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歸屬感：家庭健康飲食資訊的脈絡研究

Homing in mobile life:

A Contextual Study of Domestic Information on Health

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摘要

近年來，由於交通工具的便利與普及化，人們逐漸離開家鄉就學與工作。對於在外居住的家人，家的意義從固定的家庭住所，逐漸變為一個移動的概念，而外宿者可透過居住經驗與社交生活來適應新的生活環境。為了能夠讓在外居住的家庭成員感受家的存在感而不會過於孤獨，本研究提出了"家庭歸屬感"(Homing)的概念，希望幫助外宿者在外居住時可透過不同型式的歸屬方式增加新住處與原生家庭的連結。為了形成通勤成員的家庭歸屬感(Homing)，家庭意識與家庭識別度為主要建立家庭歸屬感的基礎。透過各個家庭各自的習慣與生活方式，家庭識別連結了家庭成員的過去與現在生活中的各種資訊，而家庭歸屬感(homing)則是把這些已知的家庭的資訊實踐到生活當中。當家庭成員離開原生的家到另一個環境之中時，可將家庭的資訊帶到新生活當中，讓新的生活與原生的家以資訊的方式相互連結，使新生活依然保有原生家庭的氣息，進而讓在外居住的成員更能適應新環境。

於資訊層面來看，家庭健康飲食資訊是最能突顯家庭識別的資訊之一，透過建立家庭資訊歸屬感的方式，本研究試圖整理出影響家庭健康飲食的因素，進而提出外宿者透過健康飲食資訊建立歸屬感的可能性。在過去的文獻當中，多數的健康相關研究著重於個人的健康記錄。在家庭方面，則偏向探討增進老人、小孩與家庭健康的關係，而對於外宿者與家庭健康的連結則鮮為人討論。為了增進在外居住的家人更快速的佈置家庭歸屬感於新的環境當中，本研究透過深度訪談法(In-depth Interview)進行使用者研究，分別調查七位在原生家庭的成員與四位在外通勤的家庭成員對於處理家庭健康飲食的原則以及處理方式。其次，透過親和圖法(Affinity Diagram)和工作模型(Work Models)整理歸納出家庭健康飲食的內容以及影響來源。

最終，本研究歸納出六項可喚起家庭意識的健康飲食資訊，分別為地理資訊的連結，家庭健康信仰，家庭健康事件，母親的角色，健康處理經驗和對健康的期許，進而探討家庭健康飲食資訊增進在外居住的家人家庭歸屬感的可能性。其次，本研究提出"資訊物件"(Information Artifacts)的概念來整理以及典藏家庭健康資訊。透過家庭食物資訊物件，長期健康照護資訊物件，以及生活作息的資訊物件，外宿者可以延續處理家庭資訊的原則，藉以形成家庭的歸屬感。另外，本研究也提供了設計師在針對家庭健康議題上的一些設計建議。透過適當的資訊分享，複製，以及連結周遭地理資訊的方式，設計師可透過家庭飲食健康的相關資訊，建立在外家庭成員的家庭歸屬感。

關鍵字：家庭歸屬感，外宿者生活，家庭健康飲食，家庭典藏，分居式家庭

ABSTRACT

In recent years, a number of people live in mobile life and away from their family. The idea of home for mobile people is not a stationary location, but rather an experience along with the place where they stay. In order to feel more homely in new residence, mobile family member create the sense of belonging in certain place through the identity of their own families. Taking into account of domestic information, health and diet information are considered as one of the most valuable data to construct the sense of belonging for mobile people. To maintain the experience of belonging for mobile family member, the research seeks to build the idea for homing toward domestic health information. In the advances of technologies nowadays, research studies are now paying attention to personal or social health management, health reflection of elderly or children at home. However, it is a lack of investigation on how mobile family member create the belongingness to family through domestic health and diet information.

To support mobile people construct the sense of belonging, the research firstly excavated comprehensive health information within family, and secondly retrieved the possibility of homing for mobile people. Based on the in-depth interview with family members, the research recruited participants included seven mothers, as the role of family member at home, and four children, as the role of mobile people. Though the analysis of affinity diagram and work models, the research explore how domestic health information being managed in family. From the understanding of results, several factors highlight the belongingness to family via health information, which are geographic health information, family health beliefs, the role of mothers in family, empirical practice of health, and health expectation.

In order to put the idea for homing into practice, Food in family, Long-term Healthcare, and Daily Schedule are proposed as *Information Artifact* which help mobile people evoke the belongingness for family. Drawing attention to the possibility of homing, several implications have been proposed in research. Copying domestic health information, sharing appropriately is the consideration for distributed family to interchange information. Connecting geographically and maintaining daily Schedule are the idea to construct a relative position of health information for mobile people. These implications provide the insights in health management for designing technology for family.

Keywords: Homing; Mobile Life; Domestic Health Information; Family Archive; Distributed family.

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終於也是到了寫致謝的這一刻。從考上交大應藝所，去英國皇家藝術學院(RCA)一年洗禮，到回來台灣完成論文的這三年，遊玩了七個國家與十四個城市，遇見了許多人，也經歷了許多事，豐富，並且特別。最要首先感謝的是親愛爸媽無私的為我這個任性小女兒的奉獻與關心，雖然我不常在家你們也常常小倆口自己約會去，但我愛你們！

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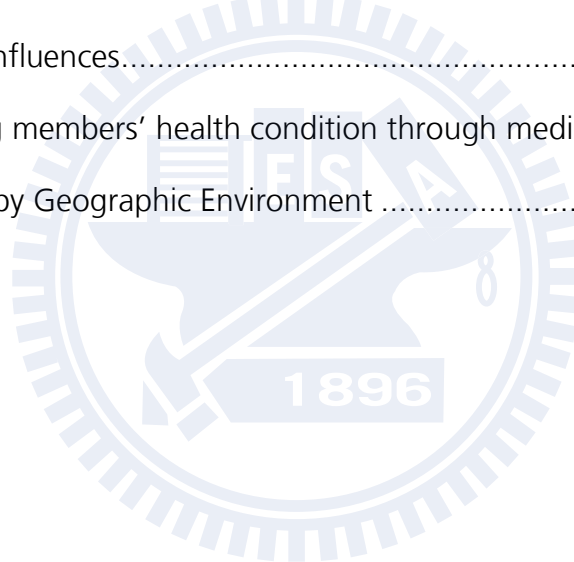
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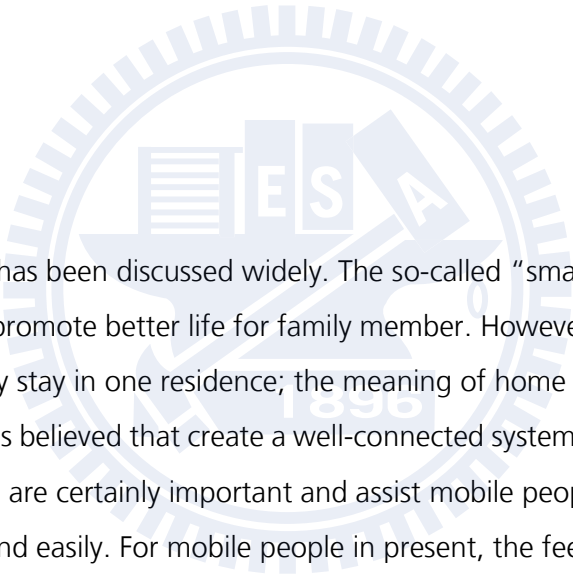
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1.

