The city centre as an age-friendly shopping environment:

A consumer perspective

Anna-Maija Kohijoki

*Corresponding author:

Department of Marketing and International Business, Turku School of Economics,

University of Turku, 20014 Turku, Finland;

anna-maija.kohijoki@utu.fi

Katri Koistinen

Centre for Consumer Society Research, Faculty of Social Sciences, University of Helsinki,

University of Helsinki, 00014 Helsinki, Finland;

katri.koistinen@helsinki.fi

This article has been published in a revised form in Ageing & Society https://doi.org/10.1017/S0144686X21000295.

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Abstract

The urban population ageing has significant implications for city centres to cater for an increasing number of older consumers. To guide world cities on taking action in response to population ageing, the World Health Organization (WHO) has addressed the universal features of the age-friendly city. This study applies the WHO guideline to the context of shopping. With an emphasis on older consumers, the perceptions of the city centre as a physical and social shopping environment are studied. Using a qualitative content analysis, older consumers' perceptions (focus-group participants aged 64–94) are analysed based on the age-friendly city features. The perceptions are compared with those of younger consumers (qualitative-survey respondents aged 21–41). The study confirms the significance of older city shoppers, and suggests their needs and wants to be taken into account in urban development projects. The older consumers differ from younger consumers in their city-shopping behaviour and perceptions with many respects. The age groups highlighted the same themes, but mainly with dissimilar content. This indicates that measures to develop the city centre friendlier to older consumers also benefit their younger counterparts, but for different reasons. It is necessary to understand this disparity to create a city-centre shopping environment that is friendly for different ages. The study offers new perspectives on responding to the challenges that consumer ageing poses to Western cities.

Keywords age-friendly, city centre, older consumer, perception, shopping, younger consumer

Introduction

Population ageing poses a challenge to Western societies to cater for the increasing number of older consumers. In the European Union (EU), for example, the old-age dependency ratio (64+ people vs the 15–64-year-olds) has been estimated to rise to 40 per cent during the 2020s (Eurostat Database). This demographic trend has major implications for cities, given that in the EU, for example, almost 75 per cent of consumers live in urban areas (European Union 2016). More specifically, population ageing should be taken into account in the city centres because they are important shopping environments for older consumers (Bromley and Thomas 2002; Wrigley and Lambiri 2015).

Along with the challenge of adapting to the changes in demographics, several intra-urban centres have faced pressure to remain vital shopping environments. The growing attractiveness of out-of-town shopping centres and e-shopping has decreased the importance of the city centre as a retail location (e.g. Parker *et al.* 2017; Teller, Wood and Floh 2016; Wrigley and Lambiri 2015). Studies on older consumers have reported that inner-city decline has created difficulties for senior citizens taking care of their shopping (Bromley and Thomas 2002; Kohijoki 2011; Temelová and Dvoráková 2012). Although urban development projects have aimed at revitalizing the high streets, older consumers have usually been remained outsiders, and thus considered as undervalued resources, because the emphasis has been on younger consumers (Buffel, Phillipson and Scharf 2012; Buffel 2018; Kohijoki and Marjanen 2013).

The concept of an age-friendly-city, initiated by the World Health Organization (WHO 2007; 2018), has raised awareness of the impacts of population ageing on urban environments (Buffel, Phillipson and Scharf 2012; Fitzgerald and Caro 2014; Steels 2015). It has emphasized that the most effective approach to responding to population ageing is developing cities to become more age-friendly. The aim is to adapt services and physical and social environments to be accessible to citizens of all ages with diverse needs and capacities. The fundamental aim is to support older citizens to age actively and healthily because this contributes to independence in living and taking care of daily chores (Sokolec 2016; WHO 2007; 2018). Although the WHO-led projects have

focused on older citizens, age-friendliness does not refer to the ageing of a specific age group. As active/healthy ageing is considered a lifelong process, an age-friendly city centre should not just be "old-age-friendly" but "friendly for all ages" (Buffel, Phillipson and Scharf 2012; WHO 2007).

With an emphasis on older consumers' perspective, the current study focuses on the age-friendliness of city centres in the context of shopping. As a daily chore outside the home, shopping is considered a vital means for older consumers to stay active and maintain their well-being (Hovbrandt *et al*. 2007; Kohijoki 2011). Thus, it is necessary to promote active ageing also from the shopping point of view. The shopping behaviour of older consumers and their perceptions of the shopping environment has received considerable attention in the grocery shopping context (e.g. Kohijoki 2011; Lesakova 2016; Meneely, Strugnell and Burns 2009; Teller, Gittenberger and Schnedlitz 2013; Wilson, Alexander and Lumbers 2004) but corresponding studies on city centres, multipurpose shopping environments, are few in number (cf. Kohijoki and Koistinen 2018).

Using a focus-group research method, the current study explores the perceptions of older consumers of the city centre as physical and social shopping environment and compares their perceptions with those collected through a qualitative survey among younger consumers. The data is collected in Finland, where the old-age dependency ratio is one of the highest in the EU region (Eurostat Database). As the framework of the qualitative content analysis, the study utilizes the typology of the universal features that the WHO (2007) has identified to contribute to the age-friendly city. This typology has been commonly used in studies relating to social sciences and medicine (Steels 2015) but not in retailing. The current study contributes to the literature by exploring what kinds of content and meanings (if any) these age-friendly city features have in the context of shopping and whether older consumers differ from younger consumers concerning their city-centre shopping behaviour and perceptions of the shopping environment. The study offers new perspectives on retail and urban planning, in particular, in order to satisfy the needs and wants of an increasingly ageing society by recognizing the characteristics of a shopping environment that are relevant in developing the city centres to become friendlier for different ages.

The features of the age-friendly city

The concept of the age-friendly city refers to an urban environment in which citizens are treated equally, regardless of their age. Citizens are enabled to engage in the different activities of the city life and access both the public and private services as well as the physical and social environments (WHO 2007). The age-friendliness of the urban environment is closely related to the concept of active/healthy ageing, which is seen as a process that enhances wellbeing and quality of life as people age (WHO 2002; 2018). The age-friendly environment supports and maintains the ability of ageing citizens to meet their basic needs, to be mobile, to build and maintain social relationships, and to contribute to society, amongst other things (WHO 2018). These issues are incorporated in the Finnish Land Use and Building Act (132/1999) which objective is to create a favourable living environment that is safe, healthy, pleasant, socially functional, and provides for the needs of various population groups, such as the elderly (132/1999: 5§).

