

Northumbria Research Link

Citation: Xiong, De Xuan and Brownlee, Iain A. (2018) Memories of traditional food culture in the kampong setting in Singapore. *Journal of Ethnic Foods*, 5 (2). pp. 133-139. ISSN 2352-6181

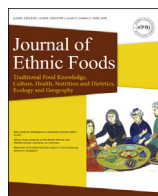
Published by: Elsevier

URL: <https://doi.org/10.1016/j.jef.2018.02.007>
<<https://doi.org/10.1016/j.jef.2018.02.007>>

This version was downloaded from Northumbria Research Link:
<http://nrl.northumbria.ac.uk/id/eprint/41301/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)



Contents lists available at ScienceDirect

Journal of Ethnic Foods

journal homepage: <http://journalofethnicfoods.net>

Original Article

Memories of traditional food culture in the kampong setting in Singapore



De Xuan Xiong, Iain A. Brownlee*

Human Nutrition Research Centre, Newcastle University Research and Innovation Institute Singapore, Singapore

ARTICLE INFO

Article history:

Received 17 November 2017

Received in revised form

28 February 2018

Accepted 28 February 2018

Available online 5 March 2018

Keywords:

Anthropology

Food culture

Food sharing

Gotong royong

Kampong

Singapore

ABSTRACT

Background: Singapore is a metropolitan city state that has rapidly transitioned from residents living in traditional multicultural villages known as kampongs to one of the most population-dense and technologically advanced countries in the world. This study aimed to explore the framework of traditional food culture, beliefs and practice in Singaporeans who grew up in kampongs via questionnaire-based interviews.

Methods: A convenience sample of participants ($n = 34$) were recruited through word-of-mouth and interviewed both face to face ($n = 29$) and by telephone ($n = 5$). Interviews were conducted in English, Mandarin, and Hokkien using a semistructured questionnaire that included themes preidentified from an exhaustive literature search.

Results: A conceptual framework of five major themes was noted as a result of respondent input and the preidentified structural themes of the questionnaire. These were self-sustenance and farming, food and water safety, food and beverage retail, dietary habits and culinary practice, and a culture of sharing (or *gotong royong*). Of these themes, 64% ($n = 22$) of participants had noted collecting or maintaining fruit and vegetables or rearing chickens. Participants (29%, $n = 10$) also noted memories of traditional food storage techniques, general feedback which suggested relatively low levels of concern for food safety.

Conclusions: Many of these kampong food practices from a kampong were fondly remembered by participants. Consideration of positive food values from early life (such as a strong culture of sharing and togetherness) could help in the development of government drives to improve dietary intake or benefit food security for older Singaporeans.

© 2018 Korea Food Research Institute. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Before the 1970s, Singapore's population mainly lived in a network of rustic villages, known as *kampongs*, a term subsequently romanized to “kampongs” [1,2]. During the 1970s, the government began the housing resettlement program and previous kampong dwellers were relocated in the Housing and Development Board public apartment flats. In most cases, the kampongs themselves have been cleared for urban redevelopment [2,3]. A recent project by the National University of Singapore has developed an interactive map of around 220 previous kampong dwellings in and around the main island of Singapore [4].

Settlements have been described in Singapore since the 14th century [3]. Kampong numbers grew rapidly following an influx of

immigration from nearby Indonesian Islands and Peninsular Malaya and further afield in the early 19th century following British colonization and the expansion of Singapore's importance as a hub of international trade [3]. Most of the early kampongs were fishing villages and settles along the coast and rivers. Kampongs also developed inland, and these were involved in the cultivation of coconuts and fruits. The settlements were generally found in the rural areas around the eastern coast and the interior of the island, with a relatively small number to the north of the Singapore river [3]. More recently, the term “*kampong spirit*” has been used to describe a more relaxed and communitarian way of life [5] and was a factor suggested to be limited in modern-day Singapore [6].

The multicultural and inclusive nature of kampongs is likely to have helped to shape Singapore's unique food culture, which is represented by modern-day hawker stalls, coffee shops (“*kopi-tiams*”), and food courts. These outlets have multiple kitchens preparing a variety of multiethnic foods and shared seating areas where people of different social and ethnic backgrounds congregate [7]. The most recent National Nutrition Survey highlighted that

* Corresponding author. Human Nutrition Research Centre, Newcastle University Research and Innovation Institute Singapore, SAHMRI Building, Adelaide SA 5000, 567739, Singapore.

E-mail address: iain.brownlee@csiro.au (I.A. Brownlee).

out-of-home dining in hawker centers, coffee shop/stalls, and food courts is common among Singaporean adults [8]. Fig. 1 highlights the position of some of the kampongs found in Singapore during the early years of independence [4].

Alongside a background of national interest in the kampong spirit, this study aimed to uncover the key themes in kampong food culture, as evaluated through in-depth, interviews with middle-aged Singaporeans who previously resided in kampongs.