INTRODUCTION



Recent issue in family has been discussed widely. The so-called "smart home" in design field is also making effort to promote better life for family member. However, people in the age of rapid mobile life are not only stay in one residence; the meaning of home for them is transferred from stability to mobility. It is believed that create a well-connected system between original family and mobile family member are certainly important and assist mobile people adapt to new environment quickly and easily. For mobile people in present, the feeling of home is built up by the artifacts such as furniture and articles for daily use constructed in new residence. However, mobile people still need to seek for a sense of belonging to family in new residence; otherwise they would be isolated rather than intimacy with family. According to Maslow's hierarchy of needs, belonging is a need that we naturally seek in order to feel loved (Maslow, 1943). Apart from the connection of tangible artifacts in family, domestic health information is an idea in supporting mobile people creates a sense of belonging to family. In previous research studies about smart home technology related to family health issue, it is been widely debate on promotion of personal and family healthcare, especially for elderly or children, but rarely discuss in how mobile people connect their health condition to their original family in order to placing the belongingness in second residence. Therefore, this research aims to describe research in supporting distributed family members who live apart from home to build up the belonging to family in an aspect of domestic health information.

1.1. Background

The experience of home has been changed over time when people started to work or study away from their family, as well as take home as a mobile experience rather than stability place.

Traditionally, the meaning of home in sociology is basically focused on the terms of privacy, security, family, intimacy, comfort, and control (Putnam and Newton, 1990). People are looking for a sense of belonging when living in a place so-called "home". It is not only in a way of familiarization with the dwelling, but also building a strong connection with distributed family. However, for people who live remotely, it is necessary to maintain the feeling of home, which in the sense of belonging to family, into different aspects in order to keep connection to their family even apart from home.

To support the idea of maintaining the sense of belonging in mobile life, Winther (2009) propose the idea of homing, which is an act to make people feel homely. It is not a non-place, but an action to make specific places more self-belonging. To make the act of homing into practice, Petersen, Lynggaard, Krogh, and Winther (2010), in HCI (Human Computer Interaction) field, proposed tactics for homing within mobile people. Research studies in environmental psychology have also investigated that in material and social dimension can make mobile people feel at home (van der Klis & Karsten, 2009), such as creating a comfort living environment and participating in social interaction of commuter residence. Research studies in family archive also state that the sentimental objects can recall the memories of family and reveal the identity of home (D. S. Kirk & Sellen, 2010). In HCI field, recent advances in technology for home device are mostly discuss about how to control (Davidoff, Lee, Yiu, Zimmerman, & Dey, 2006) in between the devices in order to make people live easily and intelligently.

In the research studies above, it is found that most of the studies are debating the feeling of home in the aspects of materials, social, environment and technology. The definition of homing in Winther's research (2010) is mostly focus on self-belongingness in mobile life rather than discuss about the belonging to family for mobile people. In this thesis, the idea of homing is defined as the action to make mobile people feel the belonging to family. This research also aims to investigate the domestic information which contributes to mobile people construct the sense of belonging when apart from family.

In the perspective of domestic information, families own their custom and life style which

differentiate the identity of home from other families. This sense of identity can create the sense of belonging to the family for mobile people. It is a group of psychological phenomenon which is founded as a share system of beliefs, such as roles, relationships, managements of families (Bennett, Wolin, & McAvity, 1988). The identification of family is collected from various information of family members' long-term living experience in the earlier period till present. For people who live apart from home, the sense of belonging to the family though family identity is able to help them seek for belonging to family in new residence. "Homing" is an action to create the belongingness of family. With the sense of belonging built from original family, mobile people are able to maintain family identity in life without lost connection.

In this research, it aims to focus on the most valuable information, domestic health information, to support mobile people construct the sense of belonging. Nowadays, the advances of technology provide various methods to access, present and share information to individual or community (Davidoff et al., 2006; Pratt, Unruh, Civan, & Skeels, 2006). In the perspective of health management, it is focus on personal health record (PHR), patient nursing at home, and social wellness improvement. In the issue of family healthy and diet, most research studies focus on the purpose of improving senior nursing at home or relationship within children and parents. Grimes, Tan, and Morris (2009) investigate how distributed family sharing and collecting health information within family members and propose considerations for technologies that support distributed family reflections on health data. The purpose of these studies are either promoting the health condition within family members, or integrating health information in management.

Beside, research studies in family archive investigate the relationship between tangible materials and digital materials in present, and propose the possibility and affection of future family archive in the digital world (Sellen, 2011). It opened up the field to study how families access their information in home physically or digitally. Gemmell, Bell, and Lueder (2006) state that all the information surrounding us is possibly to be storage and preserve eternally. In the wide public issue of family healthcare, how to management domestic health information through digital archive, and maintain it continuously for mobile people are crucial issue to be discussed in this research.

1.2. Motivation

The connection between individual and family is considered as three dimensions: in blood relation dimension, in environment dimension, and in information dimension. Blood relation is certainly union family members together. The geographic location of home is gathering family together environmentally. The interchange of family information in daily life construct an integrate memory in family. In the mobile life nowadays, family members are hardly connected each other in tangible dwelling house but connected in an emotionally sense of identification, especially connect through relevant artifacts, such as photos that recall the memory of family, or decorating a warm and cozy dwelling in a way of copying origin-home furniture or atmosphere.

Nevertheless, the interaction of family members is full of richness information which shapes the identification within families. For mobile family members, it is important to maintain this kind of identity through original family information in order to construct the sense of belonging in mobile life. In all field of family information section, this research aims to focus on the most valuable information in family, which is health and diet information. One of the valuable parts is that while domestic information has been archived, family member can retrieve the history of family member's health condition, and support doctors for future security in hospital. Besides, in the perspective of inheritance, it enhanced family members understand other member's condition and storage the information for family identity. When mobile people away from home, health and diet information still can be maintained and communicated without isolation. It is believed that health and diet information in family is a positive perspective to build up the sense of belonging to family. In the meanwhile, in the gradually popularity issue of family healthcare, the importance of how people collect and preserve health data in family is especially worth to study.

In Human Computer Interaction field, there are amounts of technologies and devices support family health issue, particularly focus on health nursing of senior and children. They are mostly aims to maintain and promote families' health situation, but rarely discuss about how these information create a sense of belonging to family. In the field of family archive, research studies discuss about the value and possibility of archiving in both tangible object and digital object such as photos and videos, but less discuss about how domestic health information being archived as well as maintain the information for mobile life.

In current domestic health and diet information, it is being collected by the ritual of family, cultivated from family's subjective sense of its custom over time, and the experience of daily life traces. However, this type of information is not being archived yet, and it certainly needs to be put into practice. With the establishment of health and diet information archive in family, it is possible to manage the health information equally rather than centralized into one family member. When the time family member leave home or pass away, this information is able to continuously exist and inherent generationally.

1.3. Objective

To support designers create a system to manage domestic health information, the research aims to investigate the possibility for homing for mobile people through domestic health and diet information in order to make mobile people create the sense of belonging. In this point of view, four objectives are focused as follow:

A. Understanding the meaning of home through domestic information

In the previous study being investigated in various research field, included environmental psychology, sociology, architecture and human center design, the meaning of home can differ from one to another. The research firstly defined the meaning of home through domestic information. The purpose of doing so is to limit the boundary of home meaning and clarify where the research stand for.

