

Sensing older people's lived experiences through visual images in Singapore

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Abstract: This paper presents a user-based qualitative research approach: 'see and snap' to gain insights into older adults' lived experience of their neighbourhood environment. The method provides a way of capturing personal observations from the older population by involving them to take photographs of their built environment. The purpose is to allow participant photographs to query the built environment, in particular, how the built environment is perceived, negotiated and experienced during daily journeys. The discussion presents findings on older Singaporeans' (age 55+) daily travel experience, exploring what they see and think to be important environmental features for their ageing process. Such information has relevance to the wider discourse on healthy ageing and planning. Even though photographs are increasingly used as a research tool across a wide range of disciplines, e.g. anthropology, sociology, geography, few have used them with older people in cities. This 'see and snap' photo-taking method is part of a larger, multi-method study to understand the connection between older people's health and their neighbourhood built environment in Singapore.

Keywords: user photographs; neighbourhood; older population; Singapore.

Introduction

This paper presents a user-based qualitative research approach - 'see and snap' to gain insights into older adults' lived experience of their neighbourhood environment. It is one of three urban audit methods developed as part of a research project on "Understanding the Changing Needs of Singapore's Older Adults"; the other two methods are On-site Observation and Walk and Talk (see Yuen, 2019). The purpose is to investigate the older population's usage of their neighbourhood built environment and identify potential barrier and enabler in the design of current outdoor urban environment for ageing.

The premise of the 'see and snap' approach is the visual narrative research method, which involves the use of participant photographs as discussion materials during a research interview (Wang and Burris, 1997; Pain, 2012; Glaw, et al., 2017). As Glaw et al (2017) summarised, the use of photographs in interview offers a novel approach to accessing the rich everyday worlds of participants. Even though photographs are increasingly used as a research tool across a wide range of disciplines, e.g. anthropology (Collier, 1987), sociology (Banks, 2001; Harper, 1997; 2002), geography (Smith and Barker, 2000; Oldrup and Carstensen, 2012), health research (Hanna and Jacobs, 1993; Riley and Manias, 2003; Glaw, et al., 2017), few

have used them with older people in cities (Magilvy, et al., 1992; Yankeelov, et al., 2015; van Hees, et al., 2017). In Singapore, district level town councils in collaboration with various government agencies have started to conduct photograph-based participatory town audits to identify physical hazards in residential neighbourhoods and suggest improvements (Ministry of Health, 2014).

The rest of this paper presents an example of the method used in a study of older adults (aged 55 years and older) in Singapore. Like many cities around the world, Singapore, a city-state of 710 sq km in Southeast Asia, is ageing rapidly. Its age-65+ population is projected to double to one in four (900,000 people) by 2030. For many, the built environment for growing older is in high-rise public housing where 80% of resident population live (Yuen and Soh, 2017). Based on new town planning, each public housing town is designed along neighbourhood lines with a hierarchical range of retail (e.g. shops, markets), educational (e.g. primary schools, kindergartens), healthcare (e.g. polyclinics, clinics), transportation (e.g. mass rapid transit stations, bus stops, bus interchange), community, recreational and social amenities (e.g. parks, children's playgrounds, swimming pools, outdoor fitness equipment, senior activity centres) to cater to the daily needs of residents while providing a quality living environment (Yuen, 2007).

Method

The research activity of 'see and snap' involved two components: a photo-taking activity and a follow-up discussion. It was completed with a purposive sample of 17 older public housing residents (aged 55-70+ years) in a local neighbourhood from Jul 2015 to May 2016. The research protocol was reviewed and approved by the SUTD Institutional Review Board. Participants could choose to discontinue at any point of the research process and their data would be accordingly omitted from the study. In this study, an initial 22 participants were recruited and 5 decided to discontinue the study as they found the photo-taking activity onerous.

Participants were asked to use their camera-enabled smartphones to take photographs of their neighbourhood built environment as they went about their daily activities for one week. The aim was to collect older adults' place-bound, experiential knowledge about their neighbourhood built environment. Participants were, however, not required to do anything special or go anywhere outside of their daily routines and activities. The photographs could be of the built environment features along their travel journeys and/or destinations, e.g. their favourite places or regularly visited places, capturing the environmental features that they like or dislike about these places/routes, their concerns about the built environment and the features they view as important for their ageing process. During photo-taking, participants were encouraged to take note of the time and place where the photograph was taken and to submit these with a short line on why they had taken the photograph to the research team.

Each participant was invited to participate in one follow-up discussion session. Held within a couple of weeks after photo-taking was completed, the discussion was designed as small group discussion at the convenience of the participants to facilitate collective visualization of their experiences and views through the photographs, offering an opportunity for the less literate participants to also share their perspectives. A common discussion guide was used though the emphasis was on using the photographs to guide and encourage the participants to share their personal experiences of the built environment - which and why certain built environmental features matter to them/not. The discussion was audio-recorded with participant permission for transcription purposes. Where permission was not given for recording, instant notes were taken by the research team. The average duration of the discussion was between 1-1.5 hours.