2. Methods

Following the ethical approval from Newcastle University Faculty of Science, Agriculture and Engineering Ethics Committee, a series of interviews were carried out. Owing to the exploratory nature of the project, a semistructured qualitative interview [9] was conducted using themes preidentified in the literature review. This approach allowed flexibility for the researcher to probe for information appropriately and participants to express their perspectives more freely [10].

Interview participants (n = 29) were recruited through convenience sampling and snowball sampling by word-of-mouth. Interviews were mainly completed face-to-face, although five participants were interviewed by telephone. Fieldwork was conducted in English, Mandarin Chinese, and Hokkien dialect between October 2016 and January 2017. Information provided by specific participants is presented below using participant's ID number, their age range (to help ensure anonymity), ethnicity, and sex. Unless otherwise stated, interviews were carried out face-to-face in English. The participants selected the theme(s) around kampong food culture that they preferred discussing before in-depth interviewing. Photographs that related to some kampong food themes (e.g., kitchen environment, street peddlers) were used as a visual cue. For telephone interviewees, the elements were made known to them via instant messaging. Field notes were then transcribed and translated for most participants by a single researcher (DXX). The data were evaluated through thematic analysis because of its

applicability in this exploratory study [11]. A conceptual framework was developed with the preidentified themes and themes that were uncovered during the fieldwork.

3. Results

Five major recurrent food-related themes were identified following the evaluation of the transcripts. These themes (self-sustenance and farming, food and water safety, food retail, dietary habit and culinary practice, and food-sharing culture) are presented and discussed in greater detail in the following sections. The demographics of the participants are presented in Table 1.

3.1. Self-sustenance and farming

Approximately 64% (n = 22) of the participants noted rearing chickens in the kampong. Maintaining livestock appeared to be a common practice among participants who had a large area in their kampongs (n = 7). Two participants remembered breeding services being provided, where an owner would walk around with a boar to

Table 1
Participants' profile.

Characteristics	Frequency (n)
Gender (n = 34)	
Male	25
Female	9
Ethnicity (n = 34)	
Chinese	29
Malay	2
Indian	3
Age group (n = 34)	
41–50	3
51–60	11
61–70	10
70+	10

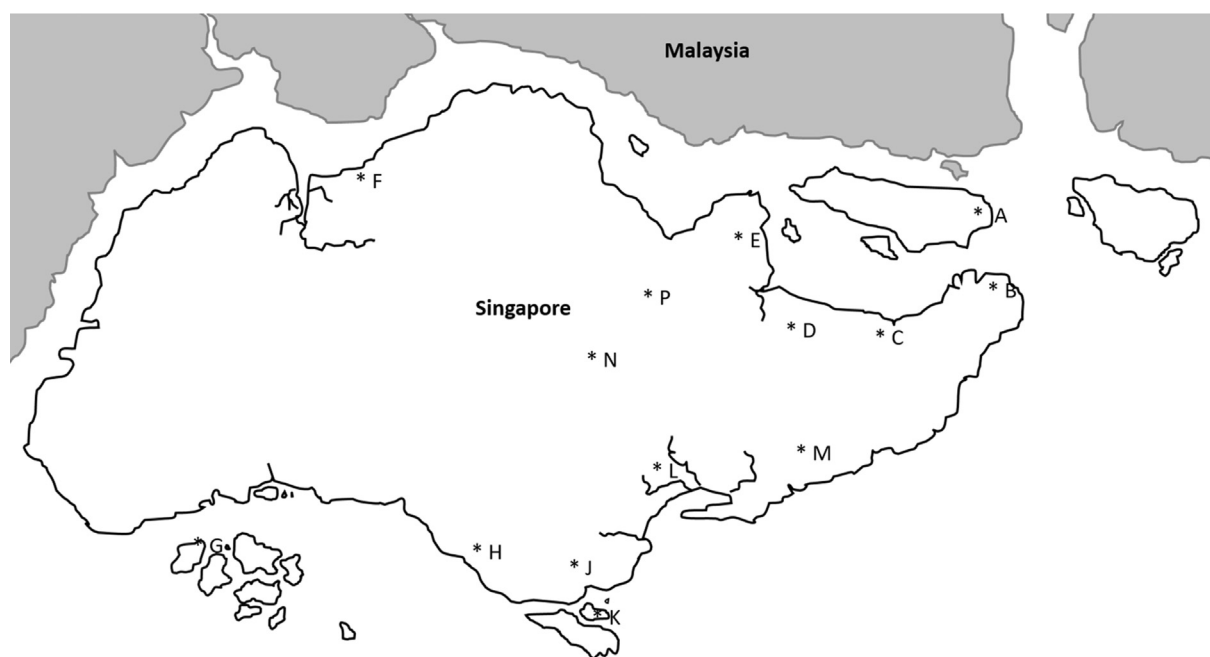


Fig. 1. The approximate locations of selected kampongs (*) in Singapore during the 1960s and 1970s. See [4] for further details. A = Kampong Pulau Ubin, B = Kampong Changi, C = Kampong Loyang, D = Kampong Pasir Ris, E = Kampong Punggol, F = Kampong Mandai Kechil, G = Kampong Pesek, H = Kampong Sultan, J = Kampong Radin Mas, K = Kampong Kopit, L = Bugis Village, M = Kampong Eunus, N = Kampong Kebun Baru, P = Kampong Lorong Buangkok.