B. Understanding the connection and transformation of health and diet information in family.

Since domestic health and diet information has not yet being collected and investigated before, a comprehensive understanding of the categories and the affection of health information is necessary to be studied at first. In this term, this research aims to clarify different layers of affections, the subject that influence information management and the behavior that sharing within family members.

C. Analyzing the evidence of belonging to family in domestic health and diet information.

After understanding the intension of domestic health information, several evidences are able to reveal family identification which conducts the sense of belonging for mobile people. The evidences can compare to the meaning of home defined in first term, and retrieve the valuable data to display the principle for homing.

D. Proposing design implications for homing for mobile people in family health diet information.

For designers who are making effort to build up an information system, the research proposed several advices for them to consider home system in information perspective. These implications can guide designer to improve the system of health information in family and propose a better home experience for mobile people.

1.4. Issues

This research includes three aspects of issues to discuss about. The issues are display as follows: 1) what factors influence domestic health and diet information? 2) Which factors of domestic health and diet information indicate the sense of belonging for mobile people? 3) How to construct the action of homing for mobile people in the perspective of health and diet information?

1.5. Scope

This research provides the possibility to achieve family member feel belonging during the time spent in second residence. However, the evidence is limited in specific seven interviewers we studied in Taiwan. The users research investigated are mainly focus on nuclear family with mothers in the age of 45 to 55, and children in the age of 25 to 29 who studied away from home. The perspective of fathers is not considered in the thesis. Besides, the quantification analyze and statistic analyze are excluded in the research.

1.6. Outline

This research is consisted into six chapters. Chapter one include research background, motivation, objective, issues and the scope of this research. In chapter two, literature review present overall definition in the meaning of home, and introduce relevant research studies in health management and family archive. The research structure and methodology are displayed in chapter three which include data analyzing process. The research findings are displayed in chapter four, with the evidence of homing in analyzed contextual inquiry and work models. In chapter five, the research discussion about research results and demonstrated implication for designers. Finally, the conclusion and recommendation for future work are proposed in the end of this research.



2.

LITERATURE REVIEW

In order to develop the idea for homing through domestic health and diet information, this research firstly looked into the fields that discuss about the meaning of home in order to seek for the sense of belonging to mobile people. In environmental psychology, the concept of home is clarified as a continuum, from the physical space to the emotional attachment of a place. In sociology, it focused on persons across life cycle affiliate with places and home. Research studies also discuss about the meaning of home in Human-Computer Interaction field. Besides, healthcare technology and design for home are reviewed to provide the insights for family health and diet management. In order to comprehend information management in family, the subject of family archive is also addressed in this research.

2.1. The Idea of Home as a Continuum

The meaning of home is widely discussed in different research fields, such as environmental psychology, sociology, anthropology, and human computer interaction. Home is considered as a place or a place where one lives, a family or group living in house, a person's country, city or birthplace (Mallett, 2004). In most of the research studies, the meaning of home is considered as a continuum from the most general perspective, as a space, to the intimate meaning, as a home.

Home as a space is a general ideas of home meaning; it indicates where the home is, and what tangible objects in home. Douglas (1991) firstly considered home as a localizable idea, which located in space. She further addressed home is not only a space but a multiple concept, such as space with the structure of time. The meaning of home is an organization of space over time, as well as a dynamic, a endless, ongoing accomplishment (Gurney, 1997). Each kind of dwelling has its own distinctive memories within family members (Douglas, 1991).

Home as a place is different from space. It includes emotional expression in dwelling and cultural interpretation. During the time family members living in home as a place, the ritual and life trace have constructed the identification of home. Gieryn (2000) notions that a place should naming, identification, or representation by ordinary people, otherwise it's not a place but only a space.

Family identity is an idea that able to make people feeling "at home", and it reflects obviously on migration people. Cuba and Hummon (1993b), in sociology field, has defined home identification in three different successive locales: Identity in dwelling, community and region. In this research, author focuses on how migrate people developed a sense of home with collected data from the residents living in Cape Cod. The results stated that dwelling identification for older migration is influenced by the demographic quality of residents and residential background. Community identification is influenced by the activity residents participated in, regional identity is promoted by comprehend community spatial activities. It reveals that not only in-home attributions create the meaning of home, external influences also affect families create their own family identity, such as neighbors, social life circle around home, and friends.

For mobile people, the meaning of home is considered as a mobile idea rather than stable in specific places or space. van der Klis and Karsten (2009) address three levels to create sense of home in commuting partners in dual residence: in material dimension, activity pattern dimension, and social dimensions. Furthermore, the research divided these three dimensions into three spatial levels: as a space, as a place, or as a home. Space is functional, without any emotion context, place is where people familiar with, and home is where people adapt in, with more emotional expression and sharing activity, especially imply intimation, belonging and safety. The research stated that material dimension is the most common and easiest way to make sense of home in commuting partners, such as sentimental attachments, family photos, and cherish objects. Activity pattern are mostly focus on the job, and it presents different pattern between men and woman. Women are more likely to create routine activity after working time, but men are more likely to stay in workplace late to escape the after work time rather than arrange other activities. Furthermore, since their routine scope is limited through the time they spend in either residence, it is difficult to create a continuous activity circle in life to make sense of home. Social dimension are the most difficult way for commuters to create sense of home because it is yet needed family members accompany with commuter in order to create a sense of home.

In other review of the literature related to the meaning of home, scholars have sought to define

home as a place in three aspects: sense of place, place identity, and place attachment. Sense of place is the most subjective places, which represent general characteristic of a place, such as where the events happened in, or where domestic objects place in. Place identity can be define as an interpretation of self that uses environmental meaning to symbolize or situate identity (Cuba & Hummon, 1993b). It is the place where people are able to identify emotionally, such as common memories or activities. Place Attachment is where people develop affective ideas with places that are in part to do with satisfaction, but also to do with evaluation.

2.1.1. Sense of Home

In the meaning of home, making sense of home indicate the general home definition, which is a spatial house or dwelling where one lives, or a birthplace, a residence during people's early years (Mallett, 2004). It includes activities that occur in one place, with life trace constructed by family and ancestors. It also represents basic characteristic of home which is recognizable, such as where family stay. In the meanwhile, research studies also notion that particular family events are strongly highlight how people making a sense of home. Cuba and Hummon (1993a) investigated how migration people conduct a sense of home through place affiliations, and the research concluded that people in different stage of life cycle consider the sense of home in different aspects. Migrating people in young age often base their family identity in friendship, family, and self attribution, but senior migration consider the sense of home as a dwelling or experience with place. Gurney (1997) investigated how dramatic events influence people make sense of home, such as relative pass away or natural disaster happened in home.

Besides, men and women stand for different position to define home meaning is also reflects on the sense of home. Women seem to take home in more emotionally expression, as well as playing a different role apart from men. Some early research studies claim that men consider a sense of home as a signifier of status and achievement, nevertheless, women view home as a haven. Besides, women and men experience home in vastly different ways. Mallett (2004) mentions that analysis of the relationship between gender and the meaning of home generally focus on issues of: work or production, consumption, spaces including house design, and housing tenure and the house as an expression of status. Meanwhile, the historical separation of work from home environment has divided what men and women manage information in family. The privatization of family life, and the domestication of women's role are thought to both enrich the experience of "being at home" in everyday life and root the experience in the domestic

environment.