To encourage cities around the world to become more age-friendly, WHO (2007) has published a guide for age-friendly cities based on focus groups of 60+ people in 33 countries. The guide consists of eight core features (aka domains) of age-friendly cities that cover the policies, services and structures related to the city's physical and social environments. These somewhat overlapping and interacting features include elements which were found to be universally relevant for older citizens (see Table 1; WHO 2007). Three of the core features are key elements of the physical environment. *Outdoor spaces and buildings* refers to both the built and natural environment. It includes elements related to the location and accessibility of buildings and services, convenience and safety to move around, and the ambience and aesthetics of the environment (e.g. beauty and cleanliness). The *transportation* refers mostly to public transport services because according to the WHO (2007), driving is not an essential transportation option for older citizens. *Housing* includes elements of the housing structure, design, and ageing in place in terms of the location of essential services to the home.

< Insert Table 1 about here >

Five other core features reflect aspects of the social environment, but the physical features also affect some of them (WHO 2007; Steels 2015). *Social participation* refers to engagement in different activities in city life. These include recreation, socialization, and cultural and spiritual activities. In addition to the offerings of activities, the ability to participate depends on receiving information about the services and having access to transportation. *Respect and social inclusion* includes elements related to behaviour and attitudes towards older people and the adaptation of products and services to older people's needs and preferences. It also includes aspects of community and economic inclusion. The experience of inclusion is closely linked to the level of engagement in city activities. *Civic participation and employment* refers to the contribution to the community through paid employment or voluntary work. *Communication and information* refers to the capability (incl. technical know-how) to stay connected with society and to receive timely and relevant information for managing personal matters and meeting personal needs. *Community support and health services* includes the availability and accessibility of social services. Given the aim of the World Health Organization, it refers mostly to health-care services, but it also includes help with shopping.

In the current study, the WHO's typology is applied in the city-centre shopping environment. Several academic studies have emphasized the role of the physical features in the ability of older consumers to take care of their errands. Ageing-related studies have highlighted the meaning of the home and independent living to older citizens (Lux and Sunega 2014; Sokolec 2016; Stones and Gullifer 2016; Wiles *et al*. 2011). Walking is the typical form of physical activity among older people, and its health benefits are well documented. However, physical obstacles in the outdoor environment may decrease the independency to engage in activities outside the home, i.e. prevents opportunities for active ageing (e.g. Hovbrandt *et al*. 2007; Mitra *et al.* 2015). In retailing-specific studies, the physical environment has been a common object of study. However, the emphasis has been confined to the physical accessibility of the stores (incl. location, transportation) as a fundamental aspect for older grocery shoppers, in particular. Older people have often been

considered disadvantaged consumers in terms of their ability to access grocery stores (Kohijoki 2011; Teller, Gittenberger and Schnedlitz 2013; Wilson, Alexander and Lumbers 2004).

The importance of social features has also been particularly highlighted for those old-age-pensioners who seek new activities to fill the social vacuum created by retirement (Wallin 2019; Wiles *et al*. 2011). Several retailing studies have focused on the social perspective of shopping, but these studies have usually explored the relationship between customers and store personnel (e.g. Rosenbaum and Massiah 2011). The studies focusing on the social features outside the store environment (i.e. external shopping environment) are few (e.g. Hart, Stachow and Cadogan 2013). The WHO's typology is considered to provide a useful tool for this purpose. The typology covers several aspects of city life. Some social features apparently only have an indirect connection with shopping activity. In the current study, however, all core features are explored as there is evidence that older consumers show a tendency towards multipurpose shopping, and they look for social interaction in the stores. In addition to services offered, both the built environment and social aspects of shopping are found to be important to older consumers (e.g. Kohijoki 2011; Lesakova 2016; Meneely, Strugnell and Burns 2009; Wilson, Alexander and Lumbers 2004). The age-friendliness of city centres should be evaluated from the shopping point of view in order to create urban environments that enable consumers to have an active, healthy and independent life while they age (Buffel, Phillipson and Scharf 2012).

Methods

The study took place in the city of Turku (pop. 187,000) in southwest Finland as a part of the research project *The city centre as an age-friendly shopping environment*. According to the old-age dependency ratio, the population in the Turku area is older than in other large urban areas in Finland (Official Statistics of Finland a). The study focused on consumers who were familiar with shopping in the Turku city centre (Figure 1). To gain an understanding of the perceptions of older consumers of the city-centre shopping environment, in line with the recommended number and size of the groups (e.g. Krueger 1988), four focus-group discussions with 5–6 participants (a total of 22

participants; two men, 20 women) were organized (Table 2) in autumn 2016. The method was convenient as it did not discriminate those who were incapable of filling in questionnaires or using information technology (Kitzinger 1995).

< Insert Figure 1 about here >

< Insert Table 2 about here >

The recruitment was conducted on a volunteer basis through senior clubs, housing corporation and the authors' networks. The authors guided their contact persons to compile the groups of volunteers, consisting of both men and women, aged around 60+, from the communities they represented. Otherwise, the volunteers were different by their background, which gave the desired variation among the participants to allow for contrasting views (cf. Krueger 1988). However, women were easier to get involved in the focus groups than men; two men even cancelled at the last minute. The uneven distribution of men and women was not considered problematic as the aim was not to compare the genders' perspective. In addition, the majority of the aged households in Finland consists of women living on their own, and in the cohabiting households, like in other Western countries, females have the primary responsibility for household shopping (Dholakia 1999; Official Statistics of Finland a; Sidenvall, Nydahl and Fjellström 2001).

The focus-group participants were 64–94-year-old pensioners (avg. age 75) who lived and did their shopping independently. The discussions followed pre-formulated themes based on the studies on the effect of shopping environment on consumer experience (e.g. Hart, Stachow and Cadogan 2013; Kohijoki & Koistinen 2018). The discussion themes are presented on the left side of Table 3 divided into four sections. After a short round of introductions (section I), the participants described their typical city-shopping trip (section II), how they perceived the city centre as a shopping environment, and how they were currently catered for (sections II and III). In addition to the current state of affairs, proposals for improvements were discussed. After a free discussion (section IV), a brief questionnaire (font size larger than normal) concerning background information on demographic characteristics and shopping behaviour (e.g. visit frequency and mode of travel to

alternative shopping destinations) was completed. The average length of the discussions was two hours, and they were recorded and transcribed in their entirety.

< Insert Table 3 about here >

The perceptions of younger consumers were collected (spring 2018) through a qualitative online survey in which the participation was voluntary. Besides background information, the survey included open-ended, qualitative research questions on the same themes as in the focus groups (see Table 3). The participants were accustomed to using information technology, and the free-form questions enabled them to freely express their experiences and perceptions without word limits (Smyth *et al*. 2014; Tuomi and Sarajärvi 2018). The participants (a total of six men and 11 women, see Table 4) were 21–41-year-old university students (avg. age 26). They formed an appropriate group for comparison with the pensioners because, based on the socio-economic classifications, both groups belonged to the socio-economic group of economically inactive consumers who have time to use for running errands (Official Statistics of Finland b).

