Exploring the forms of sociality mediated by innovative technologies in retail settings

CrossMark

Eleonora Pantano [a], Alessandro Gandini [b], *

[a] Middlesex University, London, UK
[b] King's College, London, UK

ABSTRACT

The retail setting is characterised by an increasing usage of advanced and interactive technologies (i.e. mobile apps, Near Field Communication, virtual and augmented reality, etc.) based on high connectivity, ubiquitous and contactless systems that enhance and support consumer shopping experience. As a result of the consumers' interaction with technology while shopping, technology-enriched stores provide new experiences and enable different forms of sociality. The aim of this paper is to explore the forms of sociality mediated by innovative technologies in retail settings. To achieve this goal, we use a qualitative approach involving 20 young consumers in the London-based market, where technology use by this group of consumers is growing. Findings show that digitally-mediated in-store activity mainly responds to a need for advice and trust, and the forms of sociality deployed around it are essentially ephemeral, low-intensity and publicity-oriented modes of interaction that echo the principles of "network sociality" described by critical media theory.

1. Introduction

Traditionally, consumers approach vendors or other consumers at the points of sale to achieve social, psychological, and economic benefits from these emerging interactions. In fact, they interact with others to reduce the risk involved in the purchase process (Pantano & Migliarese, 2014). However, increased computing capabilities, improvements in wireless technologies, and continuous developments in flexible software and pervasive systems have allowed consumers to ubiquitously access information without the direct assistance of an employee (Demirkan & Spohrer, 2014; Hristov & Reynolds, 2015; Johnson, Kim, Mun, & Lee, 2015; Pantano, 2016, 2014). In fact, ubiquitous networks and context-awareness technologies provide consumers with access anywhere and anytime to information through their mobile devices (Pantano & Priporas, 2016; Strom, Vendel, & Bredican, 2014). Hence, retail settings are shifting to a new concept of store/space wherein an extensive use of advanced technologies, largely integrated into daily life, takes place. In particular, these technological innovations provide novel, interactive and entertaining tools to search,

compare, and purchase products (Blazquez, 2014; Demirkan & Spohrer, 2014; Yeh & Li, 2014; Pantano, 2016). As a consequence, the increasing use of technology while shopping might dramatically impact on the way consumers build and maintain interpersonal interactions with other consumers or with vendors.

Although previous studies refer to shopping as a social process involving human-to human interaction (Everts & Jackson, 2009; Godes & Mayzlin, 2004; Pantano & Migliarese, 2014), new forms of sociality may be involved in the in-store shopping experience, as interaction with technology replaces traditional human-to-human interactions. This represents a hot topic in the current research on innovations within retail settings that still requires further investigations (Chou, Chuang, & Shao, 2016; Everts & Jackson, 2009; Hristov & Reynolds, 2015; Huang, Lu, & Ba, 2016; Pantano, 2014).

The aim of this research is to explore the new forms of sociality emerging from the extensive usage of advanced technologies in retail settings, and how it might create value for consumers while impacting the social interactions. Therefore, our study addresses the following research questions:

RQ1: To what extent is interacting with technology becoming integrative part of consumers shopping experience?
RQ2: To what extent are new technologies changing consumers' relationships during the shopping experience?

* Corresponding author.
E-mail address: alessandro.gandini@kcl.ac.uk (A. Gandini).

RQ3: To what extent are new technologies leading towards to new forms of sociality during the shopping experience?

To this end, we interviewed 20 London-based consumers, between 18 and 23 years old, adopting a qualitative, exploratory focus aimed at investigating consumer attitudes towards seeking advice and digital technology use while shopping. The research explores whether consumer interactions with technology is a common experience, and builds on the logics of "network sociality" acknowledged by critical media theory (Wittel, 2001) as a kind of individualised form of interaction based on ephemeral, low-intensity and publicity-oriented practice.

This study advances the current knowledge on in-store interaction within technology-enriched retail settings by detailing the extent to which innovative technologies may effect the in-store shopping practice as a social activity. In particular, it highlights consumers' in-store interaction with the technology as a potential substitution of social interactions with other consumers or employees. Findings offer insight into the challenges retailers have to face in light of the changing interactional role of vendors in the store, as the forms of digitally-mediated interaction that are typical of the group of consumers we interviewed make increasingly difficult for retail personnel to persuade and influence consumers behaviour.

The paper is organized as follows: the next section will discuss the existing research around the role of technologies in consumer shopping behaviour and the way consumers interact with these technologies. Next, this paper outlines the methods and findings of a qualitative research based on in-depth interviews with young consumers on their usage of technologies while shopping. Finally, we discuss the impact of these technologies on the social interactions held while shopping, and the implications for scholars and practitioners.

2. Theoretical background

2.1. Technology and consumer shopping behaviour

The broad array of technology consumers might access within retail settings allows them to easily find, compare, locate and buy products. In addition to these activities, consumers can also find additional information on products and services, create and share wish and shopping list through user-friendly interfaces. Amongst others, NFC (Near Field Communication) provides mobile devices with two-way short range wireless connectivity up to no more than 10 cm, which supports fast checkout by allowing consumers to pay in a "contactless" way while substituting the traditional card swipe or insertion into the reader and the subsequent request of PIN or permission for the payment. Similarly, Quick Response codes (QR) (bi-dimensional barcode including rich information on a product) allow consumers to access information on products by scanning the code through their mobile camera without direct assistance by any employee (Sankaridevi, Vennila, & Jayakumar, 2015; Zhao, Smith, & Alanson, 2015).

