance limited the observation of some gestures and expressions.

Based on the developed theoretical reviews and discussions on shopping practices in stores by consumers with disabilities, some research opportunities are highlighted. In line with the perspective of studies on m-shopping, new studies can be directed towards understanding how other vulnerable consumers use the devices to make purchases in establishments.

By focusing on studies of shopping practices, understanding the practices becomes an important lens for understanding how consumers make their purchases. With the emergence of new technologies, other purchasing practices can be developed by consumers. Studies on the use of artificial intelligence, devices installed in establishments that use the internet of things

(IoT, Internet of things), wearable devices, or even new forms of payments and transfers of resources could evidence new consumer purchasing practices.

REFERENCES

- Abreu, N.R. de, Baldanza, R.F., Gondim, S.M.G., 2009. Os grupos focais on-line: das reflexões conceituais à aplicação em ambiente virtual. *Journal of Information Systems and Technology Management* 6, 05–24. <https://doi.org/10.4301/s1807-17752009000100001>
- Abreu, M.J., Miranda, C.D., 2019. The interactivity between sales channels on omnichannel retail, in: Carvalho, M.& (Ed.), *Textiles, Identity and Innovation: Design the Future*. Taylor & Francis Group, London, pp. 15–20.
- Agrebi, S., Jallais, J., 2015. Explain the intention to use smartphones for mobile shopping. *Journal of Retailing and Consumer Services* 22, 16–23. <https://doi.org/10.1016/j.jretconser.2014.09.003>
- Annett-Hitchcock, K., Xu, Y., 2015. Shopping and virtual communities for consumers with physical disabilities. *International Journal of Consumer Studies* 39, 136–144. <https://doi.org/10.1111/ijcs.12161>
- Baker, S.M., Holland, J., Kaufman-Scarborough, C., 2007. How consumers with disabilities perceive “welcome” in retail servicescapes: A critical incident study. *Journal of Services Marketing* 21, 160–173. <https://doi.org/10.1108/08876040710746525>
- Bardin, L., 1979. *Análise de conteúdo*. Edições 70, Lisboa.
- Berg, J., Henriksson, M., 2020. In search of the ‘good life’: Understanding online grocery shopping and everyday mobility as social practices. *Journal of Transport Geography* 83, 102633. <https://doi.org/10.1016/j.jtrangeo.2020.102633>
- Beudaert, A., 2018. Towards an embodied understanding of consumers with disabilities: insights from the field of disability studies. *Consumption Markets and Culture* 0, 1–15. <https://doi.org/10.1080/10253866.2018.1534734>
- Bilgihan, A., Kandampully, J., Zhang, T.C., 2016. Towards a unified customer experience in online shopping environments: antecedents and outcomes. *International Journal of Quality and Service Sciences* 8.
- Brasil, 2020. Lei nº 13.979, de 6 de fevereiro de 2020. Dispõe sobre as medidas para enfrentamento da emergência de saúde pública de importância internacional decorrente do coronavírus responsável pelo surto de 2019.
- Breen, R.L., 2006. A practical guide to focus-group research. *Journal of Geography in Higher Education* 30, 463–475. <https://doi.org/10.1080/03098260600927575>
- Bromley, R.D.F., Matthews, D.L., Thomas, C.J., 2007. City centre accessibility for wheelchair users: The consumer perspective and the planning implications. *Cities* 24, 229–241. <https://doi.org/10.1016/j.cities.2007.01.009>
- Bryman, A., 2012. *Social Research Methods*, 4th ed. Oxford University Press, New York.
- Bulmer, S., Elms, J., Moore, S., 2018. Exploring the adoption of self-service checkouts and the associated social obligations of shopping practices. *Journal of Retailing and Consumer Services* 42, 107–116. <https://doi.org/10.1016/j.jretconser.2018.01.016>
- Burnett, J.J., 1996. What services marketers need to know about the mobility- disabled consumer. *Journal of Services Marketing* 10, 3–20. <https://doi.org/10.1108/08876049610119767>
- Cavalinhos, S., Marques, S.H., de Fátima Salgueiro, M., 2021. The use of mobile devices in-store and the effect on shopping experience: A systematic literature review and research agenda. *International Journal of Consumer Studies*. <https://doi.org/10.1111/ijcs.12690>
- Chen, H., Ma, B., Pan, Y., 2016. Does Bigger Screen Lead to More Cellular Data Usage?

- SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.2510263>
- Cranmer, S., 2020. Disabled children's evolving digital use practices to support formal learning. A missed opportunity for inclusion. *British Journal of Educational Technology* 51, 315–330. <https://doi.org/10.1111/bjet.12827>
- Curd, W., Schreiber-Barsch, S., 2020. Abilities in the blind spot of testing regimes: Eliciting the benefits and the limitations of participatory research approaches for numeracy in adult basic education. *International Review of Education* 66, 387–413. <https://doi.org/10.1007/s11159-020-09848-9>
- Damascena, E.O., 2017. O Gerenciamento de Impressão e a Vulnerabilidade de Consumo: Um Estudo Acerca da Interação Entre a Pessoa com Deficiência e o Ambiente de Varejo 200.
- Damascena, E.O., 2013. Elementos sensoriais em supermercados: uma investigação na perspectiva transformativa do consumidor junto a pessoas com deficiência visual.
- Dantas, B.L.L., Abreu, N.R., 2020. Análise da influência do consumo conspícuo de fast fashion nas construções identitárias no Instagram. *Revista de Administração Mackenzie* 21, 1–28. <https://doi.org/10.1590/1678-6971/ERAMG200043>
- de Albuquerque, J.P., Diniz, E.H., Cernev, A.K., 2013. Mobile payments: a scoping study of the literature and issues for future research. *Information Development* 1–27. <https://doi.org/10.1177/0266666914557338>
- de Kerviler, G., Demoulin, N.T.M., Zidda, P., 2016. Adoption of in-store mobile payment: Are perceived risk and convenience the only drivers? *Journal of Retailing and Consumer Services* 31, 334–344. <https://doi.org/10.1016/j.jretconser.2016.04.011>
- Dellagnelo, E.H.L., Silva, R.C. da, 2004. Análise de conteúdo e sua aplicação em pesquisa na administração, in: Vieira, M. M. F. & Zouain, D. M. (Orgs.) *Pesquisa Qualitativa Em Administração: Teoria e Prática*. FGV, Rio de Janeiro, pp. 97–118.
- Dennis, C., Alamanos, E., Papagiannidis, S., Bourlakis, M., 2016. Does social exclusion influence multiple channel use? The interconnections with community, happiness, and well-being. *Journal of Business Research* 69, 1061–1070. <https://doi.org/10.1016/j.jbusres.2015.08.019>
- Dourado, L.P., Faria, M.D. de, 2021. Produção acadêmica em administração sobre pessoas com deficiência nos eventos da Anpad, entre 2010-2020. *Caderno de Administração* 29, 182–202. <https://doi.org/10.4025/cadadm.v29i2.59640>
- Elms, J., de Kervenoael, R., Hallsworth, A., 2016. Internet or store? An ethnographic study of consumers' internet and store-based grocery shopping practices. *Journal of Retailing and Consumer Services* 32, 234–243. <https://doi.org/10.1016/j.jretconser.2016.07.002>
- Elms, J., Tinson, J., 2012. Consumer vulnerability and the transformative potential of Internet shopping: An exploratory case study. *Journal of Marketing Management* 28, 1354–1376. <https://doi.org/10.1080/0267257X.2012.691526>
- Faria, M.D. de, Carvalho, J.L.F. dos S. de, 2013. Diretrizes para pesquisas com foco em pessoas com deficiência: um estudo bibliométrico em administração. *Revista Ciências Administrativas* 19, 35–68.
- Faria, M.D., Carvalho, J.L., Ferreira, D.A., 2010. Estratégias de Marketing e Consumidores com Deficiências: Diretrizes para Empresas de Serviços de Lazer Extra-Doméstico. *Ingepro* 02, 12.