< Insert Table 4 about here >

Both sets of data were analysed using qualitative content analysis complying with deductive logic (Mayring 2004; Tuomi and Sarajärvi 2018). After thorough readings of the data, the comments were organized, and summaries of the content and meanings were composed according to the typology of the age-friendly city features (WHO 2007). As the discussion/survey themes did not fully resemble the WHO's typology, the individual elements presented in Table 1 were used as a guideline to analyse the consumers' perceptions. The perceptions of the physical features were searched from all discussion themes and respective survey questions but particularly from the third section considering the physical shopping environment (Table 3). The social features were mainly identified from the second section considering the typical shopping trip, but the other sections also included valuable data on social aspects of shopping. In this paper, summaries of the feature-related perceptions and shopping behaviour, divided into physical and social environments, are presented

and the age groups compared. Regarding the background information, the frequencies were used to describe the data.

The study complied with the ethical guidelines drawn up by the Finnish National Board on Research Integrity (TENK guidelines 2019). The researchers respected the autonomy of the participants, and the research did not cause physical or mental harm to the participants. Participation in the research did not deviate from the principle of informed consent. The volunteers were informed of the real content and purpose of the study, the processing of their personal data and how the research will be conducted. Prior to the analysis, the identity of the participants was anonymized to maintain research confidentiality. The pseudonyms (e.g. Woman 65, Man 23) were used when reporting the individual comments in the following section.

Findings

The content and meanings of the physical and social features in the context of shopping are summarized in Tables 5 and 6. For each core feature (e.g. Outdoor spaces and buildings), tables present the main themes (e.g. *Compactness*) revealed in both sets of data and specify the perceptions or behaviour of older and younger consumers relating to these overarching themes (e.g. easy to walk from shop to shop vs time-efficient shopping). The viewpoints of the age groups were different in most of the themes. In this section, relevant background information and the findings on physical features are reported in the order they emerged in the city-shopping trip of the older participants, whereas the social features mainly follow the order of the WHO's typology (Table 1).

Physical environment

Housing

The older participants started by describing their shopping trips from home. About half of them lived in an apartment in or near the city centre, whereas one third lived in a terraced or detached house in the suburbs (Table 2). A convenient location of the home with respect to the city-centre services was emphasized (Table 5). They did not have major problems with accessing the services,

but they were worried about the future. They hoped to stay healthy and active enough to be able to live in their present home for as long as possible (i.e. ageing in place). One participant highlighted: "*It's important… that we can go where we want by ourselves… this kind of activity is decreasing; it's highly valuable to maintain this option"* (Woman 82). The younger participants lived in the vicinity of the city centre (Table 4), mainly temporarily in student apartments, and thus they considered the services easily accessible. By a convenient location, they meant quick shopping on the way home from other activities. For example, one participant described: "*I make the purchases in the centre while going to the university or home"* (Man 23).

< Insert Table 5 about here >

Transportation

The city centre was visited regularly, as two-thirds of both age groups did city shopping at least once a week. They highlighted convenience and functionality to easily access the market square, which they considered the heart of the commercial city centre (see Table 5 and Figure 1). Several modes of travel were used, bus and a private car being the most common choices among older consumers. Younger consumers usually walked or took a bus. As there were very few cycle paths or cycle parks in the core centre, those who preferred cycling had to park a few blocks away from the market square. It is worth noting that the data were collected during the seasons when the weather is usually pleasant for travelling with different modes. However, the winter frosts or summer heats rarely prevent outdoor activities, like an older participant said: "*I visit the city centre whether it's winter or summer, the weather has no effect on that*" (Woman 67).

Although two-thirds of the older participants and one-third of the younger participants had access to a private car (Tables 2 and 4), the bus was considered a more convenient and functional method for travelling to the centre. For the older consumers, the reasons were the low-priced tickets and frequent daytime schedules with direct access to the market square. Both groups found it convenient that the bus terminals were located around the market square. In the open square, the buses were also easy to find. Although the car owners perceived it to be easy to drive to the centre,

they usually left their car at home because parking was inconvenient around the market square. Both groups suggested improvements in parking facilities but from different perspectives. For older drivers, inconvenient parking meant that parking times were too short for shopping and, for younger drivers, (free) parking places were hard to find, as stated in the following comments:

> *I seldom go there* [by car] *because the* [parking] *times are so short*. (Woman 67)
>
> *You need more time* [for city shopping] *because first you need to find a place for the car*. (Woman 41)

The bus ride, however, did not avoid criticism. The older consumers considered carrying purchases on the bus to be inconvenient. When it was necessary to make heavy purchases, some drove to out-of-town stores, but carless seniors had to rely on taxis to get home from the centre. The bus services were considered inaccessible, particularly among mobility-restricted seniors, for whom driving competence was the only means of coping with city shopping independently. One older participant argued: "*for customers with a rollator, it's difficult to travel by bus… and the buses depart so quickly that many people fall down*" (Woman 67). Several younger consumers complained that on weekends, in particular, the bus services to the city centre were inadequate. One participant pointed out: "*I have noticed that I don't travel by bus to the centre on Sundays due the infrequent schedule*" (Woman 24).

Outdoor spaces and buildings

The layout of the city centre was considered to be compact, with a variety of services located a few blocks from the market square. For the older consumers, compactness meant that the distances were short enough for them to walk easily from shop to shop. For the younger consumers, compactness meant, above all, being able to handle their purchases time-efficiently (Table 5). This disparity comes up in the following comments:

> *As it's so small and compact, it's easy to run errands and to go from one place to another* (Woman 81).

All services are close to each other, and shopping is therefore quick and easy (Woman 23).

The older consumers emphasized that the city centre is a barrier-free walking environment, and the brick-and-mortar stores are easy to access. However, referring to cobbled-street pedestrian areas, they wished for smooth and non-slip surfacing to decrease the risk of falling. The younger consumers also found cobblestones unpleasant, but they did not highlight the issues of accessibility in outdoor spaces. This indicates that these issues are at a tolerable level.

Both groups agreed that the city centre is a secure shopping environment regarding crime (social environment). However, they were concerned about traffic. The fear of being run over by a car when crossing the road reduced the feeling of security among the older consumers. One older participant described: "*cars go through a red light… but if you are careful and make sure that it's a green light, and then running, you manage* [to cross the roads]" (Woman 80). For their part, the younger consumers felt that cycling among traffic was dangerous. For example, one participant demanded that: "*there should be more cycle paths… it would increase safety*" (Man 36). Despite the perceived safety risk, the older consumers disagreed with the younger that cars should be banned from the centre. As noted regarding transportation, the older consumers wished they would be able to drive to the centre by themselves. The younger consumers reinforced their argument by mentioning the unpleasant exhaust fumes.