2.1.2. Family Identity

Family identity is the attribute of family, what people think the meaning of family emotionally, and the memories people shared with family member. The experience in family is went through the time spend in family. It is the family's subjective sense of its own continuity over time, its present situation, and its character. The attribute of family identity make the meaning of home different from other families. It is a group psychological phenomenon which is founded as a share system of beliefs, such as roles, relationships, managements of families(Bennett et al., 1988). Those beliefs take into account the family legacy form prior generations and represent the family sense of its current place in the world. Cuba and Hummon (1993b) pointed that long term residence build up place identity, with life trace in daily life, sentimental attachment and the memories family shared with each other. During the years family been through, family identity play an important role when young adult leaving home and a role in the experience of young couple beginning to create its own family as well (Douglas, 1991; Moore, 2000).

2.1.3. Home Attachment

Home attachment is where family shared the most inner emotion, as well as provides a satisfaction in both physical and mental aspects. In sociology and anthropology field, home mostly described as a haven, a place where people can relax, feel comfortable and safety. Mallett (2004) propose seven dimensions of home meaning which are grasped from personal and cultural experience: shelter, hearth, heart, privacy, roots, abode and ideal paradise. Research also concluded that research studies into the meaning of home repeatedly focus on basis terms: privacy; security; family; intimacy; comfort, and control.

2.1.4. Brief Summary

Taking into account of the three levels in the meaning of home, it is not only spoken to the home meaning in geographical perspective, but also consider about the emotional expression and family identification of dwelling. The sense of home starts from general perspective, such as a space, a dwelling where people lived, and a place with collective memory of people. The family identity reveal how family members recognize home with the memories and life trace spend in

home. Home attachment expresses the most intrinsic thought of home which construct the intimacy within family.

2.2. Perspectives of Homing for Mobile People

2.2.1. The Activity of Homing

“Homing” is primary defined by Winther (2009). It means a none-place, the acts of making specific places feel self-belonging in life. He categorized the concepts of home as two axes: Static to mobile, Mentality to Tactility (fig 2.1). It split into four home meaning which are home as a place: a general understood as a place reserved for people, Home as an idea: multiple ideas attached to cultural aspect and ideological construction, to feel at home: the mood to feel at home, and homing: an activity that continuous making, to achieve comfort even though away from origin-home.

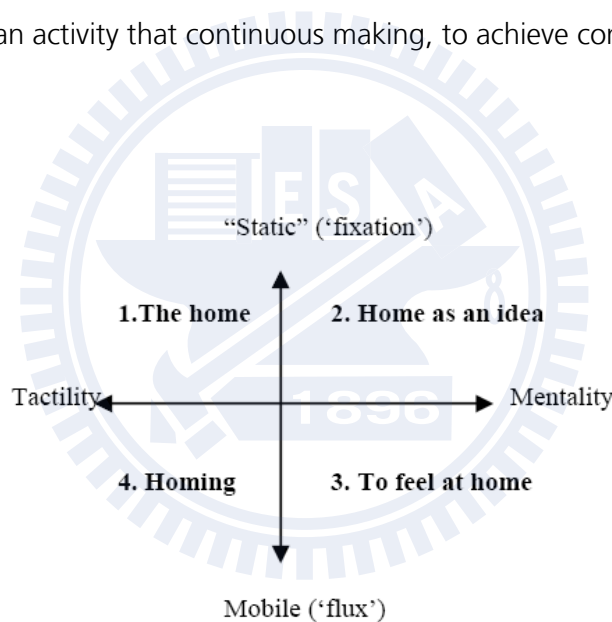


Figure 2.1 The concept of home (Winther, 2009)

The meaning of homing in the research study based on mobile and tactility axis, which refer to people who live in mobile life and necessary to put homing into action in order to feel self-belonging in new residence. Petersen et al. (2010) proposed seven tactics for homing for mobile people when they away from home, which are territorializing, bubbling, outboxing, connecting, differentiating, doubling, and rhythming.

Territorializing. Territorializing is a physical way of making traces, showing life that people lived, such as dropping things on specific location, or display where they are. This phenomenon is able

to create a sense of presence to others in both original home and new residence.

Bubbling. Bubbling is a way of excluding the outside disturbances. It is to isolate oneself and make people concentrated on one thing without the limitation of space and location, such as phone talking and music listening. It is a behavior of “copying” what people usually do when continuously on the move. It may less feel at home by bubbling, but it reduces the feeling of strangeness when people went into a new environment.

Outboxing. Outboxing represents what tangible objects mobile people bring between two residences; it is preparing artifacts for moving. The research study focus on the content of bags users take with them, and they see two way of outboxing, one is a permanent outbox which is adjusted between trips but never been totally unpacked, another is a temporary bags which only packaged when people ready to move.

Connecting. Mobile phone and laptops are key artifacts for connecting, which are able to stay in touch with distributed family. Another way to connect with family is gift giving, which reflects home as a social construction of home. The mobile phone and laptops were stood for key roles for connecting. In addition to numerous phone calls, Gift giving also represents the connection between mobile people and family members. We saw a lot of examples of gift giving as a way of connecting to loved ones. The tactic of connecting is a way to relate the ideas of home as the social construction of home.

Differentiating. People act differently in two residences because of different value they consider in each of places. It helps them differentiate the identity of home from on to another.

Doubling. Doubling is copy artifacts from primary home to new residence, such as setting double things in either residence, or copying technology in computer in order to equal the information in two places. People seek for same home feeling in different place in order to feel at home in remote place.

Rythming. Rythming is continuation beyond mobility, copying live schedule from one place to another, such as sticking to same working time even when they are in different time zone, or person who follow the rhythm of markets in terms of doing business.

With those activities, mobile people are able to put homing into action. However, the definition of homing in this research study is based on extremely mobile people with their own way established self-belonging in mobile life, rather than mainly considering the relation with distributed family members. In our research, the action of homing for mobile people is not only based on material perspective or personal behavior, but rather founded on the belongingness of family.

2.2.2. The Meaning of Home for Mobile People

More and more research studies in environmental psychology and sociology demonstrate how mobile people create emotional and cognitive feeling of home in dual residence. van der Klis and Karsten (2009) proposed the feeling of home for commuters in material, activity, and social dimensions, and compare these dimensions to the sense of space, place and home. Scholars investigated thirty commuter couples in Netherlands with in-depth interview. Material dimension is physical setting, items which are emotionally interpreted.

Table 2-1 Number of respondents with the experience of space, place, or home for each dimension. (Cuba & Hummon, 1993b)

	Space	Place	Home	Total
Material dimension	6	11	13	30
Activity patterns dimension	6	17	7	30
Social dimension	16	11	3	30

It is the most common dimension which considered as evidence to create the feeling of home in various research studies, such as furniture, cherish objects and meaningful material in order to represent an experience of familiar places (D. S. Kirk & Sellen, 2010). Activity dimension is regarded as a personal place identity in particular location in daily life, and further transform it from space into a familiar place or home. Commuters arrange their time in workplace and commuter residence differently, which demonstrate the activities they arranged in daily life. It is

interesting that gender is one of influencer that cause different activity behavior which refer to previous research studies that women interpret home emotionally but men interpret home practically (Rutherford, 1990; van der Klis & Karsten, 2009).