- Faria, M.D., Casotti, L.M., Carvalho, J.L.F.S., 2016. A Decisão de Compra de Veículos Adaptados por Consumidores com Deficiência Motora. *Revista de Administração da Unimep* 14, 102–131. <https://doi.org/10.15600/1679-5350/rau.v14n3p102-131>
- Faria, M.D., Siqueira, R.P., Carvalho, J.L.F., 2013. Diversidade no Varejo: Impactos de Acessibilidade e Inclusão na Intenção de Compra. *Revista Brasileira de Marketing* 12, 231–259. <https://doi.org/10.5585/remark.v12i3.2343>

- Finkelstein, V., 1997. Emancipating disabling studies, in: Shakespeare, T. (Ed.), *The Disability Reader: Social Sciences Perspectives*. Cassell, London, pp. 1–21.
- Frey, J.H., Fontana, A., 1991. The group interview in social research. *The Social Science Journal* 28, 175–187. [https://doi.org/10.1016/0362-3319\(91\)90003-M](https://doi.org/10.1016/0362-3319(91)90003-M)
- Fuentes, C., 2015. How green marketing works: Practices, materialities, and images. *Scandinavian Journal of Management* 31, 192–205. <https://doi.org/10.1016/j.scaman.2014.11.004>
- Fuentes, C., Bäckström, K., Svingstedt, A., 2017. Smartphones and the reconfiguration of retailscapes: Stores, shopping, and digitalization. *Journal of Retailing and Consumer Services* 39, 270–278. <https://doi.org/10.1016/j.jretconser.2017.08.006>
- Fuentes, C., Enarsson, P., Kristoffersson, L., 2019. Unpacking package free shopping: Alternative retailing and the reinvention of the practice of shopping. *Journal of Retailing and Consumer Services* 50, 258–265. <https://doi.org/10.1016/j.jretconser.2019.05.016>
- Fuentes, C., Sörum, N., 2018. Agencing ethical consumers: smartphone apps and the socio-material reconfiguration of everyday life. *Consumption Markets and Culture* 22, 131–156. <https://doi.org/10.1080/10253866.2018.1456428>
- Fuentes, C., Svingstedt, A., 2017. Mobile shopping and the practice of shopping: A study of how young adults use smartphones to shop. *Journal of Retailing and Consumer Services* 38, 137–146. <https://doi.org/10.1016/j.jretconser.2017.06.002>
- Garland-Thomson, R., 2011. Misfits: A feminist materialist disability concept. *Hypatia* 26, 591–609. <https://doi.org/10.1111/j.1527-2001.2011.01206.x>
- Goodley, D., 2011. *Disability Studies: An interdisciplinary introduction*. SAGE Publications Inc, London. <https://doi.org/10.1017/CBO9781107415324.004>
- Grewal, D., Roggeveen, A.L., Runyan, R.C., Nordfält, J., Lira, M.E.V., 2017. Retailing in today's world: Multiple channels and other strategic decisions affecting firm performance. *Journal of Retailing and Consumer Services* 34, 261–263. <https://doi.org/10.1016/j.jretconser.2016.01.007>
- Groß, M., 2020. Differences between mobile and non-mobile buyers: Comparing attitudinal, motive-related, and media behaviour. *International Journal of Electronic Marketing and Retailing* 11, 50–80. <https://doi.org/10.1504/IJEMR.2020.106433>
- Groß, M., 2015. Mobile shopping: A classification framework and literature review. *International Journal of Retail and Distribution Management* 43, 221–241. <https://doi.org/10.1108/IJRDM-06-2013-0119>
- Groß, M., 2014. Exploring the acceptance of technology for mobile shopping: an empirical investigation among Smartphone users. *International Review of Retail, Distribution and Consumer Research* 215–235. <https://doi.org/10.1080/09593969.2014.988280>
- Guan, S., Tan, W.P., Liu, F., 2008. Cogbroker - A cognitive approach to intelligent product brokering for e-commerce. *International Journal of Computational Intelligence and Applications* 7, 401–427.
- Guia de Rodas, 2021. Quem somos: o guia de rodas [WWW Document]. URL <https://guiaderodas.com/quem-somos/> (accessed 1.4.22).