Regarding the building architecture, both groups paid attention to similar characteristics. In the market square surroundings, the buildings built during the past 60 years were seen as boring, whereas the neoclassical-style theatre and church represented beauty in the architecture. The riverfront, two blocks from the market square (see Figure 1), was considered a harmonious environment with many beautifully restored buildings, elegant examples of their era of architecture. Participants in both age groups agreed with the following comments:

Not on the riverfront, but elsewhere, there's no consistent [architectural] *line* (Man 73).

The riverfront is wonderful, but the market square surroundings and shopping street seem somehow grey (Woman 23).

The riverfront promenade and the city parks were important places for both groups. It was typical of the older consumers to pop into the parks while shopping. They emphasized the importance of preserving these green areas because they are vital for those who are unable to walk in the forests. Thus, the city centre offered convenient space for outdoor activities all year round. For the younger consumers, green areas were important places to spend time with their friends. Thus, they hoped for more lawn-surfaced pedestrian areas. Like the older participants, they also desired more seating. For the younger consumers, parks and public seating areas provided places to hang out with their friends without obligation to buy anything. For the older consumers, seating facilitated their shopping. As they spend time shopping, they need places to rest their feet. They frequented cafés and restaurants, but they also called for benches in the market square, pedestrian (shopping) street, and inside the department stores they patronized. This disparity between the age groups comes up in the following:

> *There should be benches… I think our mobility is worsening all the time* (Woman 68).
>
> *There should be more free spaces for hanging around, especially in winter. In summer, we meet friends in the riverfront and parks* (Woman 23).

Lastly, the issue that both groups had paid attention to in the outdoor environment was the rubbish on the streets, which they considered to decrease the attraction. The following comments indicate that more rubbish bins were suggested, but above all, changes in attitudes:

> *There is dirt everywhere… but no one can do anything unless people change their attitudes* (Woman 79).
>
> *The cleanliness could be better, but it requires that residents and visitors change their attitudes* (Man 21).

Social environment

Social participation

Social engagement (see Table 6) was important for both age groups when visiting the city centre.

There was a consensus that there were enough events and activities available. The older participants actively participated in various citizens' clubs, but the younger participants did not show a similar engagement. Both groups enjoyed the fairs, music and other cultural events, but they wished for more free admissions to allow everyone to participate. In addition, the older consumers regretted that musicals and theatre plays are performed in the evening. Unlike the younger consumers, they avoided the city centre in the evenings due to feelings of insecurity. It was typical that the older consumers engaged in recreational, cultural and spiritual activities on their shopping trip in the city centre. They enjoyed frequenting cafés, restaurants, the library and exhibitions, in particular. For them, city shopping was a vital means of preventing loneliness. Some of them had regular lunches with their friends, for example, but, more often, they went city shopping alone to see other people or find someone to talk with. The market square and market hall were pleasant places to keep up these spontaneous relations. One participant described: "*every morning I think about what I need to buy… I eat out, meet people and friends in the market square, pop up clothing stores, buy food… I go to the city centre to look around and spend time*" (Woman 81).

On the other hand, the younger consumers did not go shopping in search of the company. They made separate trips to meet their friends in bars and restaurants, usually in the evenings, and at student events. For example, one participant condensed: "*meetings with friends, participating in events, on a separate trip, in the evening* (Man 26). As pointed out in the context of outdoor spaces, frequenting restaurants becomes costly, so city parks and the riverbank offered free sites for hanging around and having a picnic with friends.

< Insert Table 6 about here >

Civic participation and employment

Regarding city-shopping behaviour of the older participants, this feature was closely related to social participation. All the older participants were pensioners, and many of them were actively involved in volunteering. They considered it important that the events and clubs where they were volunteering were located in the city centre for ease of access and to make it convenient to shop on

the same trip (Table 6). The younger participants were full-time students, and some of them worked part-time. Although some of them were active operators in student activities, volunteering in clubs and so on was not highlighted or connected with the main shopping activity.

Respect and social inclusion

Neither the older nor the younger participants had experienced age-based discrimination by other citizens. The older consumers were pleased that help was available when needed, even from strangers. Because they were looking for social contact, they preferred to shop in the market square and hall where the service was more personal than in the grocery stores. One participant highlighted: "*there* [in the market square/hall] *you can have such a social contact that you don't have in large markets, I need that*" (Woman 68). Although older consumers could acquire all necessary products and services from the city centre, they expressed a wish for the fashion retailers to improve their ranges targeted at older adults (Table 6). They added that they did not frequent out-of-town shopping centres because they considered them to be targeted at younger shoppers. Regarding community inclusion, the older participants were pleased that the researchers and the city authorities were interested in their perceptions.

The younger consumers were also satisfied with the offerings of the city centre, but sometimes they directed their shopping to out-of-town. They specified that sports-gear selection was much broader in off-centre shopping centres. Although the small city-centre food stores offered efficient shopping, lower prices made them occasionally shop at the off-centre hypermarkets. For example, one participant described: "*I buy food from* [an out-of-town] *hypermarket because there are lower prices than in the city centre*" (Woman 23). Regarding economic inclusion, although both students and pensioners are entitled to special discounts from services, the younger participants, contrary to the older, repeatedly highlighted the importance of low prices or free entrances.

Communication and information

Most of the older participants had appropriate devices and the knowhow to use information technology, acquire information, and run their errands through e-channels. They used health and

bank e-services rather competently and regularly bought travel and theatre tickets. However, they did regret that many service providers, banks, in particular, have reduced the number of physical service counters. Apart from tickets, the older consumers seldom shopped online. They considered e-shopping to be a socially isolating activity (Table 6), and even spontaneous meetings in the centre were vital for staying connected with society. One participant said: "*I don't e-buy because it's a nice experience when you shop in a* [physical] *store*" (Woman 66).

The younger participants were experienced with technology, frequently shopping online to get products unavailable elsewhere, to make shopping easy, and to find competitive prices. The products they usually bought online were tickets, books, electronics and clothes. Although the younger consumers were accustomed to e-shopping, their perceptions indicated webrooming behaviour. They used the web to find information and to make price comparisons, but the brick-and-mortar stores were still their main shopping channel, like one participant described: "*e-shopping is usually pleasant. I don't need special contact with personnel, but I don't want to buy, e.g. clothes, without trying"* (Woman 23).

Community support and health services

The older participants regularly used health and wellness services (e.g. hairdressing, manicures) in the city centre. On the same trip, they did their shopping, frequented cafés and so on. One participant described: "*It is a pastime* [to shop] *in the centre, and those pampering places are there, I use those* [services] *once a month, also the doctor... and usually afternoon coffee with my friend*" (Woman 67). This kind of multipurpose activity was seen to increase physical and mental wellbeing (Table 6). They highly appreciated that click-and-collect/delivery services have increased, but they still wanted to do their shopping without home help for as long as possible. They considered physical shopping to be a means of getting exercise – and that the city centre offers a convenient and appealing environment for this purpose (cf. outdoor spaces and buildings).