The research shows that women are more willing to create a sense of home in commuter residence with abounding activities after working time, and decorate residence as a comfortable place. In contrast, men are more willing to work overtime in order to escape the rest of time spending at night. They also less interest to shop or decorate commuter residence. Social dimension looks into social contact of mobile people in commuter residence. Family visiting enhance the experience of home feeling, and it is the most difficult action for mobile people visiting their family regularly. However, some of people regarded their commuter residence as a personal place apart from primary home. They create a secret place in commuter residence in order to temporary away from family. Comparing these three dimensions with the experience of space, place and home, they found that material dimension is the main element reflects the experience of home. For the activity mobile people involved, it reflects to the experience of place where leads them to familiar certain place. Social dimension is the most difficult element to experience commuter residence as home but rather than a space. It is because family members are in distant location where is hard to physically connect to their family members. Without the experience family gathering together, it is hard to regard commuter residence as a home.

2.2.3. Brief Summary

In conclude, research studies have looked into various perspectives that make mobile people feel at home. For extremely mobile people, the perspective of behavior is being investigated to understand people construct self-belonging in new residence.

For commuter partners in dual residence, material, activity and social aspects are regarded as principle to survey the feeling of home. As a result, the evidence of how people construct the feeling of home is not only focusing on copying the material from original family, but creating a sense of belonging in new residence. The type of belonging can divide as self-belonging, family belonging, and community belonging.

For self-belonging in mobile life, people construct a continuously habit or activity themselves without the limitation of location. The evidences are clearly reveal on the behavior of Bubbling

and Doubling in the research of Petersen et al. (2010). Community belonging is focus on how well people adapt to the new environment through social life circle. Family belonging means to feel a sense of welcome and acceptance to family. As suggested by Maslow's hierarchy of needs, a psychological theory centered on humans' innate desire for fulfillment, belonging is a need that we naturally seek in order to feel loved (Maslow, 1943). To keep the *Rythming* from home and *Connecting* to family are both emphasize the importance of family belonging for mobile people in new residence. In this research, we attempt to explore domestic information perspective in mobile life and seek to understand the key element to make mobile people create the sense of belonging of family.

2.3. Family Health and Diet

In order to understand domestic information, and how it affects to mobile people, the scope of domestic information has to be defined. In this research, we aim to focus on health and diet information which is considered as the most valuable information in family management.

2.3.1. A Growing Study of Health Issue

During recently advanced of technology support, health management of individual has been explored, such as exercise training, healthy sleep behaviors, and activities monitoring. Numbers of studies have demonstrated that the health behavior through the monitoring devices and the clinic applications helps people live a better life (Rabbi, Ali, Choudhury, & Berke, 2011; Tollmar, Bentley, Moore, & Olwal, 2011). Personal Health Record (PHR) also provides online health information storage. Besides, collecting and interacting with individual health information data through mobile devices is a growing research subjects, especially focus on elderly and children. People manage healthcare or physical status of elderly through the assistance of electronic devices in order to detect emergency situation (Lee, Basapur, Chaysinh, & Metcalf, 2011). The research studies above are mostly concentrating on how technologies support healthcare archive or detection. With the support of technologies, people are able to enhance health condition.

Besides, healthcare issue is not only about individuals, but also reflects to social networks and group people participate. Several research studies discuss about how social context affects personal health condition. Scholars state that social healthcare, personal or interpersonal health

while using social networks or social connections, may affect personal health condition, and persons who are aware of wellness of other friends contacted online may also improve wellness in group (André, Schraefel, Dix, & White, 2011).

Beyond the social context, families are one of the most influential group affect personal health condition. Recently, the growing body of evidences states that family and social environments play an important role in developing children's eating and diet pattern at home (Patrick & Nicklas, 2005). The ritual of food and health habit shaped the characteristic of family's health and diet identity, which directly influence health condition of family members. For supporting domestic health promotion, research studies provide home assistance for family members to control other member's health condition. Some research studies developed an affect- and behavior- relevant assistance system for family to communicate and display relevant information, particular for elderly who connect with their family (Peter, Bieber, & Urban, 2010). Other research studies also provide a wearable sensor system that support privacy management for smart home healthcare system and suggesting to share the most meaningful health information in different context (Rashid, Schmidtke, & Woo, 2007). By the healthcare technology in home, family members are able to detect and control about other member's condition. However, the archiving of personal healthcare data is not only benefit on physical consideration, but also able to improve the communication of domestic information.

2.3.2. Research in Supporting Domestic Health Information

In the aspect of domestic information, Grimes et al. (2009) proposed tactics for family collecting and sharing behavior upon health information within family members. Scholars have provided various aspects for health data management in family, and highlight four areas reflecting on health information context.

Firstly, family members are more easily to collect and reflect when they share similar daily schedule, which encourage them collaborate with health data completion, such as distribution of daily meal since they shared routines. Also, it facilitate family collaborate the reflection on health data in a good sense of habits within family members. It presents the highlight that it is a unique opportunity for family member gathering together to construct and share health information.

Secondly, scholar suggested that any technology applications should concern about balancing

the values of openness, caring and modeling in protection. Openness is regarded as a principle of not violating the core of health information core. Caring is what family members think the value of health information data, especially for the role of “mother” who take it as a moral responsibility. Modeling is to set good example for children in order to model a proper health and diet behavior. Besides, for the needs of protection, the transparency of health information between parents and children need to be under consideration, even though it has value for modeling well behavior to children. Parents take worrying about their children as their duty but not vice versa. Thirdly, it is negative to compete or compare the health behavior between family members. Parents prefer to seek different type of health information for each child. It also emphasized the comparison and competition could leads embarrassing to family members. Fourthly, there are some benefits beyond health information, for example. Looking at the record of children’s health information can make parents see their development. It also reflects an enjoyable experience family share, and the memory of tastiness of the food.

In the end, scholar provided implications for the management of domestic healthcare information. First of all, increasing the opportunity for family members gathering together can facilitate health data collecting and sharing. Besides, research studies also explore how to balance the interflow of health information between each family member in order to fulfill various values within family. Considering cooperation in health data collection is also important, and considering the information beyond health data as well.

2.3.3. Brief Summary

In conclude, with the support of advanced technology, health data collection is widely being used in various areas such as nursing detection, smart home control, and online personal healthcare management. Scholars also study about how these technologies influence life and the relation between family members. In the information of domestic health nowadays, it display in domestic spaces such as kitchen with food information, bathroom with medicine information, or bedroom with supplement information. For mobile people, the information was hard to retrieve in distant places due to its attachment in original family. Nevertheless, with the support of internet and mobile device, mobile people are able to manage and access health information even when they are not at home. In present, there are some technologies already support family to detect and save health condition on website (André et al., 2011; Tollmar et al., 2011), but there is a lack of health management based on the pattern of family member.

The managements of domestic health information supposed to be archived to help family member build up their own health knowledge system, as well as provide the opportunity for mobile people construct their sense of belonging through those information. Hence it is important to study what factors influence health management in family and how it affect to mobile people when they apart from home.

2.4. Domestic Information Management: Family Archive

To understand domestic health information, it is necessary to understand the meaning of archive in family. Since recently advance in digital storage, creating digital archive of individual or family is an area of growing interest.