- Halkier, B., 2010. Focus groups as social enactments: Integrating interaction and content in the analysis of focus group data. *Qualitative Research* 10, 71–89. <https://doi.org/10.1177/1468794109348683>
- Halkier, B., Jensen, I., 2011. Methodological challenges in using practice theory in consumption research. Examples from a study on handling nutritional contestations of food consumption. *Journal of Consumer Culture* 11, 101–123. <https://doi.org/10.1177/1469540510391365>
- Holmes, A., Byrne, A., Rowley, J., 2014. Mobile shopping behaviour: Insights into attitudes, shopping process involvement and location. *International Journal of Retail and*

- Distribution Management 42, 25–39. <https://doi.org/10.1108/IJRD-10-2012-0096>
- Hosbond, J.H., Skov, M.B., 2007. Micro mobility marketing: Two cases on location-based supermarket shopping trolleys. *Journal of Targeting, Measurement and Analysis for Marketing* 16, 68–77. <https://doi.org/10.1057/palgrave.jt.5750058>
- Hou, J.L., Chen, T.G., 2011. An RFID-based Shopping Service System for retailers. *Advanced Engineering Informatics* 25, 103–115. <https://doi.org/10.1016/j.aei.2010.04.003>
- Hui, A., 2017. Variation and the intersection of practices, in: Hui, S., Schatzki, T. Shove, E. (Eds.). *The Nexus of Practices: Connections, Constellations, Practitioners*. Routledge, New York, pp. 52–67.
- IBGE, 2010. Censo Demográfico 2010: Características gerais da população, religião e pessoas com deficiência. Rio de Janeiro.
- Instituto Biomob, 2021. Quem somos? [WWW Document]. URL <https://biomob.app.br> (accessed 1.4.22).
- Kaufman-Scarborough, C., Childers, T.L., 2009. Understanding markets as online public places: Insights from consumers with visual impairments. *Journal of Public Policy and Marketing* 28, 16–28. <https://doi.org/10.1509/jppm.28.1.16>
- Kiran, P., Thomas, T., Johny, J., Jose, D., 2019. Understanding the Influence of Utilitarian and Hedonic Factors on Buying Behaviour of Gen Y while Purchasing Smartphones. *Ushus - Journal of Business Management* 18, 55–69. <https://doi.org/10.12725/ujbm.49.5>
- Klerk, H.M. de, Ampousah, L., 2002. The physically disabled South African female consumer's problems in purchasing clothing. *International Journal of Consumer Studies* 26, 93–101. <https://doi.org/10.1046/j.1470-6431.2002.00209.x>
- Krueger, R.A., Casey, M.A., 2014. *Focus Groups: A Practical Guide for Applied Research*, 5th ed. SAGE Publications, Thousand Oaks, California.
- Lamont-Robinson, C., Williams, V., Thompson, T., 2018. Pitching perspectives on disability: Voyage experiences of disabled sailors on tall ships. *Scandinavian Journal of Disability Research* 20, 102–110. <https://doi.org/10.16993/sjdr.23>
- Leavy, P., 2014. *The Oxford Handbook of Qualitative Research*. Oxford University Press, New York.
- Lee, S., Park, S., 2006. Improving accessibility and security for mobile phone shopping. *Journal of Computer Information Systems* 46, 124–133. <https://doi.org/10.1080/08874417.2006.11645906>
- Machado, M.D. dos S., 2020. Mobile shopping: o que move a intenção de compra do consumidor para o m-commerce.
- Manfredini, A.M.D., Barbosa, M.A., 2016. Diferença e igualdade : o consumidor pessoa com deficiência. *R. Dir. Gar. Fund., Vitória* v. 17, n., 91–110.
- Mano, R.F., Abreu, N.R. de, Silva, J.O. da, 2015. Eu também sou consumidor: pessoas com deficiência física no varejo hipermercado da cidade de João Pessoa/PB. *Revista Gestão Organizacional* 8, 68–83. <https://doi.org/http://dx.doi.org/10.22277/rgo.v8i1.2828>
- Marriott, H.R., Williams, M.D., 2016. Developing a theoretical model to examine consumer acceptance behavior of mobile shopping. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)* 9844 LNCS, 261–266. https://doi.org/10.1007/978-3-319-45234-0_24
- Mello, M.G., Cruz, L.R. da, 2018. Documentação metodológica de um grupo focal virtual sobre hackers e ciberpiratas. *Acta Scientiarum. Human and Social Sciences* 40, 1–9. <https://doi.org/10.4025/actascihumansoc.v40i2.40527>
- Merchant, W., Read, S., D'Evelyn, S., Miles, C., Williams, V., 2020. The insider view: tackling disabling practices in higher education institutions. *Higher Education* 80, 273–287. <https://doi.org/10.1007/s10734-019-00479-0>
- Ozok, A.A., Wei, J., 2010. An empirical comparison of consumer usability preferences in

- online shopping using stationary and mobile devices: Results from a college student population. *Electronic Commerce Research* 10, 111–137. <https://doi.org/10.1007/s10660-010-9048-y>
- Paraná, 2021. Decreto nº 6983, de 26 de fevereiro de 2021. Determina medidas restritivas de caráter obrigatório, visando o enfrentamento da emergência de saúde pública decorrente da pandemia da COVID-19.