As a result of the diffusion of such technologies, recent studies have been investigating how in-store consumer behaviour has been affected by advanced technologies (Demirkan & Spohrer, 2014; Hristov & Reynolds, 2015; Pantano, 2016; Pantano & Priporas, 2016). To this end, research has extensively exploited the Technology Acceptance Model (TAM) (Davis, 1989), by considering the perceived ease of use, usefulness, attitude and behavioural intention as drivers of new technology adoption. This traditional model has been further extended with more constructs such as risk avoidance (Gross, 2015), trust (Perea y Monsuwé, Dellaert, & de Ruyter, 2004; Pavlou & Fygenson, 2006), hedonic value (Pantano,

2014) and utilitarian value (Pantano & Priporas, 2016). Using a new system, a new technology or an innovation involves a certain level of risk related to the uncertainty and the possible consequences emerging from its usage. Thus, trust plays a critical role under conditions of uncertainty and risk, such as during the purchasing of unfamiliar (or unknown) products (Perea y Monsuwé et al., 2004; Park, Gunn, & Han, 2012). In traditional stores, the most important source of trust is the sales assistant (vendor), who shares his/her experience, expertise, honesty, benevolence, confidence, and communication skills to support the consumer's purchase behaviour (Pantano & Migliarese, 2014). The concept of trust has also been extended to the technology, by implying that if the technology itself is trustworthy, consumers may not be willing to ask others' support while choosing (Pantano & Priporas, 2016).

Research on the introduction of advanced and interactive technologies within the stores has so far largely focused on the extent to which these systems mediate the traditional communication between consumer and sales assistant (Williams, Nadin, & Windebank, 2012). Mainly, these studies describe the increasing difficulty in building (strong) relationships with consumers who use self-service technologies because of the decreased frequency of interpersonal contacts with other consumers and vendors (Everts & Jackson, 2009; Kim, Suh, & Lee, 2013; Pantano & Migliarese, 2014; Tang, Shee, & Tang, 2001). This might affect shopping as a social experience (Everts & Jackson, 2009), which includes spending time with friends or relatives while purchasing (Gilboa and Vilnai-Yaetz, 2013; Kim & Kim, 2012; Kim et al., 2013). Indeed, one key aspect of the points of sale lies on the ability to offer a social experience (Gilboa and Vilnai-Yaetz, 2013). Moreover, the need to interact with others during the purchase decision includes the desire to be accepted by others and meet others' expectations, as described in Maslow's (1954) definition of the social need for belonging.

However, the main focus in most studies on technology-enhanced retail settings has been on consumers' acceptance of these innovations (Demirkan & Spohrer, 2014; Hristov & Reynolds, 2015; Johnson et al., 2015; Pantano, 2014; Blazquez, 2014, 2016; Yeh & Li, 2014). Thus, research on the degree such technologies (especially smart phone-based social media apps) impact social interaction as a consequence of the adoption of technologies while shopping is still at an early stage.

2.2. Consumer-computer interaction and social relations

As the purchase of a product is often motivated by the attempted acquisition of a certain status or identity, consumers buy items in order to be accepted by a social reference group (Reinstaller & Sanditov, 2005). Thus, they are willing to ask for suggestions and opinions to make a better choice (Li, 2013; Reinstaller & Sanditov, 2005). The request for suggestions might consist of face-to-face questions, which would require the physical presence of other consumers (e.g. friends/relatives/partners/etc.) or a sales assistant in the store, or it might occur via the intermediation of social network sites (SNSs) such as Facebook and Twitter, through which consumers may post their questions to an "imagined audience" (Marwick, 2011) or exchange private messages with other users (i.e. WhatsApp). Past studies also recognize how social interaction between customers and vendors is a determinant of clients' satisfaction, loyalty and subsequent purchasing behaviour in the store (Drollinger & Comer, 2013; Yang, 2013). Similarly, existing research reveals that consumers usually spend more time and purchase more goods when shopping with friends and relatives (Kim et al., 2013).

Moreover, several studies demonstrate how word of mouth communication influences consumer's decision-making processes, by allowing consumers to access information, and generate

awareness and interest towards a certain product or brand (Bhattacharya & Saha, 2004; Lim & Chung, 2011; Litvin, Godlsmith, & Pan, 2008; Rafiq, Fulford, & Lu, 2013). This can be seen as a form of information seeking, which may take place while consumers seek information from others before choosing. Information emerging from this kind of interaction adds new knowledge to what consumers already believe about certain features of products and services (Lim & Chung, 2011). In fact, the opinions of others have an impact on the individual decision-making process, negatively or positively, by reducing or increasing the perceived credibility of the product/firm making these judgements (Hornik, Satchi, Cesareo, & Pastore, 2015). When choosing unknown products, consumers are more willing to ask suggestions to reduce the risks involved in the purchasing process. Yet, few existing works have directly confronted how social network sites intervene within consumers' information seeking processes.