2.4.1. Tangible and Digital Archive

In personal archive, research started from seeking for how people archive tangible objects. It explored personal archive through academics arranged their papers, emails, documents, and internet bookmarks, which concluded why and the reason to archive: to find it later, to build a legacy, fearing to loss, to share, and identity construction. Scholar also address that materials describe the owner, thus people arrange personal object can define identity of oneself (Kaye et al., 2006). Other research studies propose an organized system to draw attention to informational artifacts, such as notes or recipes, and provide design implications for information device at home (Taylor & Swan, 2005).

When archive comes to digitalized area, a growing of studies focus on how to collect and arrange personal digital data. Gemmell et al. (2006) begin the project "My life bits", which is a personal data for everything and preserved in digital way. In digital archives within family now, the production of its form is mostly focus on digital documents. Beside, some research studies explored the interaction of physical and digital archive, and proposed design implications based on the artifacts that support collecting and accessing family information in digital.

2.4.2. The Value of Family Archive

For the family archive in digital aspect, research studies demonstrated on artifacts in home such as sentimental attachments, or digital material such as family photos and videos. Scholars

propose an idea that the reason of why people archive in home is to memorize, and record family memories (Stevens, Abowd, Truong, & Vollmer, 2003). However, D. Kirk and Sellen (2008) propose different perspective that the value of archive is not only about memory. The scholars investigated both physical and digital materials in home which are cherished for family members, and excavated the value of home archive. The six value research proposed is: defining oneself, to forget, fulfilling the duty, farming the family, connecting with the past, honoring those we care about (Fig 2.2).

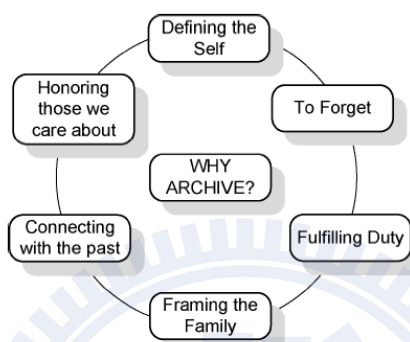


Figure 2.2 Six value of home archiving (D. Kirk & Sellen, 2008)

Defining the self. One of the archiving values is to define oneself with express something about themselves, surround themselves with objects which connect to their past, and trigger memories of personal events and relationships. It is comparably reflected on personal aspect, but it also able to reflect personal identification.

Honoring those we care about. It means that objects can be display for honoring other in family or important friends and family, such as the painting in childhood. Besides, this type of objects is focused on stay original rather than replication. "Copying" can loss the value of these objects. However, in the digital artifact, it is hard to find the evidence that honor oneself.

Connecting with the past. By the connection with the past, the value can reveal on recollecting or reliving some past experience, such as recipe from grandmother. It is to share the event or experience to other family member, with the evidence that recall the memories of past. It also display in digital artifacts such as scanning old photos in home.

Farming the family. This type of objects can spoke more to the social organization of home and

farm the family rather than individual. Mothers in family are playing important role in this value, such as decorating house, or collecting and arranging things on proper spaces. The different displays of furniture at home frequently become an identification of families. However, it is seldom reflecting on digital artifacts.

Fulfilling duty. The purpose of archiving objects is for the duty. Scholar stated that sometimes objects being storage are not archiving for someone, but rather than archiving for its own value. People may not take these objects as meaningful artifact now, but they think they would be meaningful someday, or it can be kept to pass on to the future generations. In digital artifacts there are no relevant evidence supporting this value. For people who archived artifact such as photos are either little concerning in passing to next generation or fulfilling the duty to someone.

Forgetting. It is mostly focus on painful events on family that reveal the archive value of forgetting. In digital evidences such as emails or digital footprint from someone who pass away were kept but deliberately hidden.

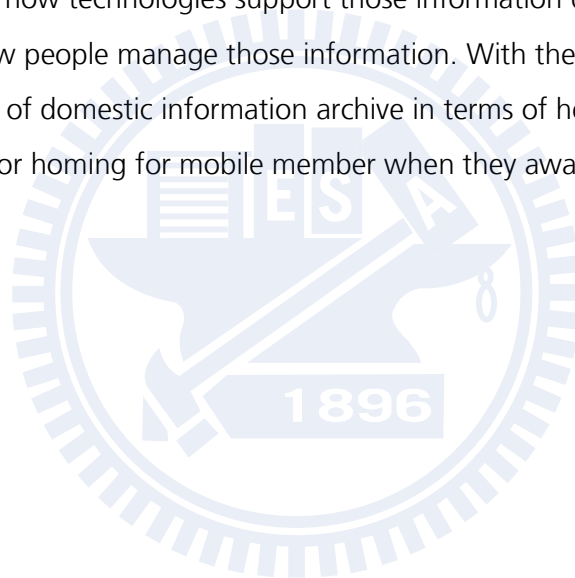
2.4.3. Brief Summary

In conclude, previous research studies demonstrated how people archived objects and the value of archiving in home from analyzed the comparison of physical artifacts and digital artifacts. In the future, the information in family will gradually storage and arrange in digital way (Gemmell et al., 2006). How families display their own identities through these digital information and what can these information support families' life are both important field that worth for study.

2.5. Brief Summary

In the previous literature we have studied, it indicated that family archive in present is focus on physical artifact such as sentimental objects or cherish things, and digital objects such as digital photos and videos (D. S. Kirk & Sellen, 2010). The comparison between the two addressed that physical archive at home reveal more evidences to display family identification than digital archive. Nowadays, it is believed that digital archive is unavoidable in the future years due to the advances of technologies and devices(Gemmell et al., 2006). More and more personal or family information would upload to cloud system; therefore, people will face the issue of how to distinguish personal identification from others with such similar data categories.

In domestic health information issue, scholars are focusing on technology of data access and how these technology support domestic health information with the digital data they have collected. The technologies in present such as personal health record, online medical management and object with monitors are both supported data access in the aspect of computing system (Cuba & Hummon, 1993b; Patrick & Nicklas, 2005; Pratt et al., 2006). Other research studies are more focusing on cooperation or competition in personal or group achievement. All these technologies are managed based on data access, and are further being discussed in the improvement in tracking system or privacy protection within family (Beaudin, Intille, & Morris, 2006). As a result, these types of health information are founded on the starting point of computing data. It can be seen that these health managements are based on data they have collected, with the principle to manipulate those data and further involved into the device placing at home. Most of the research studies are discussing how technologies support those information data but rarely discussing in the perspective of how people manage those information. With the respect to this, the research explore the possibility of domestic information archive in terms of health and diet issue and provide implications for homing for mobile member when they away from home.



3.

METHODOLOGY

While previous research studies have applied design in domestic health information and the principle of family archive in digital world, it is necessary to excavate the knowledge in order to comprehend the influence of domestic health information between mobile people and origin-family. For the reason above, the research propose a systematic user study framework to facilitate the understanding of domestic health information.

3.1. Research Process

The research structure aims to focus on understanding the categories of domestic health information in distributed family, and highlights the most valuable information for mobile family members. The research is divided into three stages: Data collection, Analysis, and Discussion (Fig 3.1).



Figure 3.1 Research Structure

3.2. Data Collection

The purpose of the research is to understand the information management of family diet and healthcare in order to create the sense of belonging for mobile in new residence. From the prior research studies being investigated, female play an important role in family and dominate the family work and daily life, especially in health and food management (Bennett et al., 1988). Participants are divided into two groups to seek the perspective in both family member at home and family member apart from home. For family members who control most of the information is interpreted as participant group A. In this research, participants group A are mainly focus on the role of mother in family. For the respect of seeking the value of health information in mobile people, family members who lived apart from home become participant group B, as mobile people in our research. With these two different aspects from participants, the health information in family is able to explore comprehensively (Table 3.1).