The younger participants did not mention health services, probably due to the off-centre location of the student health-care services. Regarding wellness services, they were pleased that there were

many hairdressing/barber services at affordable prices in the centre. One participant pointed out: "*there are at least a million cheap barbers in the centre, and they offer discounts for students"* (Man 23). In addition, gyms were regular destinations for many, but also these services were usually used on a separate trip from main shopping. Regarding home-delivery services or e-shopping in general, the younger consumers considered them to alleviate their busy schedules.

Discussion and conclusions

The current study focused on the age-friendliness of the city-centre shopping environment from the perspective of older consumers but also compared their perceptions to those of younger consumers to gain an understanding of how to develop city centres to become friendly for different ages. The comparative research setting also highlighted the uniqueness of older people as consumers. Taking into consideration that this consumer segment is increasingly important for the city-centre retailers and the vitality of city centers, very few academic studies have focused on older city shoppers. According to the authors' knowledge, this study was the first to utilize the age-friendly city framework (WHO 2007) in the context of shopping. Given the purpose of the study, the typology of age-friendly city features turned out to be applicable. The physical features were rich in perceptions, and all the social features had connections to shopping activity, especially among older consumers. The study revealed new content and meanings to the existing features. In terms of social features, in particular, perspectives, which have not gained much attention in retailing studies, were revealed. The study highlighted the fact that shopping activity plays a significant role in the age-friendly city centre. Supporting active/healthy ageing and independent living of older people have been policy priorities in ageing societies. The findings confirmed that shopping outside the home is a fundamental activity for ageing citizens to maintain physical and mental well-being (cf. Hovbrandt et al. 2007); thus, it is essential to support this opportunity and implement the age-friendly-oriented policy and practice.

Consistent with prior studies (e.g. Lesakova 2016; Meneely, Strugnell and Burns 2009), the physical features of the environment, as well as the social aspects of shopping were found to be

important to older consumers. This indicates that physical and social environments are strongly interconnected in the city centre, and thus should not be considered separately (cf. Steels 2015; WHO 2007). The out-of-town shopping centre, for example, may be easily accessible by private car or public transportation and offer a physically barrier-free shopping environment under one roof. Citing the social features, however, the shopping centres, nor online stores, were not perceived as attractive environments like the city centre for the older consumers in the current study. The study showed that city centres are vital shopping destinations for older consumers, but they should offer more than just places to shop. It is not only the services provided or the physical features, which facilitate shopping but also the social aspects that affect older consumers' patronage behaviour. The external shopping environment, in particular, turned out to be the asset of the city centre as compared to the aforementioned enclosed competitors. The main responsibility for developing the external shopping environment has been on the urban planning authorities, whereas the internal store environment has been managed by the retailing. To increase the age-friendliness of the city-centre shopping environment, the current study calls for established procedures that contribute far-reaching co-operation with different sectors – working in concert results in greater outcomes than what would be achieved separately.

The vital city-centre shopping environment supports the independent living of older citizens, but it also attracts younger shoppers to the city centre. It turned out that the older city shoppers highlighted the same themes as their younger counterparts (Tables 5 and 6). However, the age groups differed in their shopping behaviour and used the same city spaces in dissimilar ways and partly at different times of the day. Because the age groups viewed the age-friendly city features through different lenses, the feature-related perceptions of the older consumers diverged from those of the younger. Taking convenience as an example, which has been identified as an important criterion in shopping destination choices (e.g. Parker *et al*. 2017; Wrigley and Lambiri 2015). Both age groups highlighted this characteristic in the shopping environment, but for the older consumers, convenience meant independence, whereas efficiency for the younger consumers. Convenient

access and convenience of moving around - with different modes of travel - characterised the age-friendly city centre shopping environment. Social engagement, as another example, was also highlighted in both groups, but among the older consumers, it was strongly attached to shopping activity. The older participants were daytime shoppers who prefer to connect shopping, e.g. with recreational activities (e.g. frequenting cafes and restaurants). However, by providing a competitive offer, several city centres have recently put effort on specialising in recreational activities offered mostly in the evening (Teller, Wood and Floh 2016). In an age-friendly city centre, these activities are also provided daytime to cater to senior shoppers who aim to fill their social vacuum (cf. Wallin 2019). To sum up, older consumers highly emphasised shopping independence; they were more service-oriented and more frequently connected shopping with social networking. The younger consumers were more price-sensitive and tended to do their main shopping, time-efficiently, on a separate trip from other activities.

In many respects, the suggestions for improvements were similar, which indicates that the same measures for developing the city-centre shopping environment do benefit consumers of different ages but for different reasons. This disparity is essential for different actors in city-centre retailing and urban planning to understand in order to satisfy the needs and wants of consumers of different ages. The outdoor seating, for example, is easily actualise mean to increase the city-centre attractiveness at a relatively low cost. The younger consumers called for places to hang out with their friends without obligation to buy anything. In contrast, older consumers wished for proper seating for resting their feet and enjoying the atmosphere while shopping.

The current study revealed practical actions to be realised in achieving an age-friendly city-centre shopping environment. However, implementing these actions requires awareness of age-friendly issues also at the policy-making level. Older people should be considered valued resources not only as citizens but also as consumers. The decisions should be made with an understanding of their heterogeneous characteristics and needs. Thus, integrating academic research in the decision-making process as well as in the actions of practitioners is valuable. Taking older people’s

perceptions into account is one of the principles in designing age-friendly communities (WHO 2007). In a favourable living environment, everyone has the right to participate (Land Use and Building Act 132/1999). As the older city shoppers proved to have unique perceptions and be a significant customer segment for city centres, they should not be treated as outsiders in development projects (cf. Buffel, Phillipson and Scharf 2012; Buffel 2018). However, participation methods appropriate for older people should be used. By acknowledging older city shoppers, societies can also be better prepared for the ageing of younger generations.

Due to its novelty, the study was descriptive and offered a new perspective on responding to the challenges that consumer ageing poses to Western cities. Although the findings were limited to a medium-sized city, and some of them were location-specific, the fundamental challenges of ageing are similar irrespective of city type (cf. Lux and Sunega 2014; WHO 2007). However, a comparative study between several cities is recommended. For example, contrary to the findings of the WHO (2007), maintaining driving competence was here found to be vital to the older participants. This indicates that the planning policy that promotes total car bans does not contribute to the age-friendly city-centre shopping environment. However, evidence from other cities would reveal whether this finding was location-specific and/or shopping-related.