propagate sows for a fee. While livestock and vegetables were noted to have required daily maintenance, fruits trees required relatively low input. Some, like jackfruit and starfruit, had to be wrapped with plastic or sacks to prevent insect eating them. One participant made the following comment in relation to livestock and the commonality of ownership:

Participant #016, (61- to 70-year-old Indian male): “The chickens will go everywhere come to our place... no sense of direction... just lay their eggs anyhow... so they will go to every house... if the chickens decide to lay eggs in your place, you're a happy man... if the chickens doesn't go back and the owner never call... we may slaughter the chicken [and it] become[s] our feast... We do not know who it belongs to... every house got some chicken... when he [the chicken] have to go out for food... have to release”.

A further example of self-sustaining kampong practice in this theme is illustrated by the following quote:

Participant #002, (51- to 60-year-old Chinese male): “The place is very big... grown out with all these fruit trees... we plant papaya... plant bananas... ah this one we plant—just dig a hole and pluck in. We plant tapioca... we just cut the root and just shove it in the floor on the ground they grow already lah... and also on the fen[ce] we also grow those kind of mani cai... then this is our food lah”.

3.2. Food and water safety

The participants interviewed noted limited concern regarding food safety and hygiene during their time in the kampongs. Participants provided interesting responses such as “not washing hands before meals” (**Participant #015**, 51- to 60-year-old Chinese male) and “... if see cockroaches crawling on the food means must throw; if no cockroaches seen, we assume the food is safe... but we don't know if the cockroaches have already crawled across the food” (**Participant #030**, 61- to 70-year-old Chinese male, interviewed by phone). Limited concern with regard to food hygiene was also noted when participants shared their memories of food peddlers/itinerant hawkers (see below).

Owning a “vegetable cabinet” was fondly remembered by 29% of the participants ($n = 10$) because refrigerators were uncommon, although some noted occasionally buying ice to help keep things chilled. These bamboo or wooden vegetable cabinets are either hung or fixed and included netting for ventilation and to keep out pests. One participant (**Participant #002**, 51- to 60-year-old Chinese male) described an indigenous method of placing a water-filled porcelain plate at the legs of the cabinet to create a moat, preventing crawling insects. Another participant (**Participant #025**, over 70 years old, Chinese male) described storing raw and cooked food together.

There was a mixed consensus regarding types of food that were storable, but the majority of participants came to a similar agreement that food has to be consumed within 24 hours of preparation. Other types of dishes (e.g., curries) were cited to be reheated more frequently (e.g., in the evening of preparation) to reuse them/stop them spoiling.

3.3. Food retail

Markets and food centers were open-air sites of food service. Items were either laid out on the floor or sold out of tricycles or pushcarts operated by the vendors. These markets did tend to separate fresh items (i.e., fish and vegetables) from cooked food into separate aisles. (**Participant #002** 51- to 60-year-old Chinese

male) described the scene as “similar to the market in Thailand”. The market also sold live chickens, and the patrons could choose to have their chickens slaughtered by the vendors or do it themselves at home ($n = 4$). Some participants ($n = 5$) also mentioned that the markets were located a distance away from the kampong, and hence they had to travel to the markets by walking, cycling, or bus.

Experiences with food peddlers (or hawkers—see Fig. 2) was a major recurrent theme identified by the participants, with most being able to identify with a *roti* seller ($n = 15$) and peddlers attracting patrons through the use of sounds ($n = 9$), such as shouting or the use of handheld instruments. Food peddlers were generally remembered by the type of food that they sold, their mode of operation, or by the vendor's ethnicity (mainly Chinese, Malay, and Indian). Previous work has suggested that food peddlers from this era in Singapore can be categorized as either providing “routine” everyday food or those who provide “occasioned” food [17]. Chan [7] further explained that “occasioned” food is often used to mark the significance of a wide range of cultural events and thus may likely have imparted a sense of cohesion to social events. The types of food sold and the common modes of operations are illustrated in Table 2.