The discussion was held in the preferred language of the participants – English or Mandarin. It should be noted that older Singaporean’s spoken English might not be grammatically correct to the native English speaker.

Results

Photo-taking was a new experience to some older adults. Yet, they patiently participated and took photographs to show and tell their experiences and memories with the research team. They sent an average of about 38 photographs each over a period of 7 days. The description that they provided with each photograph was a useful prompt for them to recall the context of the photographs during the follow-up discussion session.

As seen in Table 1, many of the photographs were about immediate neighbourhoods (5 of 7 photograph categories) while in some cases, they showed places beyond individual neighbourhood (e.g. traditional ethnic/cultural/religious places in other parts of Singapore) and about participants’ travel journeys by public transport or on foot (none of the participants drove or cycled). Discussions with the participants revealed that most of them were long-time (over 20 years) residents, at least two were in employment and the rest were either housewives or retirees. All participants were Singaporeans or permanent residents and physically mobile.

Table 1: What did participants take photographs of?

Photograph Content	No.	%
Outdoor green spaces, e.g. neighbourhood park, community garden	167	25.3
Transportation and travel journeys, e.g. sheltered walkway, longer crossing time for older adults, steps and ramps	122	18.5
Amenity and facility, e.g. marketplaces, eateries, shopping areas, library	117	17.7
Incidental social space, e.g. void deck, common corridors in public housing residential blocks, en route to key destination e.g. market, school, park	83	12.6
Favourite or frequented activity node outside of one’s neighbourhood, e.g. to visit friends and relatives, workplaces, medical care, leisure and recreation, cultural and religious places	63	9.5
Structured social space, e.g. exercise hard court, children’s playground, community centre	60	9.0
Quality of neighbourhood infrastructure and outdoor street furniture, e.g. lighting level, condition of benches, littering, maintenance	49	7.4
	661	100

Participants talked not only about the provision and setting but also the activities and meanings they attached to places. A frequent theme was outdoor green space, ranging from neighbourhood parks to community gardens and landscaped areas around the neighbourhood (Photo 1). Participants talked about community involvement in greening, community gardening

and nature maintenance; the community gardens were one of the favourite and most frequented places. They spoke about the role of their district mayor in championing the provision of community gardens. In consequence, their town now had more than eleven community gardens, spread across the neighbourhoods in convenient locations close to the residential blocks. Even though edible fruits and vegetables were favoured by many community gardeners, many of the community gardens had evolved special focus over time – some were for organic farming while others were spice garden, had medicinal herbs or special varieties of fruits trees and flowering plants.

Photo 1: Neighbourhood green spaces (all photos from respondents)



Zhenghua Park near residential blocks, a platform for exercises

Resident at community garden



Landscaping brings garden and greenery near to residents

Retirees engaged to do landscaping upkeep

Participants commented that they were able to have a sense of ownership as they took care of their own plot of garden and chose their preferred plants, vegetables, flowers or even medicinal herbs. They could enjoy the “fruits of their labour” as gardeners would get to keep the produce. Many opined that it was healthy to eat vegetables that they grew themselves (organic food). Importantly, for many, it brought back memories of days when they or their families were farmers.

Participants spoke about activities (soft programming) that brought residents to the community garden, park and green spaces. One respondent shared that she found it useful for residents to learn about gardening tips. The more experienced gardeners would sometimes share gardening tips on the types and names of vegetables, how to plant and harvest various kinds of vegetables. For some, gardening had become an integral part of their daily routines, something to do before or after their morning or evening exercises, morning trips to the market or before some of them go to work. For them, the community gardens supported social interaction, a place to meet other residents in the neighbourhood who shared similar gardening interests and through that helped them to make new friends and strengthen the sense of community. Some would take part in competitions such as for the best community garden in the neighbourhood. As one respondent proudly shared,

the community garden beside Block 423 is very good, was done beautifully. It is able to

win the first place in competitions! – Madam C, Chinese lady.

Others talked about the organisation of community programmes like ‘Sports to Stay Fit’, which took place every morning from 6.30am-8.30am, to encourage the participation of residents, mostly housewives and retirees for group exercises such as qigong. They also highlighted the provision of hardware infrastructure such as pavilions and seating, in particular, the absence of provision that discouraged their participation. For instance, some participants shared that their neighbourhood park lacked colour (a variety of floral planting), attractions and amenities for older adults to spend their spare time. More specifically, the lack of toilets in the park was an inconvenience, especially to the older person. One respondent highlighted the difficulty experienced by her mother,

...my wheelchair-bound mother has to rush back home because there’s no toilet in the park. It puts a lot of pressure on the old folks. – Madam HS, Chinese lady.