The data sets in the study were comparable despite the different methods of collection. Several studies have revealed that older people prefer interviewer-administered methods, whereas young adults prefer to express their feelings via the web (e.g. Smyth *et al.* 2014). Using focus groups proved to be successful with the older participants because reading and writing turned out to be challenging for many. Thus, to increase community inclusion among older citizens, more interactive means than web-based platforms should be utilised. However, the anonymity of a web-survey allowed the younger consumers to openly express their concerns about money, for example, whereas the focus-group participants did not share their thoughts on this topic. Talking about money may be a taboo for older generations, but the findings supported the evidence that older consumers value service(s) over price (e.g. Kohijoki and Marjanen 2013). Finally, the study focused

on two significant consumer segments – the current and the future seniors - for the city centre vitality. Middle-aged consumers and those with children, in particular, were purposefully excluded from this study. To form a more comprehensive understanding of city shoppers, studies with a focus on several stages of life are recommended. Using "walk-along" interviews on shoppers' interaction with the city space in which they move would target the actions on the right places and at the right time of the day.

Ethical standards

The study complied with the ethical guidelines of the Finnish National Board on Research Integrity (TENK guidelines 2019). The Ethics Committee for Human Sciences at the University of Turku (Humanities and Social Sciences Division, 19 May 2020) has stated that this research did not meet any of the criteria that would have required ethical review from the Committee.

Financial support

This work was supported by the Foundation for Economic Education in Finland

Declaration of contribution of authors

Both authors made a substantial contribution to the conception and design, data collection, analysis and interpretation of data, and the drafting and revising of the article.

Conflict of interest

The authors declare no conflict of interest.

Acknowledgements

The authors would like to thank the Foundation for Economic Education for supporting this study, and the editors and the anonymous reviewers for their helpful feedback. Special thanks are given to the consumers who participated in the study.

References

Bromley RDF and Thomas CT (2002) Food shopping and town centre vitality: Exploring the link. *The International Review of Retail, Distribution and Consumer Research* **12**, 109-130. doi:10.1080/09593960210127682.

Buffel T (2018) Social research and co-production with older people: Developing age-friendly communities. *Journal of Aging Studies* **44**, 52-60. doi: 10.1016/j.jaging.2018.01.012

Buffel T, Phillipson C and Scharf T (2012) Ageing in urban environments: Developing "age-friendly" cities. *Critical Social Policy* **32**, 597-617. doi:10.1177/0261018311430457.

Dholakia RR (1999) Going shopping: Key determinants of shopping behaviors and motivations. *International Journal of Retail & Distribution Management* **27**, 154-165. doi: 10.1108/09590559910268499.

European Union (2016) *Urban Europe. Statistics on Cities, Towns and Suburbs*. Publications office of the European Union, Luxembourg.

Eurostat Database, *Projected Old-Age Dependency Ratio*. Available online at https://ec.europa.eu/eurostat/data/database [16 September 2020].

Fitzgerald KG and Caro FG (2014) An overview of age-friendly cities and communities around the world. *Journal of Aging & Social Policy* **26**, 1-18. doi:10.1080/08959420.2014.860786.

Hart C, Stachow G and Cadogan JW (2013) Conceptualising town centre image and the customer experience, *Journal of Marketing Management* **29**, 1753-1781, doi:10.1080/0267257X.2013.800900

Hovbrandt P, Ståhl A, Iwarsson S, Horstmann V and Carlsson G (2007) Very old people's use of the pedestrian environment: Functional limitations, frequency of activity and environmental demands, *European Journal of Ageing* **4**, 201-211. doi:10.1007/s10433-007-0064-2.

Kitzinger J (1995) Qualitative research: Introducing focus groups. *BMJ* **311**, 299-302. doi:10.1136/bmj.311.7000.299.

Kohijoki A-M (2011) The effect of aging on consumer disadvantage in grocery retail services among the Finnish elderly. *Journal of Retailing and Consumer Services* **18**, 370-377. doi:10.1016/j.jretconser.2011.04.003.

Kohijoki A-M and Koistinen K (2018) The effect of the physical environment on consumers' perceptions: A review of the retailing research on external shopping environment. *Architecture and Urban Planning* **14**, 83-90. doi:10.2478/aup-2018-0011.

Kohijoki A-M and Marjanen H (2013) The effect of age on shopping orientation. Choice orientation types of the ageing shoppers. *Journal of Retailing and Consumer Services* **20**, 165-172. doi:10.1016/j.jretconser.2012.11.004.

Krueger RA (1988) *Focus Groups. A Practical Guide for Applied Research*. Sage Publications, California.

Land Use and Building Act (132/1999), Finlex. Available online at https://www.finlex.fi/fi/laki/ajantasa/1999/19990132 [16 September 2020].

Lesakova D (2016) Seniors and their food shopping behaviour: An empirical analysis. *Procedia – Social and Behavioral Sciences* **220**, 243-250. doi:10.1016/j.sbspro.2016.05.496.

Lux M and Sunega P (2014) The impact of housing tenure in supporting ageing in place: Exploring the links between housing systems and housing options for the elderly. *International Journal of Housing Policy* **14**, 30-55. doi:10.1080/14616718.2014.884880.

Mayring P (2004) *Qualitative content analysis*. In Flick, U., von Kardorff, E. and Steinke, I. (eds), A Companion to Qualitative Research. Sage Publications, London, UK, 266-269.

Meneely L, Strugnell C and Burns A (2009) Elderly consumers and their food store experiences. *Journal of Retailing and Consumer Services* **16**, 458-465. doi:10.1016/j.jretconser.2009.06.006.

Mitra R, Siva H and Kehler M (2015) Walk-friendly suburbs for older adults? Exploring the enablers and barriers to walking in a large suburban municipality in Canada. *Journal of Aging Studies* **35**, 10-19. doi:10.1016/j.jaging.2015.07.002.

Official Statistics of Finland a, *Population Structure*. Available online at http://www.stat.fi/til/vaerak/index_en.html [16 September 2020].

Official Statistics of Finland b, *Time use*. Available online at http://www.stat.fi/til/akay/index_en.html [16 September 2020].

Parker C, Ntounis N, Millington S, Quin S and Castillo-Villar CF (2017) Improving the vitality and viability of the UK high street by 2020: Identifying priorities and a framework for action. *Journal of Place Management and Development* **10**, 310-348. doi:10.1108/JPMD-03-2017-0032.

Rosenbaum MS and Massiah C (2011) An expanded servicescape perspective, *Journal of Service Management* **22**, 471-490, doi:10.1108/09564231111155088

Sidenvall B, Nydahl M and Fjellström C (2001) Managing food shopping and cooking: the experiences of older Swedish women. *Ageing and Society* **21**, 151-168. doi: 10.1017/S0144686X01008121.

Sokolec J (2016) The meaning of "place" to older adults. *Clinical Social Work Journal* **44**, 160-169. doi:10.1007/s10615-015-0545-2.

Stones D and Gullifer J (2016) At home it's just so much easier to be yourself': Older adults' perceptions of ageing in place. *Ageing and Society* **36**, 449-481. doi: 10.1017/S0144686X14001214.

Steels S (2015) Key characteristics of age-friendly cities and communities: A review. *Cities* **47**, 45-52. doi: 10.1016/j.cities.2015.02.004.