Seven participants expressed delight when the visual cues were shown and were enthusiastic to discuss food peddlers further. Their responses were noted and reported below:

Participant #004, (41- to 50-year-old Chinese female): “Loved the deep fried fish balls. The vendors come at 3 pm every weekend... looked forward to it... not afraid of the hot oil despite being a kid because... engrossed with the fish balls. Felt really happy to buy a cup of bird's nest drink.”

Participant #008, (above 70 years old, Chinese female, interviewed in Hokkien): “The residents run out of the house to buy [the *roti*]. My son loved the *roti* and bought 20 loaves in one go, my son is now obese... regret not controlling his purchases... but already used to eating *roti* from the same seller.”

Participant #015, (51- to 60-year-old, Chinese male, interviewed in Mandarin): “Favorite food was *yong tau foo*. The vendor had a small charcoal stove, burning embers without fire. The food was cooked on the spot, differed from today. Back then, they only had a few varieties—*tofu*, fish balls, *bee hoon*, noodles, *kang kong*,



Fig. 2. A food peddler in the kampong (circa 1980). Participant #015 (51- to 60-year-old, Chinese male, interviewed in Mandarin) fondly remembers such peddlers selling *yong tau foo* in the kampong when he was 10 years old. The rhythm of hawkers' movements structured the routines and cycles of social life of the consumers. Itinerant hawkers had to travel through different individualized circuits for the better part of an entire day to sell their food [17]. Source: Ronni Pinsler Collection, courtesy of National Archives of Singapore.

Table 2

Types of food sold in the kampong and mode of operation (see Glossary for further details).

Mode of operation	Types of food sold					
	Fresh produce	Snack items	Morning and afternoon items	Night items	Desserts	Beverages
Bicycle/motorcycle/scooters (routine)	Cow's and goat's milk in bags. Vegetables (in huge baskets).	N/A	<i>Mee siam</i> ; <i>nasi lemak</i> ; prawn noodles; <i>roti</i> (n = 15), with <i>kaya</i> and butter filling (n = 5)	N/A	Ice cream (n = 5)	N/A
Trishaw with platform/pushcarts (routine)	Raw meat —resold from the meat distributor	Deep-fried fish balls; dried cuttlefish; maltose candy; <i>rojak</i> (Chinese) (n = 4); <i>ting-ting candy</i>	<i>Chee cheong fun</i> ; fried carrot cake porridge (n = 2)	<i>Chee cheong fun</i> ; <i>char kway teow</i> ; <i>rojak</i> (Indian); <i>kok-kok mee</i> ; <i>mee rebus</i> ; <i>mee goreng</i>	<i>Cheng tng</i> ; grass jelly (hot and cold); <i>Pulut hitam</i> ; <i>Tao suan</i>	Fruit cordials
Items carried over the shoulder/on the head (routine)	N/A	Flour cakes; <i>kacang putih</i> ; <i>keropok</i> in glass jars	Fried <i>bee hoon</i> ; <i>roti</i> ; <i>yong tau foo</i>	<i>Char kway teow</i> ; <i>satay</i>	Ice cream (n = 1)	N/A
Snack stands/ <i>Pasar Malam</i> stall (occasional)	N/A	N/A	N/A	Cotton candy; deep-fried fish balls; deep-fried <i>ngoh hiang</i> ; steamed buns; fried carrot cake; <i>kacang putih</i> ; <i>kueh</i> ; <i>kway teow</i> soup; longans; preserved fruits (n = 2); <i>roti prata</i>	Ice balls with sugar syrup (n = 5)	Bird's nest drink; fruit cordials; grass jelly; soy milk

sweet potato leaves... nowadays is selected by the patrons and the vendor will cook it”.

Participant #016, (61- to 70-year-old Indian male): “The whole family sat down and [the vendor grilled [the satay orders] on the spot... provided chairs but also brought along own chairs... sat together and had conversation... sat with other neighbors from the kampong... [it was] quite lively”.

Two participants remembered bringing along their own containers to purchase food (porridge and *pulut hitam*) from the vendors. Snack stands and *pasar malams* were also often associated with *wayang* shows, outdoor cinemas, hungry ghost festival *getai* shows, and temple celebrations.

The term “provision shop” was linked to Chinese and Malay owners while *mama* shops were reported to be operated by Indians. These convenience stores retailed commodities, spices, livestock feed, snacks, and other nonperishables. These friendly and sincere business owners allowed patrons to purchase goods on credit. “Direct selling” was also a kampong practice, with fish being a specific item mentioned by two participants.