- Perini, M.D.N., Lazzari, F., Eberle, L., Milan, G.S., 2020. Análise dos Fatores Que Influenciam a Intenção de Uso do M-Commerce por Americanos da Geração Millennial. *Revista Eletrônica de Ciência Administrativa* 19, 134–157. <https://doi.org/10.21529/recadm.2020006>
- Peters, C., Bradbard, D.A., 2007. Web accessibility: An introduction and implications for a corporate social responsibility marketing strategy. *Journal of Internet Commerce* 6, 27–54. <https://doi.org/10.1080/15332860802086185>
- Reckwitz, A., 2002. Toward a theory of social practices: A development in culturalist theorizing. *European Journal of Social Theory* 5, 245–263.
- Rezabakhsh, B., Bornemann, D., Hansen, U., Schrader, U., 2006. Consumer power: A comparison of the old economy and the internet economy. *Journal of Consumer Policy*. <https://doi.org/10.1007/s10603-005-3307-7>
- Robinson, J., 2018. A Phenomenological Look at the Life Hacking-enabled Practices of Individuals with Mobility and Dexterity Impairments.
- San-Martín, S., López-Catalán, B., Ramón-Jerónimo, M.A., 2013. Mobile Shoppers: Types, Drivers, and Impediments. *Journal of Organizational Computing and Electronic Commerce* 23, 350–371. <https://doi.org/10.1080/10919392.2013.837793>
- San-Martín, S., Prodanova, J., López Catalán, B., 2016. What makes services customers say “buy it with a mobile phone”? *Journal of Services Marketing* 30, 601–614. <https://doi.org/10.1108/JSM-02-2015-0081>
- Saúde, M. da, 2020. Portaria nº 188, de 3 de Fevereiro de 2020. Declara Emergência em Saúde Pública de importância Nacional (EPIN) em decorrência da Infecção Humana pelo novo Coronavírus (2019-nCoV).
- Schatzki, T.R., 2012. A primer on practices theory and research, in: Higgs et al., *Practice-Based Education: Perspectives and Strategies*. Sense Publishers, Rotterdam, pp. 13–26.
- Schreiber-Barsch, S., Curdt, W., Gundlach, H., 2020. Whose voices matter? Adults with learning difficulties and the emancipatory potential of numeracy practices. *ZDM - Mathematics Education* 52, 581–592. <https://doi.org/10.1007/s11858-020-01133-1>
- Seale, C., Riva, C., 2012. Using Software to Analyze Qualitative Interviews, in: Gubrium, J.F., Holstein, J.A., Marvasti, A.B., McKinney, K.D. (Eds.), *The SAGE Handbook of Interview Research: The Complexity of the Craft*. Sage Publications, pp. 427–440.
- Shankar, V., Kleijnen, M., Ramanathan, S., Rizley, R., Holland, S., Morrissey, S., 2016. Mobile Shopper Marketing: Key Issues, Current Insights, and Future Research Avenues. *Journal of Interactive Marketing* 34, 37–48. <https://doi.org/10.1016/j.intmar.2016.03.002>
- Shove, E., Pantzar, M., Watson, M., 2012. *The dynamics of social practice: everyday life and how it changes*. SAGE Publications, London.
- Sirirungruang, I., Boonyuen, P., 2017. Shoppers with Disabilities: A Study on Experiences, Behaviours and Needs, in: *The 4th Ratchasuda International Conference on Disability 2017*. Ratchasuda College of Mahidol University, Thailand, pp. 1–14.
- Skrovan, S., 2017. How shoppers use their smartphones in stores | Retail Dive [WWW Document]. URL <https://www.retaildive.com/news/how-shoppers-use-their-smartphones-in-stores/444147/> (accessed 1.7.22).