Preliminary studies on the usage of in-store technology for accessing information on product and services have revealed an interesting tension. On the one hand, technologies reduce the direct assistance of employees, while at the same time face-to-face support from an employee discourages the consumers' usage of these technologies (Pantano & Migliarese, 2014).

These findings highlight the need for further inquiry into consumers' use of social network sites in retail settings. Specifically, it is deemed important to more closely observe whether these sites are accessed pre- or post-purchase, and for what purposes — such as contacting other consumers for advice or accepting suggestions and opinions (either negative or positive) also from individual(s) who they may not have met before without further investigations, and whether this influences their purchasing decisions, or fulfils some need for social interactions (relationships-oriented motivation) (Cao, Jiang, Oh, & Li, 2013).

The idea of a "network sociality" (Wittel, 2001) has been influential in media studies and critical theory to identify the main features of digitally-mediated communication and the implications of this remediation upon social interaction in everyday life. Similarly, a variety of social studies have observed human behaviour across online communities and assessed their reverberation on the everyday life of users (Papacharissi, 2015; Karatzogianni and Kuntsman, 2012). The case we present here is evidence of how these logics seem to apply more generally as a cultural conception of digitally-mediated interaction applied to consumer behaviour.

3. Materials and methods

3.1. Data collection and procedure

Taking into consideration the exploratory nature of this study and the need for more studies exploring the impact of new technologies on consumers' social interactions, we employed a qualitative approach. The research adopted an inductive design to achieve a comprehensive understanding of the research context and flexible structures for the research process, which is commonly accepted for theory generation (Bryman & Bell, 2011; Pantano & Priporas, 2016).

We conducted in-depth face-to-face interviews with 20 London-based consumers aged 18—23. Participants were randomly recruited during university activities at two universities in London. The interviews took place between May and July 2016 and lasted approximately 30—45 min each. Data were collected through an open-ended interview guide and pointed at assessing the impact of technology on the social aspect involved in the shopping experience (Table 1). The primary rationale in restricting the sample to the age range 18—23 has been the technological competence of these participants (Lenhart, Purcell, Smith, & Zickuhr, 2010; Pew

Research Centre, 2015) as well as their condition of consumers with increasing purchasing power (Pantano & Priporas, 2016).

During the interviews, a professional tape recorder was used, with the authorization of the interviewee. This allowed the authors to transcribe each conversation completely to facilitate the process of data analysis. The names of the interviewees have been omitted for anonymisation purposes.

3.2. Sample profile

The sample is gender-balanced (10 males, 10 females) and is made of consumers of different geographic origin (8 British, 8 EU, 1 mixed Asian, 1 South-East Asian, 1 Norwegian, 1 Canadian). All but one interviewee has attended or just completed a college degree course in the UK. It must be acknowledged this is a "convenience" sample (Ritchie, Lewis, Nicholls, & Ormston, 2013). Participants were recruited on the basis of their availability to participate in the study, in line with the exploratory, qualitative, non-probabilistic nature of the research. Yet, a majority of participants had some prior knowledge and understanding of the uses of social media at an academic level. This requires further explanation. The age range of 18—23 was purposely framed to increase the likelihood of participants having a high familiarity with diverse social media technologies. On the one hand, the "convenience" sample consists of interviewees who are largely knowledgeable about practices and uses of social media, some even for marketing purposes. Consequently, there seems to be no need to operate a distinction on the skills of use on the basis of the participants' higher education access in the same field. In fact, it may be argued such a sample renders the picture of a portion of consumers who are more prone to a critical reception of consumer-related social media dynamics as a result of their education level.

4. Findings and discussion

In this section we illustrate our findings following the same areas we identified in the interview topic guide presented earlier (Table 1). Facebook, Instagram and Snapchat together with text-messaging applications WhatsApp and Facebook Messenger emerged as the most used social network sites. In terms of frequency of usage, all but one interviewees describe themselves as heavy social media users, who access social apps between 5 and 10 times a day. This is often described by interviewees themselves with some reluctance or embarrassment, as something they are not happy about, or proud of. As Participant 20 explains:

"I am going to give an estimate, and say 6 times an hour. I am sure it is probably more than that because I have an unhealthy addiction to social media. It is the first thing I check when I wake up, and the last thing I do before I go to bed." (Participant 20, Canadian, Female, 20)

Participants described in-store use of social network sites as a relatively sporadic and volatile practice. For some, contrarily to common sense expectations, use was as something more likely to happen when out with friends, rather than alone, and it is linked to boredom. In such cases, interviewees were likely to use their smartphone while waiting for friends during shopping, such as when queuing for fitting rooms or at the counter, and for general purposes of time-killing. Accordingly, participant 20 continues:

"I usually don't (check social media in a real point of sale, nda), but if I am shopping with friends I may. I find I most often check social media when shopping with friends. This is usually because I am waiting for them to try on all their items, which can be boring and

Table 1
Interview guide.