Equipped with televisions (n = 2) and free newspapers, *kopitiam*s (see Fig. 3) functioned as a social space (n = 4) for the older males in the kampong after returning from work, a rest-stop for drivers and retailing food to the working class who worked in the day. *Kopitiam*s also offered credit payment for regular customers and were remembered to have sooty walls were seen. **Participant #015**, (51- to 60-year-old Chinese male, interviewed in Mandarin) remembered delivering *kopi* as a boy in used (evaporated and condensed) milk tins. Additionally, *kopitiam*s also sold alcohol. Some participants remembered *kopitiam*s as rowdy establishments that were associated with gangsters (n = 2) and were not seen as female- or family-friendly establishments. However, other participants remembered *kopitiam* as homely and welcoming establishments, with business at the front or ground floor and the family home at the back or upper floor. Other responses are listed below:

Participant #004, (41- to 50-year-old Chinese female): “fond memories of *kopitiam*s... sold zi char... [my family] does not eat zi



Fig. 3. A *kopitiam* in the kampong, presumably during off-peak hours (circa 1986). The *kopitiam* was a social center for men. Women were seldom seen idling in premises frequented by men to avoid misunderstandings in a conservative society. The silver cylinder (center-right) contained gas fuel required for commercial cooking. Soot deposits can be observed on the cooker hood. Source: Housing and Development Board Collection, courtesy of National Archives of Singapore.

char often and only in special days like weekends and celebrations... was considered a treat. The *kopitiam* was famous for the *Hock chew mee*... would wait patiently in the queue, looking forward to the dish without complain. Unlike nowadays, queuing has become a chore because of the easy access to foods”.

Participant #013, (51- to 60-year-old Chinese male): “*Kopitiam*s were not like modern-day *kopitiam*s, *kopitiam*s were just known as coffee shops... a family business... just placed some tables and chairs and start a business... home-styled... coffee bean roasting was done outside the home”.

Participant #022, (51- to 60-year-old Chinese male): “[*kopitiam*s] sold *Hock chew mee*, *char kway teow*, fried noodles, *char siew* rice, wanton mee, no beverage... Had a prawn noodles [which] was only 10 cent... Operated since the morning... had a *prata* stall, seldom see Malay food.”

3.4. Dietary habits and culinary practice

When it came to dietary intake, participants ($n = 5$) noted that their main priorities in the kampong were availability and affordability of food. One commonality in the food consumption sub-theme was consuming home-cooked meals instead of dining out ($n = 6$) to save money and because of a lack of access to food retail outlets. People also consumed dinner and went to bed earlier (i.e., cooking dinner at 5 pm, consuming dinner by 7 pm before dusk) because of lack of entertainment ($n = 2$). Three participants mentioned cooking in bulk once daily to last for the whole day (i.e., the remainder from lunch was consumed for dinner and left-overs from dinner were made into porridge the following day).

Owing to limited food availability, food waste was largely unheard of. Unavoidable food waste was reused for other purposes. For example, coconut shells were burned to create smoke which repelled mosquitoes and leftover food items were fed to livestock and stray animals ($n = 2$). One interesting incident which encompasses both food waste and food sharing culture is noted below:

Participant #015, (51- to 60-year-old Chinese male, interviewed in Mandarin): “Leftover human food was collected door to door by [the] pig farmer as pig feed... The farmer will give an angpaw and some eggs to the families who have given him the leftover food yearly as a way of saying thanks.”

Three participants described that the kitchen was detached from the main house. Most participants ($n = 17$) indicated using firewood or charcoal as cooking fuel, in part because of the lack of electricity ($n = 5$). Some participants noted that cooking food with firewood (see Fig. 4) or charcoal “tasted better” ($n = 3$) compared with liquefied petroleum gas (LPG) or modern-day induction cooker due to a slow fire and better concentration of heat at the bottom of the cookware. Domestic cooking was commonly steaming or stir-frying and seldom deep-frying because oil was expensive. Traditional fuels were remembered as imparting additional flavor to foods. For example, one participant noted the following:

Participant #012, (above 70 years old, Chinese male): “[Hainanese Chicken Rice] cooking style was different from today... boiled the chicken in a very dim light [fire], until the chicken floats. This means that the chicken is 100% perfect. Nowadays... [the chicken was] dumped into a big [industrial] tank after boiling the hot water, in heavy [fire]. Kopi was served in a small ceramic cup... Taste of the



Fig. 4. A kitchen belonging to a Chinese family (circa 1986). Firewood and charcoal were used as fuels, alongside built-in and smaller earthenware fire stoves (center-right). Woks and aluminum pots were common crockery. A steamer, “large” by modern definition, sits on the counter (upper center-right). The rustic environment provided an abundance of wood fuels. Source: Courtesy of National Archives of Singapore.

coffee depends on the individual kopitiam's coffee bean... Each kopitiam ground their own coffee, with butter and sugar... Only had black coffee, no white coffee.”