- Solomon, M.R., 2006. *Consumer behaviour: a European perspective*. Financial Times/Prentice Hall.

- Spaid, B.I., Flint, D.J., 2014. The meaning of shopping experiences augmented by mobile internet devices. *Journal of Marketing Theory and Practice* 22, 73–90. <https://doi.org/10.2753/MTP1069-6679220105>
- SPC, 2018. Consumo pela Internet [WWW Document]. URL <https://www.spcbrasil.org.br/pesquisas/pesquisa/4871> (accessed 1.31.21).
- Thaichon, P., Surachartkumtonkun, J., Quach, S., Weaven, S., Palmatier, R.W., 2018. Hybrid sales structures in the age of e-commerce. *Journal of Personal Selling and Sales Management* 38, 277–302. <https://doi.org/10.1080/08853134.2018.1441718>
- Titch, T., Titchkosky, T., 2011. *The Question of Access: Disability, Space, Meaning*. University of Toronto Press, Toronto.
- Topol, R.S., 2016. Manipulating affordances in practice: A hermeneutic phenomenological study of mobility impairment and uses of digital technologies in work.
- Tran, V.H., Sirieix, L., 2020. Shopping and cross-shopping practices in Hanoi Vietnam: An emerging urban market context. *Journal of Retailing and Consumer Services* 56, 102178. <https://doi.org/10.1016/j.jretconser.2020.102178>
- Webb, J., Williams, V., Gall, M., Dowling, S., 2020. Misfitting the Research Process: Shaping Qualitative Research “in the Field” to Fit People Living With Dementia. *International Journal of Qualitative Methods* 19, 1–11. <https://doi.org/10.1177/1609406919895926>
- Williams, V., Tarleton, B., Heslop, P., Porter, S., Sass, B., Blue, S., Merchant, W., Mason-Angelow, V., 2018. Understanding disabling barriers: a fruitful partnership between Disability Studies and social practices? *Disability and Society* 33, 157–174. <https://doi.org/10.1080/09687599.2017.1401527>
- Wilson, C., Sitbon, L., Brereton, M., Johnson, D., Koplick, S., 2016. “Put yourself in the picture”: Designing for futures with young adults with intellectual disability, in: *Proceedings of the 28th Australian Computer-Human Interaction Conference, OzCHI 2016*. pp. 271–281. <https://doi.org/10.1145/3010915.3010924>
- Wong, C.H., Lee, H.S., Lim, Y.H., Bobby, B.H.C., Chai, B.H., Tan, G.W.H., 2012. Predicting the consumers’ intention to adopt mobile-shopping: an emerging market perspective. *International Journal of Network and Mobile Technologies* 3 3, 24–39.
- Yang, K., 2010. Determinants of US consumer mobile shopping services adoption: Implications for designing mobile shopping services. *Journal of Consumer Marketing* 27, 262–270. <https://doi.org/10.1108/07363761011038338>
- Yang, K., Kim, H.Y., 2012. Mobile shopping motivation: An application of multiple discriminant analysis. *International Journal of Retail and Distribution Management* 40, 778–789. <https://doi.org/10.1108/09590551211263182>
- Yang, W., Cheng, H.-C., Dia, J.-B., 2008. A location-aware recommender system for mobile shopping environments. *Expert Systems with Applications* 34, 437–445. <https://doi.org/10.1016/j.eswa.2006.09.033>
- Yang, Y.-C., 2012. High-involvement human resource practices, affective commitment, and organizational citizenship behaviors. *The Service Industries Journal* 32, 1209–1227. <https://doi.org/10.1080/02642069.2010.545875>
- Zheng, X., Men, J., Yang, F., Gong, X., 2019. Understanding impulse buying in mobile commerce: An investigation into hedonic and utilitarian browsing. *International Journal of Information Management* 48, 151–160. <https://doi.org/10.1016/j.ijinfomgt.2019.02.010>
- Zuva, T., Olugbara, O.O., Ojo, S.O., Ngwira, S.M., 2012. Image content in location-based shopping recommender systems for mobile users. *Advanced Computing: An International Journal* 3. <https://doi.org/10.1142/S0219622010004019>