Topic area	Question/s
Opening question	Can you describe your familiarity with using social network sites (i.e. WhatsApp, Facebook, Instagram, etc.), as well as time spent, accessed contents, etc.?
Use of SNSs to ask suggestions while shopping	Can you tell me if you use any social network to ask any suggestions while shopping? If yes, to whom? What kind of information do you usually ask for while shopping (i.e. if a certain product fits your body, if the price is good, etc.)? How much of this information is important for your purchase decision?
Importance of friends' suggestion while shopping	How important is shopping with friends and why? How much do you take into account your friends' suggestions while shopping with them? How much do you take into account vending personnel's suggestions while shopping?
Access to information	For which product category/ies do you usually ask suggestions to your friends (i.e. clothes, tickets, etc.)? Which kind of information do you usually ask for and why? Through which medium do you usually contact them to have this information (i.e. Facebook, WhatsApp, etc.) and why?
Influence on the shopping decision	Which factors influence your purchase decision more? How does this influence your shopping experience?
Wrap up	Do you have any other comments about your access to social network sites while shopping you would like to share with me?

tedious. If I am searching for a specific item, I may check their online site to see if they have it in store, but usually I am not checking social media." (Participant 20, Canadian, Female, 20)

For others, instead, the use of social media or mobile apps inside a store is more likely to be connected to specific purposes of socialisation. Participant 16 (see below) indicates two main reasons for using her smartphone, and particularly accessing social media, in a store:

"Ah … it depends … I know I'm always on my phone, so … in a shop, I think for what purposes … probably, if I see something that is, say, for sale, I would probably take a picture and think how it would look like on me … or something for my cousin, that I wanna buy … and show it to someone … oh and there's another thing: I would take a picture and I would ask friends who are online what they think about it" (Participant 16, South-East Asian, Female, 21)

This brings us to a key aspect that emerges from our findings. Social media use is intrinsically related to seeking advice from friends who are not present in the store. This comes together with two pairing aspects: the general distrust of vending personnel, and a close-circled notion of trust.

4.1. Social network sites, suggestions and trust

It seems common practice for young consumers to ask for suggestions and advice rom friends who are not present in their same environment while shopping. This consists of sending a picture via WhatsApp or Snapchat, and seeking a trusted opinion. This can be a picture of an item they are willing to buy or, in case of clothes, a picture of themselves wearing the article(s) of clothing they might buy. This is generally considered an eminently private activity, and participants do not tend to post such pictures on a public social network feed or timeline due to the privacy concerns involved in social media adoption. As Participant 2 explains, this practice is mostly restricted to "best" friends and very rarely develops into a public post:

"If I'm in a changing room and it's something I really like I would 'snap' my best friend, "what do you think of this?", if she's not with me, and she would reply instantly, like …"no", or "that's so nice, get that", so yeah … (but) I would never put a picture of my outfit on Snapchat and say "what do you guys think of this? … not on my feed" (Participant 2, British, Female, 23)

This suggests that the desire to be accepted by others and meet others' expectations, as described in Maslow (1954), remains a

strong aspect to consider and actually gets amplified by the logic of social networking. The idea of privacy deployed by our participants is in fact mediated by the publicity-driven medium, the use of which fulfils the social desirability aspect involved in the shopping experience. This is a genuine insight evidenced by how interviewees link this to the general attitude of distrust they seem to have towards vending personnel. Our interviewees largely prefer sending a picture to a friend via an app or social media, rather than asking in-store vending personnel for advice. The reason of this general distrust lies in the perceived lack of personal knowledge of the individual taste and style from vending staff. Participant 13 frames this as a matter of "personal connection":

"Sometimes if I'm not sure what to buy I take a picture of it and send it to friends or family on whatsapp, "what do you think of this …" (Is it better than asking people in the store?, nda) "Yeah, 'cos they don't know you personally, and obviously you have a connection with your own people, they know you better …" (Participant 13, British, Male, 22)

Another element that contributes to foster this picture-sharing practice is the fact that many consumers tend to have a clear set of ideas in mind before visiting a store in person. A large number of participants describe how they collect information on products and goods by browsing online shopping websites before actually visiting a shop. See for instance how Participant 4, a clearly knowledgeable consumer, explains the general tendency of going shopping alone, and in case of necessity to interact or ask for advice, how she describes her use of social media apps instead of asking in-store vending personnel for an opinion:

"Normally I would go alone. I have a pretty clear idea of what I want, what I like and what looks good on me. I don't generally interact with them (in-store staff, nda), and if I am in doubt I will take a picture and send it to my best friend, I would never go ask a sales assistant. I could potentially use Snapchat, but normally I would use WhatsApp or Messenger. (Is this because you trust your friends more?) Yes, and I don't have the confidence to post a public picture and ask how do I look … this doesn't interest me" (Participant 4, Italian, female, 22)

Sometimes, this general distrust towards vending personnel may be overcome if the consumer needs advice in relation to a specific or 'special' event. Participant 2, below, explains how this works:

(Do you ask people in the store for advice?) "Sometimes. I remember doing that … I had a job interview last year and I was into Topshop to buy something, so I wasn't sure if that was

interview worthy, so I asked the girl "Excuse me, random question: do you think this blouse is for an interview?" And she was like "Yeah, I think so", and it was a simple blouse so it was ok but I didn't know if it looked too casual, it had this pattern on it, and if it was enough sophisticated for an interview. Otherwise I would never ... from wearing a pair of jeans I would never go to them like "what do you think of this pair of jeans?" (Participant 2, British, Female, 23)"

This set of quotes highlights the highly individualistic nature of the shopping experience and introduces another significant aspect, that is the quickness of the shopping routine — we will follow up on this later. Yet, these interview insights also illustrate how social interaction in and of itself is an important, but not determinant aspect of the shopping experience. Instead, we can see how it is the necessity of getting opinions from friends, either in person or via digital means, that influences the consumption choices of young buyers more heavily.