Table 3-1 Participant Groups

Participant Group A	Investigating aspects from Mother
Participant Group B	Investigating aspects from mobile people

In the research, some criteria are scoped for participants we recruited: (1) Focus on the mobile family member who live apart from family while others, at least one, stay in a stability home. The reason of doing so is to concentrate on the influence between family member in home and in mobile life. (2) The age of participants as mothers within the age from 45 to 55. And the participants who represented as mobile people are in the age of 24 to 30 who rent mostly studios apart from home (Fig 3.2).

In the family structure we recruited, mobile people focus on children who live away from parents for years, and able to create a stable lifecycle. Mother as participant is a housewife or officer who dominates health information in family. The participants we recruited are excluded the role of father in family, because it is found from the pilot study that father takes little affection in health information management, which will explain in next section.

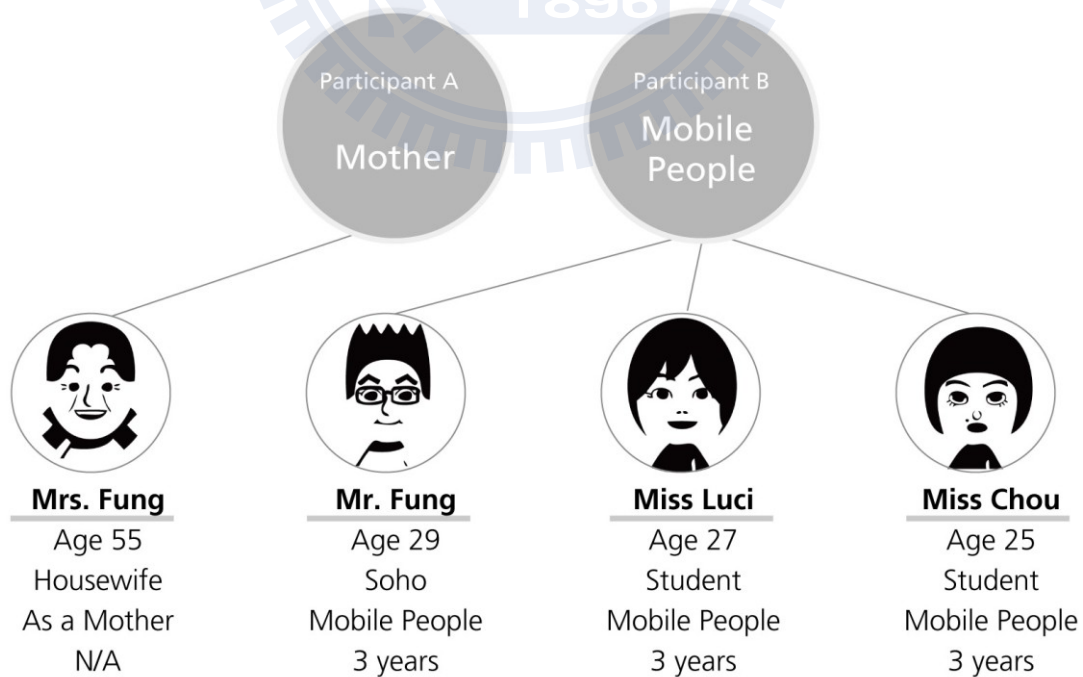


Figure 3.2 Participants of pilot study

3.3. Pilot Study

In the pilot study, Mrs. Fung and her son were firstly being interviewed as a family in in-depth interview. The interview for mother is separated as two stages:

In stage one, we basically understand daily routine of health and diet in family. The questions included what health and diet activities held in family, and the artifacts that related to health management such as medicine or dietary supplement. In stage two, we focus on specific home information in terms of health management, the interaction between family members, and the value of domestic health information for them, such as health problems occur in family member, or the alternation of food in home. For mobile people who live away from home, we also divided interview as two stages. The questions in *stage one* is basically the same as mother, but with more demonstration on individuals. *Second stage* is focus on understanding how mobile people conduct the sense of belonging to family during the day when apart from home, how to connect family members in health information, and how to maintain the information in new residence.

In the result of pilot interview, we found that mothers are relatively holding boundary of domestic information but rarely share it equally to other family members, thus she become the only family member control the whole domestic health information. For mobile people, health information is passively received from family. It is hard for them to carry with domestic health information due to technology limitation. In present, health information in distributed family is maintained by phone conversation within family members, or mobile people's eating habits. The artifacts came from home also display the belonging of family for mobile people. However, some problems have found in pilot study:

The role of mother is irreplaceable in domestic health information. The information in terms of health and diet is dominated by mother and is not wide-open information. For other family members, it is hard to obtain complete information equally, but rather receive it only one-sided.

Father is a role that lack of the connection within domestic health information in home. For the tradition of separating house work, father is a role to shoulder the income of family, while mother takes in charge of domestic housework. Thus, it reveals a fact that father takes less concern about domestic health management than mother. However, the position of father is same as mother in family, it probably cause an obstacle that those information are not sharing

equally due to their own duty in family.

It is difficult to find the evidences for mobile people construct the sense of belonging through health information in present. In the interview of mobile people, it is a lack of evidence that support health information facilitate the act of homing. One of the reasons is mobile people are not aware of home consciously, which means they treated their behavior as their own habit and not consider it as an influencer by original family. Another reason is that it is a lack of technology supporting family member to collect domestic health information, and causes an obstacle for them to build the sense of belonging in new residence.

In present, while mobile people conduct homing activity, they normally build up through physical artifacts or create an atmosphere that similar to original family. Besides, they also build the belongingness for family by gradually construct health habits from original family, which is proceeding slowly and less connect to family members.

In conclude, it is found that mobile people are hardly to construct the sense of belonging through domestic health information due to the lack of awareness on family identity. They are able to create the belongingness through “copying” atmosphere from original family to new residence by placing artifacts, but there are fewer evidences that support copying health information from family. Most of the health information is dominated by mothers who are forming enclosed information. When the time family members left home, it is hard to maintain health information in family. Therefore, it is essential to investigate what factors are able to construct the sense of belonging to family for mobile people.

3.4. Formal Study

3.4.1. In-depth Interview

According to pilot interview, it is found that family identity is able to assist mobile people create the sense of belonging. In the meantime, it is believed that health and diet information is the most valuable information in family and are able to build up the belongingness while members apart from family. Thus, the content of interview script was adjusted as follow.

We increase more perspectives of mothers as participants to deeply understand how mothers

manage and accumulate health information in family, and particularly focus on the information which is able to reveal the characteristic of family identity. The purpose is to comprehend the knowledge of health information in family in order to connect it as resource for homing.

Table 3-2 Participants in formal In-depth interview

Family	Age	Role in Family	gender	Family structure	Occupation
A	50	Mother	F	Father, mother and three daughters	housewife
B	52	Mother	F	Father, mother and two children	Officer
C	49	Mother	F	Father, mother and two children	housewife
D	45	Mother	F	Father, mother and two children	housewife
E	38	Mother	F	Father, mother and a child	officer
F	55/ 29	Mother and mobile people	F/ M	Father, mother and two children	Housewife/ Soho
G	45/ 24	Mother and mobile people	F/ F	Father, mother and three children	Housewife/ student
H	27	Mobile people	F	Father, mother and two daughter	officer
I	28	Mobile people	M	Father, mother and two children	officer

In the formal study, seven mothers and four mobile people are invited on in-depth interview. Six of them are housewife, another is officer. Both of all four mobile people are students who rent studio or flat near their campus (Table 3-2).