3.5. Food-sharing culture

Sharing of items was a major cultural element of the “kampong spirit” ($n = 7$). Although sharing of other items was common, households may have limitations about sharing certain items, including foods. For example, meat tended not to be shared because it was considered expensive, and affordability was an issue. Food (and other) items were generally loaned to others or given to exhibit altruism or hospitality. Food commodities were loaned to neighbors when the items were running low or they were low on funds and shelf space or refrigerator space may be shared with others by individuals who possessed a fridge. **Participant #033**, (above 70, Indian male) noted that neighbors would visit occasionally to borrow a large cooking pot and straw mats when they were expecting large groups of guests. **Participant #027**, (61- to 70-year-old, Chinese female) noted that her uncle sometimes gave the family seafood as he worked at the fishery port to help support them. **Participant #008**, (above 70 years, Chinese female, interviewed in Hokkien) explained that extra ingredients were often given away to less well-off relative members. Similarly, **Participant #013**, (51- to 60-year-old, Chinese male) highlighted that they would even provide meals for another family in times of need.

Participant #018, (51- to 60-year-old, Indian male) suggested that cooking aromas from the neighbor's cooking might have attracted one to walk over to visit and request food which would be provided if they were feeling hospitable. **Participant #015**, (51- to 60-year-old Chinese male, interviewed in Mandarin) remembered dropping by the neighbor's home to have lunch after school when they cook extra. His family would return the hospitality at other times.

4. Discussion

Rural kampong dwellers may have relied heavily on self-sustenance because of their low economic status and the inaccessibility of food retailers. Baharin et al [12] previously noted that some Singaporean families who moved from their kampong dwellings to apartment blocks missed having plots of land to rear poultry and cultivate fruit trees for their own consumption and for additional income. Self-sustenance has also been reported among rural communities in the United States [13]. With the access to land for gardening, such households would be able to grow produce more.

Owing to the memories associated with producing self-produced foods with traditional methods, these ex-kampong dwellers in modern day may in turn, develop a preference for “natural foods,” free from synthetic chemicals and produced “organically” [14]. The authors are not aware of such a study having been carried out in Singaporeans to date.

Limited concern with regard to food safety had been historically noted in relation to traditional out-of-home eateries in the Report of the Hawker Inquiry Commission [15]. The report noted that “The hawkers of cooked food have usually inadequate equipment and water supply to keep their utensils free from infection and to preserve the food from contamination by flies...” Similarly, the lack of basic facilities may lead to poor hygiene and sanitation practices in households of lower socio-economic status in modern times [16].

Similar to the dining habits practiced in the kampong, previous studies have suggested that rural Malaysians and Indonesians

tended to prepare sufficient food late in the morning to consume throughout the day without refrigeration [18,19]. The concept of food waste seemed alien to ex-kampung dwellers. This observation aligns with previous reports that lower income groups and older consumers tend to waste less food, citing costly food prices and food shortage experienced by older consumers as the likely reason for this [20,21]. Higher spending power may also have resulted in Singaporean consumers increasing their meat consumption over time and decreasing the frequency of intake of more traditional foods (e.g., vegetables) [8].

While the participants described cooking food with charcoal “tasted better,” many other factors may affect the sensory characteristics of the food—including modern farming and production techniques (e.g., changes to animal diet, use of growth hormones, an freezing)—and psychological factors (e.g., association with positive culinary memories). Based on the participants' responses, the sensory perception of kampung food will be evaluated in terms of culinary science.

Similar to the kampung spirit, Van Esterik [22] commented that within the small rural villages that still exist in Southeast Asia, reciprocal relations are basic to community survival. Resources such as garden produce, meat, and other foods might be shared with another household in return for help with special occasions such as weddings and funeral. Such reciprocity forms social relations and citizenship within the community [23]. A study in United States also highlighted that older rural adults perceive food sharing as an integral part of life in the community [24]. Besides sharing food for altruistic reasons (e.g., when individuals lacked money to procure food), sharing and receiving food reinforces the identity of the adults as active community members and consequently, their personal value or worth. Some adults would even intentionally provide excess garden produce to share.

When the resettlement program occurred, the physical environment of the flat impacts the dwellers to be more inward-looking, as the land for gardening and rearing poultry are non-existent. Rehoused flat dwellers in Singapore had previously noted that their privacy was highly valued in the new accommodation because before relocation, toilets and kitchens have to be shared communally in the kampungs [25].

Chang [26] noted that borrowing of things like newspapers, tools, or dishes was rare in modern-day Singapore. This study suggested that there appeared to be more limited trust in people and less concern for each other between neighbors. In an attempt to preserve the food sharing culture and revive the “kampung spirit” in modern-day Singapore, many districts have initiated networking sessions between the neighbors, through sharing of food [27,28].

This study was exploratory and qualitative in nature. The findings of this study represent the points of view of a small cross-section of Singaporeans who previously lived in kampungs and may therefore not be fully representative of the beliefs held by a wider population. Nonetheless, exploring memories of kampung food culture is timely because of the current focus on social cohesion in Singapore and the limited information available in this area. Furthermore, the number of individuals who have experience of living in Singaporean kampungs will become less and less over time.