4.2. Importance of friends' suggestion while shopping

As seen, young consumers often declare they know what they want before accessing the physical point of sale, and reluctantly engage in interaction with sales assistant within the store for suggestions or advice. Yet, as introduced by the "personal connection" aspect emerged above, the fact they turn to friends and not staff is equally due to distrust as much as it is a result of the actual chance to reach out to close friends at a distance offered by social network sites. Friends are more reliable than staff because of their taste and personal knowledge of them. Sales assistant in the store are generally seen as helpers in the process of looking out for products and goods. As Participant 17 points out:

"If I'm undecided I would ask my friends' opinion but I would never as a staff's opinion ... cos I don't trust them. I trust their knowledge but I don't trust their style ... because I don't know them ... I trust people I know ... and people that know me. They (personnel, nda) would only help me finding what I am looking for more quickly ... I mean, this is London, I think, London makes you so impatient ... and I'm very impatient" (Participant 17, French, female, 23)

Interestingly, in the quote above Participant 6 explicitly links her own practices of in-store shopping with the speed of the visit. This seems to be a key aspect of the overall processes of sociality at stake with digitally-mediated shopping practice, which seem to be rooted in the individual experience of customers. Participant 6 (see below) tells how this works for her:

"Not really ... I kinda make up my own mind ... If I really need some help I might find someone to ask there, again I think that would be more with make up than clothes, because if I know that's ok, then I'll be fine, if it fits well I'm usually alright with it. I've got lots of random clothes, I really got everything so I don't really ask for people's opinions on it, if I like it I don't care (...) Unless I am shopping with friends, then I would ask "what do you think"? (...) That would influence me, yeah, I think I would take it into consideration ... it depends on who the person is, how much I like it and how the person thought of it and what I really think of it ..." (Participant 6, British, female, 19)

Some interviewees, however, express the perception that turning to social media exchanges for picture exchange and advice is by and large a "girls affair". This is mentioned by both male and female participants in substantially equal terms. As Participant 1, amongst others, outlines:

"Sending pictures? Few times ... among boys, very little, among girls, a lot ... I see this between my girlfriend and her friends, it is endless ..."look how do I fit this" ... especially with WhatsApp because it is more direct, they send the picture ot and they get an immediate response, it's easy to use. Often the pictures they send or receive are from inside the fitting room ... a classic one" (Participant 1, Italian, male, 23)

It is noteworthy to mention that participants discuss their shopping experience chiefly in relation to the purchase of clothes. This seems to be the main in-store shopping category for interviewees. Many also state they spend a significant part of their money on food and tech products, and a minority also mention books and sports gear. The predominant focus on clothes proves nevertheless to be very useful with regards to understanding how the medium intervenes in the shopping experience.

4.3. Access to information

Snapchat and WhatsApp are the main media used by our participants in relation to their digitally-mediated interaction while shopping. The former is favoured for its capacity to embed pictures in instant-messaging conversations; the latter seems to be very popular in the age range taken into consideration due to its immediacy as well as its somewhat hybrid nature of instant-messaging app and social network site. As described by Participant 6:

"Sometimes I would take a picture on Snapchat and show what it is I'm wearing, and get an opinion, direct messaging other people. Or I would look online before I go the shop, and I ask the people in family for instance, and if they say that wouldn't suit you, I wouldn't really buy it" (Participant 6, British, male, 22)

As introduced above, interviewees report that in many cases the necessity to ask for suggestions or advice blends across the online-offline spectrum and precedes the visit to a physical point of sale. Online resources are broadly recognised as informational repositories in a continuum that goes from browsing online websites or social media before the actual visit to a real point of sale up to, in some cases, when the purchase is taking place. As Participant 2 explains:

"A couple of weeks ago I saw some boots on Zara online, and I couldn't find them anywhere in store, I searched the local store, I even went to other stores, this last store I went said these were in stock, and I asked the person "Look, I've been everywhere for these boots, do you have them?" and she found them for me. That was the reason (I used the phone in the store, nda), I just showed them on my phone"(Participant 2, British, Female, 23)

The quote above illustrates how online window shopping is considered a resource that allows consumers to optimise time and be quicker in their purchase or visit to the physical point of sale. The same goes for blogs and product reviews. Despite many maintain that the opinions that can be found on blogs, as well as online product reviews, often may not be trusted as honest ones, many others seem to be highly influenced by these in their purchase decision. Participant 18 outlines how this works:

"I'd say online shopping definitely helps me when I go into the store, cos I'd already recognise products that I've seen online ... so it'd just kind of confirm my willingness to buy a product. I'd say sometimes I feel very impulsive and I just want to buy on the spot, and this is

sort of heightened when I see some kind of blog, or vlog, on Youtube or Instagram hype about the products, that would make me want to buy it even more impulsively" (Participant 18, mixed Asian, Female, 23)

These insights shed light on the complexity of digitally-mediated shopping as a social experience and its main features, as the online and offline realm blend within a spectrum of inter-action that entails individualism, low-intensity of interaction and publicity-driven exchanges. Yet this social experience is also largely an individualistic one, where socialisation is often not even part of the picture.