Others talked about the resulting adaptive behaviour. For example, one participant said that many of the people would just go home or to the shopping mall after their exercise to use the toilet, as it was close by the park. Two of the participants shared photographs showing some residents, mainly retirees who were hired by the town council for landscape maintenance work around the neighbourhood (Photo 1). It was understood that these senior citizens could choose the days and frequency in which they want to work. The participants felt that this was a good option for senior citizens who might want to engage in some work within the neighbourhood and who would otherwise be bored at home. As this respondent explained,

They are working as gardeners under Town Council... My husband is in charge of the workers there... Some of them, maybe the ladies, (work) only half a day. Only senior citizens (are employed). After retiring have nothing to do, might as well better they go out and work right? - Madam S, Malay lady.

Besides green spaces, another frequently visited place in the residential neighbourhood were food places.

Three-quarters of the participants commented that markets and local food establishments (Photo 2), e.g. *kopitiams* and hawker centres, were places that they would frequent on a regular basis – daily, several times a week, or weekly, usually by walking. *Kopitiams* are a type of food establishments, which are ubiquitous in Singapore. They are of a smaller scale than the hawker centre (often co-located with the wet market) and can be found in every neighbourhood, frequently at the void deck of public residential blocks. Aside from visiting the market and food places for grocery and for meals, participants viewed these places as social spaces to meet neighbours and people from the community. It was a place where they could stop, linger and sometimes watch the world go by.

Photo 2: Frequently visited neighbourhood amenities (all photos from respondents)



New Bukit Panjang Market and Hawker Centre

Library



Kopitiam

Pasar (market place)

Neighbourhood retail

Participants talked about how housewives and retirees (including themselves) could often be seen in these places, passing time, chit-chatting (among women), playing chess (among men), etc., enabled by the provision of seating, television set (in some *kopitiam*) and the availability of food and drinks. These neighbourhood food places were valued for their ease of access, convenience and low cost. Most participants informed that they could reach these places by walking. They were able to get a wide variety of daily necessities without the need to travel elsewhere. As one participant explained why a particular shopping mall was her favourite place in the neighbourhood,

Because the reason we have everything there (sic). We have market, we have clinic, and we have stationary shops. And we have provision shops. We have everything we need. Everything is there, so we don't have to go anywhere (else). And the MRT station is nearby for all the people (living in flats) ... I'm staying in Block 452, next door is the shopping centre. It's convenient. Everything is there. And the clinic is there. For the elderly people, the PG¹ clinic is also there so no need to worry; dental is also there. Everything is there. So I don't have to go anywhere (else). – Madam R, Indian lady.

Another participant spoke about her appreciation of long-time shop owners of various trades in her neighbourhood; these businesses not only offered convenience for residents in the neighbourhood but were also a familiar presence within the neighbourhood. There were interesting instances of specific local knowledge that some participants had, which would not

¹ PG refers to “Pioneer Generation”, i.e. Singaporeans aged 16 and above in 1965 or those aged 65 and above in 2014, who contributed to Singapore’s nascent years of nation building. Singapore had initiated a PG package for this group of older population to help with their medical costs; a PG card allows the cardholder to receive subsidised medical treatment at designated clinics.

be immediately apparent to outsiders. For instance, one participant talked about a particular vegetable stall in the market that sold vegetables grown in his own farm and her periodic haircut sessions to a neighbourhood hairstylist who worked out of her flat.

Other community amenities that participants liked included the community library, places of worship (e.g. churches, mosque and temples), senior activity corners, clinics and even traditional Chinese medicine (TCM) clinics in the neighbourhood. A couple of the participants wished for more senior activity centres to be located at their void decks. One participant spoke about the growing popularity of TCM clinics with older residents and the importance of including this amenity in the local neighbourhood,

Oh, this is the best. Nowadays, old people like to visit the TCM, and now it's so near our homes. We don't need to wait for the children to fetch them there or travel for long on public transport. We can just walk for a little bit. It is just behind the CC, Zheng Hua TCM. It is very convenient for the elderly. – Madam SB, Chinese lady.

Another added,

Before this, the nearest TCM was in Yishun. The doctor's skills are also really quite good. He is proficient at acupuncture and even massage. – Madam AP, Chinese lady.