While interview-based studies can be effective in uncovering the points of view of individuals, more in-depth understanding could be developed using semistructured focus groups in future studies, where like-minded participants would be able to more openly share their common experiences [29]. The prompts and design of the interview documents may have in part biased participants to only discuss specific aspects of kampung culture [30]. It is also uncertain whether the beliefs and current practices of

ex-kampung dwellers differ from individuals who grew up in different setting. While it would have been ideal to carry out all interviews face-to-face, this would have meant that the views of a lower number of participants ended up being included in the current study. Previous research has suggested that interviews carried out by telephone can produce data of a comparable quality to that collected face-to-face [31].

5. Conclusions

It appears that kampung food culture has, to an extent, impacted modern food practices and beliefs in Singapore, particularly in relation to multicultural hawker centers. Encouraging practices of food sharing may be a means to benefit social cohesion in modern-day Singapore. Further exploration of kampung food culture seems timely before the opportunity for collection of primary information (from ex-kampung dwellers) is lost forever.

Conflicts of interest

The authors have no conflicts of interest to declare.

Acknowledgments

This work was fully funded by the Newcastle University in Singapore. The authors would like to thank Ms Koo Hui Ying, volunteer leader for Kampung Kampus, for facilitating links with potential participants and Ms Liang Shuang (Institute of Southeast Asian Studies), Ms Tan Chor Koon (National Museum of Singapore) and Ms Joan Wee, Ms Kimmy Xing, and Mr Sun Shengbo (Singapore Institute of Technology) for facilitating access to rare books and references relevant to this work. The authors also acknowledge Mr Chia Wencong's support during preliminary fieldwork. Finally, the authors would like to thank all participants for providing insightful and valuable responses, without which this study would not have been possible.

Appendix A. Supplementary data

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.jef.2018.02.007>.

Glossary

- Angpow* literally “red envelope”, a monetary gift given by the Chinese during special occasions
- Bee hoon* thin rice noodles/rice vermicelli
- Char kway teow* fried flat rice noodles with other ingredients added
- Char siew* roasted pork from Cantonese cuisine.
- Chee cheong fun* literally “pigs' intestine noodles” rice noodle rolls, also believed to be a Cantonese dish
- Cheng tng* literally “clear soup”, a dessert with longans, barley, agar strips, lotus seeds and a sweet syrup, served either hot or cold
- Gotong royong* an Indonesian term that broadly describes co-operation within a community
- Hock Chew mee* a type of fried noodles from the Fuzhou region of China
- Kacang putih* literally “white nuts”, chickpeas
- Kang kong* also known as water spinach or morning glory. A traditional green-leafy vegetable consumed throughout many parts of Southeast Asia
- Kaya* sweet coconut curd frequently spread on bread or toast (sometimes also referred to as egg jam)
- Keropok* deep fried crackers, a Malay snack

Kok-kok mee literally “knock-knock noodles”, sold by Chinese food peddlers
Kopitiam literally “coffee shop”, made up of a few small stalls, selling food and beverages
Kueh a Malay cake
Mama a derivation of the Tamil term “*Mamak*” (literally “uncle”)
Mee goreng fried noodles of the Malay and Indian variant
Mee rebus a dish comprising Chinese egg noodles in thick, spicy gravy
Mee siama Malay spicy noodle soup dish
Nasi lemak a Malay coconut cream rice dish
Ngoh hiang five-spice pork rolls wrapped with bean curd skin
Pasar malam a night market
Pulut hitam black glutinous rice porridge, a type of traditional dessert
Rojak literally “mixed”, a local dish of mixed vegetables, fruits, and/or dough fritters that is covered in a sticky fermented prawn paste and garnished with chopped peanuts and finely-cut fragrant ginger flowers
Roti an originally Indian term now often used to describe a range of types of bread but more frequently used to describe flatbreads
Roti prata/prata fried flatbread, a dish of Indian origin
Satay skewered and grilled meat, served with peanut sauce
Tao suan a mung bean–based dessert
Ting-ting candy a hard candy that got its name from the distinctive sound of the tools used to break it into bite-size pieces
Wanton mee Cantonese dumplings served with noodles
Wok hei literally the “breath of a wok”. Descriptive of the traditional cooking flavor imparted by wok-cooking
Yong tau foo a mixed, Chinese dish believed to come from Hakka cuisine.
Zi char literally “cook-fry”, a stall which sells Chinese dishes, similar to traditional home-cooked meals