4.4. Influence on the shopping decision/experience

The shopping experience is largely described by participants as a solitary one. In fact, the majority of interviewees clearly state their preference for individual shopping practices, and maintain that shopping with friends is usually something they either do not like doing altogether, or eventually accept as a second-best option if explicitly asked by someone. As Participant 17 explains:

"Oh no no … Alone. (Otherwise, nda) It's too time consuming … I would do it if someone is free, like I wanna meet up with a friend and we don't really have anything planned, so … we just gonna go shopping. But usually if I go shopping is because I really need something, and if I really need something I wanna make it very quick … I wanna go by myself and not be hurried by anyone, and take the time that I want.." (Participant 17, French, female, 23)

At the same time, this individualistic approach is intrinsically connected with seeking for advice via social means. As Participant 3 sums up, it appears as though the ideal shopping experience for many young consumers is a quick and individual one:

"So my ideal shopping experience is … fast, as fast as possible whether it's online or in real life … ideally, it depends on the kind of activity … getting something that will last for a longer period of time so quality, a decent price and if possible taking into consid-eration the ethical side, although I haven't managed to do this completely with my clothes" (Participant 3, Norwegian, female, 23)

Participant 3's insights describe a scenario that has meaningful points of similarity with the idea of "network sociality" outlined in critical media theory by Wittel (2001), as forms of interaction that are individual in nature, ephemeral and characterised by low-intensity of interaction.

5. Conclusion and future works

Starting from the analysis of social interaction while shopping, the contributions of our study are manifolds. Building on leading theory on sociality in the critical media literature (Wittel, 2001), this work adds further insights to previous studies which focused on consumers acceptance of new technology for supporting shop-ping (Blazquez, 2014; Gross, 2015; Hristov & Reynolds, 2015; Johnson et al., 2015; Pantano, 2016; Pantano & Priporas, 2016). On the one hand, by exploring the behaviour of young consumers in relation to the usage of social network technologies as substitute of face-to-face interactions our research extends previous studies on the effect of new technologies in retail settings from a social re-lations perspective (Demirkan & Spohrer, 2014; Hristov & Reynolds, 2015; Johnson et al., 2015; Pantano, 2014, 2016; Pantano & Priporas, 2016). In particular, the shopping experience appears to be a highly

individualised practice, characterised by a social interaction that is low in intensity and generally approached only if it is substantially necessary for utilitarian purposes — mainly, advice. Participant 18 (see below) summarizes the cultural conceptions that characterise social interaction in such context:

"When it comes to shopping I really like it to be a personal thing, but I also don't mind when it comes to friends … With my boyfriend I really don't like when he joins me because he's the worst person to shop with, he complains a lot … with friends it's a lot better for sure, and sometimes their opinion is quite valuable. But there are also different levels of shopping, if that makes sense; if it's just like a casual thing that I don't really need to buy but it would be great if I had … then I'm more welcoming … but if it's more like a necessity that I really actually need a product I would go by myself (…) When I'm sort of undecided then 100% I want their opinion, 'cos it's something that I am unsure of myself, so I definitely value their opinion more. Whereas if it's just like a pair of jeans I don't really mind, I'd just go a store and get what I want (…) If I'm alone I generally have my phone on me, so I'd take a picture and send it to my boyfriend, or whoever … if no one's available then I'd have to take an executive decision alone … which sometimes doesn't lead to any decision and I'll just come back another time"(Participant 18, mixed Asian, female, 23).

Overall, when in doubt young consumers ask for suggestions about what to buy mostly to their "friends" and rarely to a sales assistant, because s/he is not considered completely trustworthy. Arguably in their own social interaction routines our subjects seem to practice a notion of trust that is in essence very close to the interpretation of the concept given by Luhmann (2000), for whom trust and risk collide in the distinction between familiarities and unfamiliarities and determine "a new type of anxiety about the future outcome of present decisions, and with a general suspicion of dishonest dealings." (Luhmann, 2000: 106).