Smyth JD, Olson K and Millar MM (2014) Identifying Predictors of Survey Mode Preference. *Social Science Research* **48**, 135–44. doi:10.1016/j.ssresearch.2014.06.002

Teller C, Gittenberger E and Schnedlitz P (2013) Cognitive age and grocery-store patronage by elderly shoppers. *Journal of Marketing Management* **29**, 3317-337. doi:10.1080/0267257X.2013.766627.

Teller C, Wood S and Floh A (2016) Adaptive resilience and the competition between retail and service agglomeration formats: An international perspective. *Journal of Marketing Management* **32**, 1537-1561. doi:10.1080/0267257X.2016.1240705

TENK guidelines (2019) *The ethical principles of research with human participants and ethical review in the human sciences in Finland.* Publications of the Finnish National Board on Research Integrity TENK 3/2019. Available online at https://tenk.fi/en/ethical-review/ethical-review-human-sciences [26 August 2020].

Temelová J and Dvoráková N (2012) Residential satisfaction of elderly in the city centre: The case of revitalizing neighbourhoods in Prague. *Cities* **29**, 310-317. doi:10.1016/j.cities.2011.11.015.

Tuomi J and Sarajärvi A (2018) *Laadullinen tutkimus ja sisällönanalyysi* [Qualitative Research and Contenet Analysis]. Kustannusosakeyhtiö Tammi, Helsinki, Finland.

Wallin A (2019) *Eläkeläisten tila. Kaupunkitilan ja eläkeläisten sosiaalisen toiminnan tarkastelu* [Pensioners' Space]. University of Tampere, Tampere.

WHO, World Health Organization (2002) *Active Ageing: Policy Framework.* Available online at https://www.who.int/ageing/publications/active_ageing/en/ [16 September 2020].

WHO, World Health Organization (2007) *Global Age-Friendly Cities: A Guide.* Available online at https://www.who.int/ageing/publications/age_friendly_cities_guide/en/ [16 September 2020].

WHO, World Health Organization (2018) *The Global Network for Age-friendly Cities and Communities. Looking Back Over the Last Decade, Looking Forward to the Next.* Available online at https://www.who.int/ageing/gnafcc-report-2018.pdf. [16 September 2020].

Wiles JL, Leibing A, Guberman N, Reeve J and Allen RES (2011) The meaning of "aging in place" to older people. *The Gerontologist* **52**, 357-366. doi:10.1093/geront/gnr098.

Wilson LC, Alexander A and Lumbers M (2004) Food access and dietary variety among older people. *International Journal of Retail & Distribution Management* **32**, 109-122. doi:10.1108/09590550410521789.

Wrigley N and Lambiri D (2015) *British High Streets: From Crisis to Recovery? A Comprehensive Review of the Evidence*, University of Southampton, Economic & Social Research Council.

Table 1. The age-friendly city features (WHO 2007)

Physical environment			
<u>Outdoor spaces and buildings</u>			
• Environment • Green spaces and walkways	• Outdoor seating • Pavements • Roads	• Traffic • Cycle paths • Safety	• Services • Buildings • Public toilets
<u>Transportation</u>			
• Affordability • Reliability and frequency • Travel destinations • Age-friendly vehicles • Specialized services	• Priority seating • Transport drivers • Safety and comfort • Transport stops and stations • Information	• Community transport • Taxis • Roads • Driving competence • Parking	
<u>Housing</u>			
• Affordability • Essential services • Design	• Modifications • Maintenance • Ageing in place	• Community integration • Housing options • Living environment	
Social environment			
<u>Social participation</u>			
• Accessibility of events and activities • Affordability • Range of events and activities • Facilities and settings		• Promotion and awareness of activities • Addressing isolation • Fostering community integration	
<u>Respect and social inclusion</u>			
• Respectful and inclusive services • Public images of ageing	• Intergenerational and family interactions • Public education	• Community inclusion • Economic inclusion	
<u>Civic participation and employment</u>			
• Volunteering options • Employment options • Training	• Accessibility • Civic participation • Valued contributions	• Entrepreneurship • Pay	
<u>Communication and information</u>			
• Information offer • Oral communication • Printed information		• Plain language • Automated communication and equipment • Computers and the Internet	
<u>Community support and health services</u>			
• Service accessibility • Offer of services		• Voluntary support • Emergency planning and care	

Table 2. Characteristics of older participants

Participants' relationship to each other	Venue of the session*	Gender	Year of birth	Household size	In/off-centre resident	House type**	Access to car
Friends who meet regularly	Private apartment	Woman	1952	one	off-centre	apartment	yes
		Woman	1950	two	off-centre	apartment	yes
		Woman	1949	one	off-centre	detached	yes
		Woman	1948	two	in-centre	apartment	yes
		Woman	1948	one	off-centre	apartment	no
Members of a senior citizens' club	Club premises	Woman	1949	two	off-centre	detached	yes
		Woman	1946	one	in-centre	apartment	yes
		Woman	1944	two	off-centre	terraced	yes
		Woman	1938	one	off-centre	apartment	no
		Woman	1937	one	in-centre	apartment	yes
		Woman	1935	one	in-centre	apartment	no
Members of a citizens' club	University premises	Woman	1951	two	off-centre	detached	yes
		Woman	1945	two	off-centre	apartment	yes
		Woman	1944	two	off-centre	terraced	yes
		Man	1944	two	off-centre	terraced	yes
		Woman	1936	two	off-centre	apartment	yes
Residents of a housing corporation	Housing-corporation premises	Man	1943	two	in-centre	apartment	yes
		Woman	1935	one	in-centre	apartment	no
		Woman	1934	one	in-centre	apartment	no
		Woman	1932	one	in-centre	apartment	no
		Woman	1923	one	in-centre	apartment	no
		Woman	1922	one	in-centre	apartment	no

* in autumn 2016; ** based on address

Table 3. The focus-group discussion themes and survey questions

Section	Older consumers (focus-group discussions)	Younger consumers (survey)
I	• Introduce yourself briefly and tell the group where you usually buy your groceries and why you shop in that particular place.	
II	• What comes to mind first when you think about Turku city centre as a shopping environment? • Describe your typical shopping trip to Turku city centre. • How are older consumers catered to in Turku city centre?	• What comes to mind first when you think about Turku city centre as a shopping environment? • Describe your typical shopping trip to Turku city centre. • How are students/young adults catered to in Turku city centre? • Describe your typical shopping trip/behaviour to/in other shopping destinations (incl. e-shopping)
III	• Describe Turku city centre as a physical shopping environment. • What thoughts does the following functional, aesthetic and ambient element arouse when you consider Turku city centre, and what thoughts do they arouse if you think about developing the city centre?	• What thoughts does the following functional, aesthetic and ambient element arouse when you consider Turku city centre, and what thoughts do they arouse if you think about developing the city centre?
IV	• Is there anything else you would like to share with us about the topic?	• Is there anything else you would like to tell about the topic?
Demographic characteristics and shopping behaviour	(questionnaire) • Name, year of birth, address, stage of life, household size, car-ownership • Shopping frequency at the city centre and other main shopping destinations (incl. e-shopping) • Mode of transportation to the city centre and other main shopping destinations	• Gender, year of birth, place of living, stage of life, household size, car-ownership • Shopping frequency at the city centre and other main shopping destinations (incl. e-shopping) • Mode of transportation to the city centre and other main shopping destinations