References

- [1] Ali SH. Malay peasant society and leadership. Oxford University Press; 1975.
- [2] McTurk C. Parting glances: Singapore's evolving spaces. Singapore: ORO Editions; 2013.
- [3] Tay A, Chung SH, Lim I, Thangamma K, de Souza ML, Phan MY, Seah S and Thomas V. Kampong days: village life and times in Singapore revisited. National Archives of Singapore; 1993.
- [4] Dean K, Wang Y-C, Feng CC, Chong W, Kim I-H and Hue GT. Locating kampongs in Singapore. 2016. Available from: <https://www.nusgis.com/kampongs/> [Accessed 26 Dec 2017].
- [5] Chua BH. Department of Sociology working papers No. 122. Singapore: National University of Singapore; 1994.
- [6] Twelve perspectives arising from our Singapore conversation. 2012. Available from: <https://www.reach.gov.sg/oursgconversation> [Accessed 17 Mar 2017].
- [7] Chan SC. In: Chan KB and Tong CK, editors. Past times: a social history of Singapore. Singapore: Times Editions; 2003.
- [8] Health Promotion Board. National nutrition survey. Singapore: Research & Strategic Planning Division, Health Promotion Board; 2010.
- [9] Ritchie J and Lewis J. Qualitative research practice: a guide for social science students and researchers. SAGE Publications; 2003.
- [10] Berg BL and Lune H. Qualitative research methods for the social sciences: pearson new international edition. Pearson Education Limited; 2013.
- [11] Pope C, Zieband S and Mays N. Qualitative research in health care. Blackwell Publishing Ltd; 2006. p. 63–81.
- [12] Baharin S, Dahlan B and Vasoo S. In: Ahmat S and Wong J, editors. Malay participation in the national development of Singapore. Singapore: Kok Wah Book Binding Company; 1971.
- [13] Morton LW, Bitto EA, Oakland MJ and Sand M. Accessing food resources: Rural and urban patterns of giving and getting food. Agric Hum Val 2008;25: 107–19.
- [14] Dickson-Spillmann M, Siegrist M and Keller C. Attitudes toward chemicals are associated with preference for natural food. Food Qual Prefer 2011;22: 149–56.
- [15] Colony of Singapore. Report of the hawkers Inquiry commission. Singapore: Government Printing Office; 1950.
- [16] Agustina R, Sari TP, Satroamidjojo S, Bovee-Oudenhoven IM, Feskens EJ and Kok FJ. Association of food-hygiene practices and diarrhea prevalence among Indonesian young children from low socioeconomic urban areas. BMC Public Health 2013;13:977 (12 pages).
- [17] Chua BH. In: Sinha V and Kong L, editors. Food, foodways and foodscapes: culture, community and consumption in post-colonial Singapore. New Jersey: World Scientific; 2015.
- [18] Desmarchelier PM, Apiwathnasorn C, Vilainerun D, Watson C, Johari MR, Ahmad Z and Barnes A. Evaluation of the safety of domestic food preparation in Malaysia. Bull World Health Organ 1994;72:877–84.
- [19] Lipoto NI, Geok LK and Angeles-Agdeppa I. Food consumption patterns and nutrition transition in South-East Asia. Publ Health Nutr 2012;16:1637–43.
- [20] Stancu V, Haugaard P and Lähdenmäki L. Determinants of consumer food waste behaviour: two routes to food waste 2016;96:7–17.
- [21] Visschers VHM, Wickli N and Siegrist M. Sorting out food waste behaviour: a survey on the motivators and barriers of self-reported amounts of food waste in households 2016;45:66–78.
- [22] Van Esterik P. Food culture in Southeast Asia. Unites States: Greenwood Press; 2008.
- [23] Polanyi K. The great transformation: the political and economic origins of our time. Unites States: Beacon Press; 2001.
- [24] Quandt SA, Arcury TA, Bell RA, McDonald J and Vitolins MZ. The social and nutritional meaning of food sharing among older rural adults. J Aging Stud 2001;15:145–62.
- [25] Ong BG. The social structure of the resettled Malay community in geylang serai, Singapore. Singapore: Department of Sociology, University of Singapore; 1974.
- [26] Chang CT. In: Yeh SHK, editor. Public housing in Singapore: a multidisciplinary study. Singapore: Singapore University Press; 1975.
- [27] Fuyong Estate Networking Committee. Faces of Fuyong. Singapore: Grenadier Press Pte Ltd; 2015.
- [28] Lin Y. Fridges stocked with food in Tampines block to help boost kampung spirit. Singapore: The Straits Times, Singapore Press Holdings; 2017 [Accessed March 4, 2017].
- [29] Kuznesof S, Brownlee IA, Moore C, Richardson DP, Jebb SA and Seal CJ. WHOLEheart study participant acceptance of wholegrain foods. Appetite 2012;59:187–93.
- [30] Redmond EC and Griffith CJ. A comparison and evaluation of research methods used in consumer food safety studies. Int J Consum Stud 2003;27: 17–33.
- [31] Carr EC and Worth A. The use of the telephone interview for research. J Res Nurs 2001;6:511–24.