About half of the participants who talked about footpaths indicated that they walked every day. They highlighted the importance of sheltered walkways that connected residential blocks to destinations such as bus stops, MRT stations, shops and wet markets, perhaps because of Singapore's hot and wet tropical climate. A handful of them expressed appreciation of the general landscaping and greenery efforts around the neighbourhood – along main roads and even at traffic lights (flower shrubs there are beautiful). For a couple of them, they would prefer to do their brisk walking along the footpaths of the main roads rather than to go to a park as the former was pleasant enough for exercise. Participants further talked about staircases, steps, inclined slopes and handrails that enabled them to move from one level to another. They often suggested replacing the staircases with ramps to support ease of movement.

Some elaborated on how some of the design features around the residential blocks did not contribute to a barrier-free environment. One participant cited the example of barriers erected to prevent cyclists or motorcyclists to ride on pedestrian paths but unintentionally could cause obstruction for some pedestrians like wheelchair users. The respondent explained with a Mandarin caption to his photograph that could be translated as,

The barriers are installed to increase accessibility but instead, added an additional obstacle. I would suggest for them to be removed. (Mr P., Chinese man).

Another respondent underscored the importance of safety in the design of elder-friendly public spaces,

(I would) like to have a safe environment for us (the elderly), and not only for us but for everyone. When you want to design anything, you want to make it good for all the people, (with) elderly people in mind – safe and not complicated. Don't make it so complicated that the elderly cannot use. I mean if you have all these features and you don't know how to (use them, it is it useless), just like a gadget... You think all the elderly know how to use all the sophisticated gadgets? They don't know it! Just to make it safe and easy to use for them. – Madam AR, Malay lady.

Other disliked aspects of the built environment were about the maintenance and upkeep of the neighbourhood, e.g. damaged park benches not replaced (do not have backrest for older users), rubbish not cleared promptly, recycling bin misused as rubbish bin (Photo 3). Several issues concerned the inconsiderate behaviour of other residents, e.g. neighbours who clutter and obstruct public passageways when they place their overgrown plants, shoe cabinets, clothes-drying racks, etc. in common areas. Others pointed out that in a high-density living environment and a multi-racial, multi-religious city like Singapore, there were some cultural or religious practices that when carried out in public spaces could spark inconvenience and cause unhappiness to others. One respondent gave the example that people sometimes do not burn “paper money”² in the designated containers provided but on public walkways. The resulting fire and debris causes obstruction and inconvenience to pedestrians while flying ash/debris can make the estate grounds untidy.

Photo 3: Neighbourhood maintenance issues (all photos from respondents)



Damaged benches in neighbourhood park not replaced



Rubbish in recycling bins, clutter not cleared



Burnt “paper money” residue in public space

Even though photo-taking is a useful method to find out what older people feel about their neighbourhood and help convey the ineffable, hard-to-put-into-words feeling, it is not without limitations. Its effectiveness depends on several extraneous factors such as who is taking the image (the person taking the photograph decides what to include/exclude and where to take it),

² Burning paper money for the dead is a religious-cultural practice, part of Chinese Taoist ancestral worship.

who is viewing the image and the context in which the image is being viewed (the photograph is open to interpretation, sometimes in ways that those taking the image might not have intended or imagined). Some people may find this research activity time-consuming, to have to follow through one whole week of continuous photo-taking, and thus, decline participation. This potentially excludes people who are busier, engaged in full-time employment, and/or with limited mobility. Furthermore, this method requires the researcher and participant to have access to a photo-taking device (smartphone or camera) as well as a process for checking and transferring daily photographs from participant to researcher. There is also the logistical challenge in scheduling the discussion session after photo-taking.

Conclusion

The photo-taking and sharing activity has proven useful for involving older people in the research process. It gives the researcher an opportunity to see the built environment through the eyes of the older users as they go about their daily travel and activity, which otherwise are not easily conveyed verbally if only using conventional interviewing (see also Glaw et al, 2017; Harper, 2002). In the process, older people become research participants of their own neighbourhoods as they take photographs and speak about their photographs in their own words. The process provides an opportunity for older people including the less educated to show and speak out about their own life experiences, concerns and ideas. Through their self-generated photographs and sharing, they are able to bring in their ideas, visualise and identify issues of interest to themselves.

In this case, they gave narration to what they liked and disliked about their neighbourhood for growing older – the green spaces, amenities, community activities and are friends with people within their neighbourhood through activities like community gardening and regular exercise. They illustrated with location and action where neighbourhood maintenance and inconsiderate behaviour of other residents could be problematic to them and the community. They made visible how solution to one problem had sometimes created unintentional problems for others.

Since the built environment is inherently experiential and visual, the inclusion of photographs accompanied by descriptions from the participants has the potential to generate and bring to the fore everyday life behaviours, ideas or social worlds that are not easily conveyed by verbal description alone or missed as mundane and unimportant. From a practical perspective, the advances and prevalence of digital technology have made this research method much easier (some help will be needed for older participants who are not familiar with photo-taking/camera use) even though it remains subjective and somewhat time-consuming.

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