Table 4. Characteristics of younger participants

Gender	Year of birth	Household size	In/off-centre resident	House type*	Access to car
Woman	1994	one	off-centre	apartment	no
Woman	1995	two	off-centre	apartment	yes
Woman	1995	two	in-centre	apartment	yes
Man	1992	one	off-centre	apartment	no
Man	1994	one	in-centre	apartment	no
Woman	1977	four	off-centre	n/a	yes
Woman	1995	two	in-centre	n/a	yes
Man	1995	one	in-centre	n/a	no
Man	1982	one	off-centre	apartment	no
Woman	1993	one	off-centre	apartment	no
Woman	1994	two	off-centre	apartment	no
Man	1997	one	off-centre	apartment	yes
Woman	1987	one	off-centre	n/a	no
Man	1996	one	off-centre	apartment	no
Woman	1994	two	off-centre	apartment	no
Woman	1995	four	in-centre	apartment	no
Woman	1995	one	in-centre	apartment	no

* Based on residential area/post code, data collected in spring 2018.

Table 5. The physical features from the viewpoint of older and younger city shoppers

Physical environment	
Older consumers	Younger consumers
Housing	
Convenient location with respect to services	
- living independence	- shopping efficiency
Transportation	
Convenient & functional	
- easy access to the heart of the city centre	
- by bus, private car	- by foot, bus
Car-based convenience	
- parking inconvenience: short parking times - driving competence vital to cope with shopping	- parking inconvenience: shortage of (free) parking places
Outdoor spaces and buildings	
Compactness	
- easy to walk from shop to shop	- time-efficient shopping
Convenience & safety to move around	
- smooth & non-slippery surfacing - risk of being run over by car - no support for car-bans	- risk of cycling among cars - support car-bans
Building architecture	
- harmonious streetscape represents beauty	
City parks	
- only access to nature for many - visited on the shopping trip	- free spaces for hanging around with friends
Outdoor seating	
- facilitate shopping	- free places for hanging around with friends
Cleanliness	
- increase attractiveness, demand changes in attitudes	

Table 6. The social features from the viewpoint of older and younger city shoppers

Social environment	
Older consumers	Younger consumers
Social participation	
Social engagement	
- shopping for finding social contacts - connect shopping with other activities - time of a day: daytime	- social engagement, mostly on a separate trip from shopping - time of a day: afternoon and evenings
Civic participation and employment	
Volunteering	
- connected with shopping	- mostly on a separate trip from shopping
Respect and social inclusion	
Customer service & product offerings	
- service-seeking attitude directs shopping at city centre - disrespect as fashion shoppers	- price-consciousness directs shopping also at other shopping environments
Communication and information	
IT & e-shopping	
- moderate users - e-shopping socially isolating activity	- proficient users - inclined to webrooming
Community support and health services	
Health care & wellbeing	
- connect shopping and health maintenance - shopping a means to exercise	- use wellness services regularly, - mostly on a separate trip from shopping
Click-and-collect/deliver services	
- physical shopping enhance wellbeing	- occasional relief to busy lifestyle

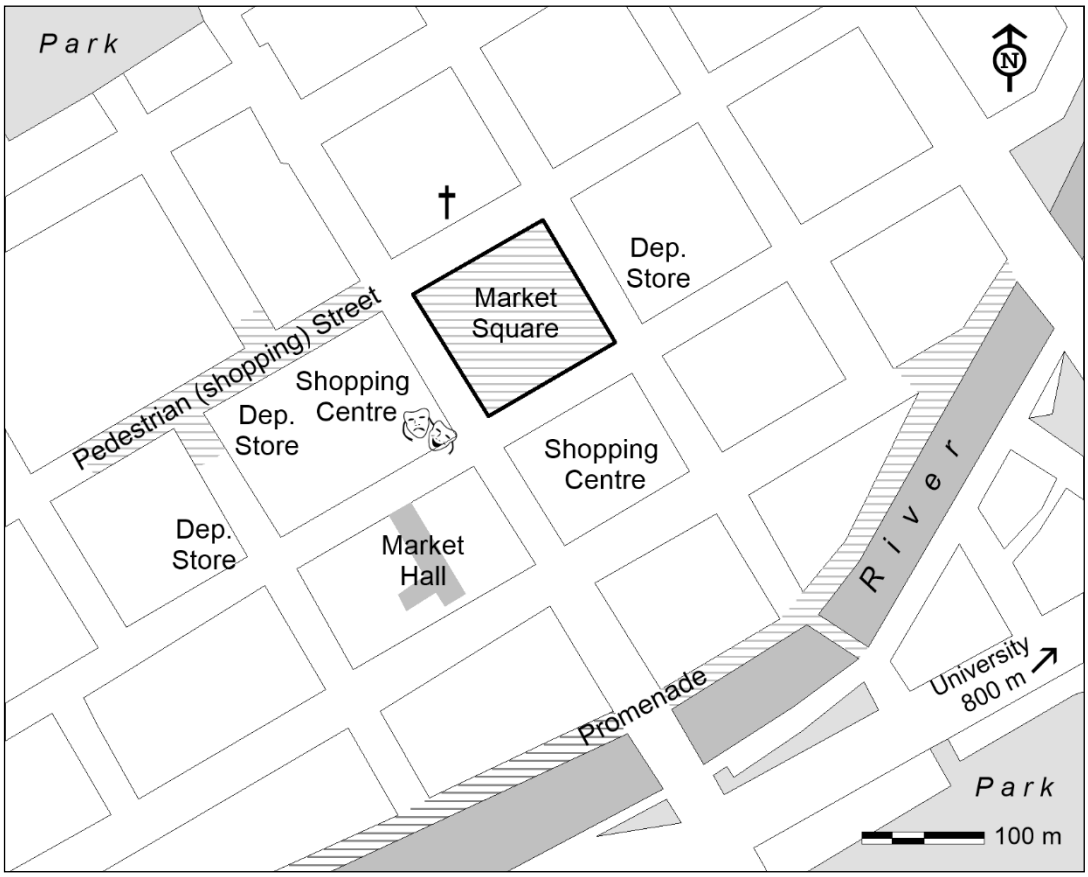

Figure 1. Turku city-centre shopping environment with places of interest.