On the other hand, our research further highlights the extent to which the idea of a "network sociality" (Wittel, 2001) may explain the way consumers build and maintain their social interactions while shopping. In particular, the evidence provided in the present study on the modes of digitally-mediated in-store interaction seems to offer a new perspective to observe how this notion of sociality potentially represents a generalised mode of socialisation for digitally-mediated interaction among young consumers, considered as archetypal mediatised subjects. This analogy is further strengthened if we integrate the idea of a "network soci-ality" with the notion of 'intimacy'; more recently another media theorist, Gregg (2013), observed how the affective dynamics at the heart of digitally-enabled forms of interaction and socialisation are paired with an idea of intimacy of social interaction. The young consumers at the heart of this study conceive their own shopping sociality as tightly connected to their intimacy, as they maintain the exclusivity of trust towards their close friends. The intensity of this intimacy, however, also seems to vary consistently from one case to another, as it blends with utilitarian conceptions of consumer choice that are implicit, rather than explicit, but nevertheless well present in our interviewees' accounts. The present research offers a deeper understanding of how young consumers practice such in-store digitally-mediated interaction and shed light on what are the underlying motivations of their consumer behaviour and decisions.

Starting from these considerations, retail managers should recognize changes in consumers' shopping behaviour and the increasing impact technology has on their preference to access friends (digitally-mediated) opinions over the opinions of a sales assistant. This in turn influences the shopping experience, which is

moving fast towards a technology-based (if not app-driven) experience. Therefore, retailers should be able to provide new experience able to better integrate salesforce service with consumers' social relations to overcome the limit of trust emerged in the current consumer-to-employee interaction. This might result in a more consistent participation of consumers to the service creation/delivery process, new initiatives to make salesforce more trustable, supportive and accessible for consumers, as well as on training both consumers and salesforce to see shopping assistants as an added value for their shopping.

This study makes an important contribution to the literature and to business practices, but also has some limitations. The research was qualitative in nature, and further research might want to employ quantitative approaches and analyses to complement and expand the insights here discussed. Although the sample was sufficient for the purpose of the research and allowed reasonable conclusions to be drawn, it cannot be considered representative of the entire population of young consumers in the age range considered. Thus, further research might want to access a larger sample to strengthen the current findings. Similarly, the study might be replicated using a different sample (i.e. older age range such as 25 to 35) that could also offer opportunities for comparing findings and achieving more generalizable results. To this end, further studies might also collect and analyse data from different countries, both in Europe and in Asia, to investigate the extent to which this process of replacement of social interaction while shopping is on an early stage or already on a mature one.

References

Bhattacharya, K. K., & Saha, S. (2004). Trust dimensions in e-retailing: A strategic exploration. In *International engineering management conference 2004 proceedings* (pp. 825–828). IEEE.

Blàzquez, M. (2014). Fashion shopping in multichannel retail: The role of technology in enhancing the customer experience. *International Journal of Electronic Commerce, 18*, 97–116.

Bryman, A., & Bell, E. (2011). *Business research methods* (3rd ed.). Oxford: Oxford University Press.

Cao, H., Jiang, J., Oh, L.-B., & Li, H. (2013). A Maslow's hierarchy of needs analysis of social networking services continuance. *Journal of Service Management, 24*(2), 170–190.

Chou, Y.-C., Chuang, H. H. C., & Shao, B. B. M. (2016). The impact of e-retail characteristics on initiating mobile retail services: A modular innovation perspective. *Information & Management, 53*(4), 481–492.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340.

Demirkan, H., & Spohrer, J. (2014). Developing a framework to improve virtual shopping in digital malls with intelligent self-service systems. *Journal of Retailing and Consumer Services, 21*, 860–868.

Drollinger, T., & Comer, L. B. (2013). "Salesperson's listening ability as an antecedent to relationship selling". *Journal of Business & Industrial Marketing, 28*(1), 50–59.

Everts, J., & Jackson, P. (2009). Modernisation and the practices of contemporary food shopping. *Environment and Planning D, 27*, 917–935.

Gilboa, S., & Vilani-Yaetz, I. (2013). Shop until you drop? An exploratory analysis of mall experiences. *European Journal of Marketing, 47*(1/2), 239–259.

Godes, D., & Mayzlin, D. (2004). Using online conversations to study word-of-mouth communication. *Marketing Science, 23*, 545–560.

Gregg, M. (2013). *Work's intimacy*. Cambridge: Polity Press.

Gross, M. (2015). Mobile shopping: A classification framework and literature review. *International Journal of Retail & Distribution Management, 43*(3), 221e241.

Hornik, J., Satchi, R. S., Cesareo, L., & Pastore, A. (2015). Information dissemination via electronic word-of-mouth: Good news travels fast, bad news travels faster! *Computers in Human Behavior, 45*, 273–280.

Hristov, L., & Reynolds, J. (2015). Perception and practices of innovation in retailing: Challenges of definition and measurement. *International Journal of Retail and Distribution Management, 43*, 126–147.

Huang, L., Lu, X., & Ba, S. (2016). An empirical study of the cross-channel effects between web and mobile shopping channels. *Information & Management, 53*, 265–278.

Johnson, K. K. P., Kim, H. Y., Mun, J.-M., & Lee, J. Y. (2015). Keeping customers shopping in stores: Interrelationships among store attributes, shopping

enjoyment, and place attachment. *International Review Retail and Distribution and Consumer Research, 25*, 20–34.

Karatzogianni, A., & Kuntsman, A. (2012). *Digital cultures and the politics of emotion: Feelings, affect and technological change*. Basingstoke: Palgrave Macmillan.

Kim, J.-E., & Kim, J. (2012). Human factors in retail environments: A review. *International Journal of Retail & Distribution Management, 40*(11), 818–841.

Kim, H., Suh, K.-S., & Lee, U. K. (2013). Effects of collaborative online shopping on shopping experience through social and relational perspectives. *Information & Management, 50*(4), 169–180.

Lenhart, A., Purcell, K., Smith, A., & Zickuhr, K. (2010). *Social media & mobile internet use among teens and young adults*. Retrieved from: http://www.pewinternet.org/files/old-media/Files/Reports/2010/PIP_Social_Media_and_Young_Adults_Report_Final_with_toplines.pdf.

Li, C. Y. (2013). Persuasive messages on information system acceptance: A theoretical extension of elaboration likelihood model and social influence theory. *Computers in Human Behavior, 29*, 264–275.

Lim, B. C., & Chung, C. M. Y. (2011). The impact of world-of-mouth communication on attribute evaluation. *Journal of Business Research, 64*, 18–23.

Litvin, S. W., Godlsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality and tourism management. *Tourism Management, 29*, 458–468.

Luhmann, N. (2000). Familiarity, confidence, Trust: Problems and alternatives. In D. Gambetta (Ed.), *Trust: Making and breaking cooperative relations, electronic edition, department of sociology* (pp. 94–107). University of Oxford. Retrieved from: http://www.sociology.ox.ac.uk/papers/luhmann94-107.pdf.

Marwick, A. E. (2011). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New media & society, 13*(1), 114–133.

Maslow, A. H. (1954). *Motivation and personality*. New York, USA: Harper & Row.

Pantano, E. (2014). Innovation drivers in retail industry. *International Journal of Information Management, 34*, 344–350.

Pantano, E. (2016). Engaging consumer through storefront: Evidences from integrating interactive technologies. *Journal of Retailing and Consumer Services, 28*, 149–154.

Pantano, E., & Migliarese, P. (2014). Exploiting consumer employee–retailer interactions in technology-enriched retail environments through a relational lens. *Journal of Retailing and Consumer Services, 21*, 958–965.

Pantano, E., & Priporas, C. V. (2016). The effect of mobile retailing on consumers' purchasing experiences: A dynamic perspective. *Computers in Human Behavior, 61*, 548–555.

Papacharissi, Z. (2015). *Affective publics: Sentiment, technology, and politics*. Oxford: Oxford University Press.

Park, J., Gunn, F., & Han, S. L. (2012). Multidimensional trust building in e-retailing: Cross-cultural differences in trust formation and implications for perceived risk. *Journal of Retailing and Consumer Services, 19*, 304–312.

Pavlou, P. A., & Fygenson, M. (2006). Understanding and predicting electronic commerce adoption: An extension of the theory of planned behaviour. *MIS Quarterly, 30*(1), 115–143.

Perea y Monsuwé, T., Dellaert, B. G. C., & de Ruyter, K. (2004). What drives consumers to shop online? A literature reviee. *International Journal of Service Industry Management, 15*(1), 102–121.

Pew Research Centre. (2015). *Mobile messaging and social media*. Retrieved from: http://www.pewinternet.org/2015/08/19/mobile-messaging-and-social-media-2015/.

Rafiq, M., Fulford, H., & Lu, X. (2013). Building customer loyalty in online retailing: The role of relationship quality. *Journal of Marketing Management, 29*(3–4), 494–517.

Reinstaller, A., & Sanditov, B. (2005). Social structure and consumption: On the diffusion of consumer good innovation. *Journal of Evolutionary Economics, 15*, 505–531.

Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (Eds.). (2013). *Qualitative research practice: A guide for social science students and researchers*. London: Sage.

Sankaridevi, K., Vennila, V., & Jayakumar, D. (2015). Near Field Communication (NFC) technology in smart e-transactions. *International Journal of Science Technology & Engineering, 1*(11), 247e251.

Strom, R., Vendel, M., & Bredican, J. (2014). Mobile marketing: A literature review on its value for consumers and retailers. *Journal of Retailing and Consumer Services, 21*(6), 1001–1012.

Tang, J.-T. E., Shee, D. Y., & Tang, T.-I. (2001). Conceptual model for interactive buyer-seller relationship in electronic commerce. *International Journal of Information Management, 21*(1), 49–68.

Williams, C., Nadin, S. J., & Windebank, J. E. (2012). Explaining participation in the self-service economy. *The Service Industries Journal, 32*(11), 1811–1822.

Wittel, A. (2001). Toward a network sociality. *Theory, culture & society, 18*(6), 51–76.

Yang, J. (2013). Harnessing value in knowledge management for performance in buyer–supplier collaboration. *International Journal of Production Research, 51*(7), 1984–1991.

Yeh, Y.-S., & Li, Y.-M. (2014). Design-to-lure in the e-shopping environment: A landscape preference approach. *Information & Management, 51*, 995–1004.

Zhao, Y., Smith, J. R., & Alanson, S. (2015). NFC-WISP: A sensing and computationally enhanced near-field RFID platform. In *Proceedings of the international conference on RFID* (pp. 174–181). IEEE.