In the formal study, interview script was divided into three phases: 1. Daily routine journey and diet habits. 2. The value or concept of health and diet in distributed family 3. The experience and alteration of domestic health and diet issue (Table 3-3).

Table 3-3 Interview Structure

Phases	Question	Purpose
Daily routine journey and diet habits	<p>Please introduce your daily life journey in weekday and weekend.</p> <p>Please demonstrate the diet habit of your family, and explain why and how to prepare the food.</p> <p>Is there any extra food preparation exclude daily meals?</p>	<p>For mother: To understand fully context of family daily life.</p> <p>For mobile people: To understand daily life time.</p>
The value and concept of health and diet in family	<p>What do you think about the concept of family healthy life?</p> <p>What's your principle about health diet in home? Why?</p> <p>Is there any other healthcare idea in your family?</p>	<p>For mother: Understanding how mothers conceptual a healthy diet environment in home, in order to understand what is the most valuable idea of health diet in home.</p> <p>For mobile people: To understand how they conceptual the idea of health and diet life routine, and what information is came from home.</p>
The experience and alteration of home diet and health	<p>Please introduce last experience you and your family gathering to have meal.</p> <p>Is there any activity related to health and diet in home?</p> <p>Is there any change of family health diet when children left home?</p> <p>Please explain the alternation.</p> <p>Is there any other alternation in health and diet? What is it and why it changed?</p>	<p>For mother & mobile people: Understanding the alternative in home which influences domestic information management, and the character of specific information that create a sense of identity in home.</p>

The formal interview script, display as above, is separated as three phases. In the first phase, health and diet information can be comprehended by asking user's daily life. For mother, it is able

to know the detail of health and diet condition which deeply understand the category of information in family. For mobile people, it is able to understand their daily life and the characteristic of health and food management.

In the second phase, we would like to explore how mother construct their knowledge of domestic health and diet, what information they choose to believe , and why they think their knowledge are the most valuable one (or not). For mobile people, it is an opportunity to know how they conceptual their ideas of health and diet habits, who influence their perspective, and what information is influenced from family.

In the third phase, which is the last phase, the experience and alternation of family health plan has been considered in the management of family health and diet. By asking their past experience of health and diet in family, it is able to understand specific events or activity that affect health and diet habit in distributed family, and more information about how family manage and assign those data. Besides, due to prior study interview and the literature review we discuss above, it is said that dramatic event has profound effect to family (Gurney, 1997). The participants we interview are in the period of empty nest, thus the comparison between the time children stay home and the time children away from home are considered deeply understand the transformation in distributed family.

3.4.2. Affinity Diagram

After the interview data being collected above, affinity diagram was used to understand the context of how care giver management their domestic health and diet information. By the statements we've collected from in-depth interview, several characters have been categorized as the interpretations of health diet information in family. This method clarifies the evidence from the in-depth interview, and also facilitates the understanding of information status interchanging in family members and the original resource of health information.

3.5. Work Models

By the raw data we collected from last stage, the statements have analyzed as work models in order to simplify the result from affinity diagram, and further clarify the influencer from various factors that affect health and diet management.

Cultural Model

Cultural model is the diagram which includes the information of expectation, desires, policies and values of the subjects. It displays cultural influence and the relationship between each influencer. In order to fully understand how mothers create a sense of health and diet value, cultural model is considered as an ideal tool to clarify the influencer. Through various motivation and purpose, it can display different levels of influencer which conceptual an idea of health and diet cultural in family. Furthermore, it also illustrates health perspectives affected from individual ideas, which encourage us to refine the possibility of family belonging.

Sequence Model

Sequence Model is displayed as continuous steps of events. It displays the trigger that causes events, the steps that follow the actions and the intent which influence the events. Due to the time information has been collected, sequence models are shown to explain the long-term affection of health diet management in family. Besides, it demonstrates the dramatic event in family as well.

Flow Model

Flow model aims to discover the relationship between each role in the subjects. It displays the information of person's responsibility, the action between persons, and the relation of artifacts and persons. Since the information are transmitted from one to another, flow model facilitates the clarification in responsibility of characters in family health diet issue, display the relationship in different characters, and also display what information they transmit between each other.

4.

RESULT AND FINDING

Since the research process has defined in chapter three, the results are analyzed as two aspects: Firstly, it shows preliminary understanding of participants' characteristic. Secondly, it focused on family archive in domestic health information. It is to categorize the health information in distributed family, look deeply into the experience, and find the character of health management. The evidences are interpreted as affinity diagram and work models in order to clarify the influences between each other.

4.1. The Characteristic of Participants

In formal study, it is found that each family has its own management due to different personality and holding their own valuable health diet principle in family. Thus, participants' family are divided as four groups due to their own management characters, which are (1) Family who hold professional health knowledge (2) Family who manage information empirically. (3) Family who manage information equally interacts with members. (4) Family who hold non-interference policy (Fig 4.1).

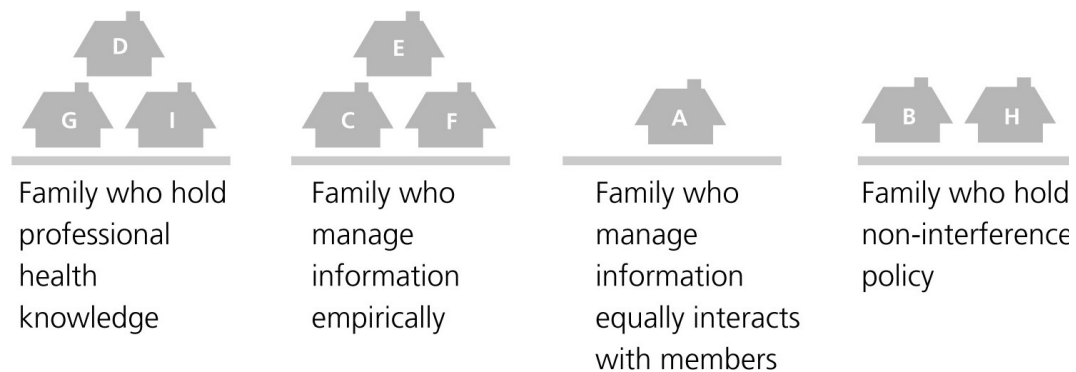


Figure 4.1 The Characteristic of Participants

4.1.1. Family who Hold Professional Health Knowledge

Families include D, G and I display professional health knowledge management in family. Mother in this section reveals a boundary health knowledge which is arranged properly in family daily life. Besides, a standard process of health management has been developed from professional mother to deal with health information as well as accumulate the health knowledge in family. Since mother's health knowledge is rather professional comparing to other family members, health information in family is mostly dominated by mother, and brings a fact that it is a lack of interaction in health information within family members.

In family D, mother as a housewife who is full of knowledge of food nutrition. She inspected every component of food and only buy fresh and healthy ingredient for family. She also provided professional advice for family members, and dominates food resources in home. In family G, participant who is a housewife taking deeply care about her family. She owns all the health knowledge in family and frequently teaches or share with other family members. Participant I, whose mother is a nurse full of professional health knowledge and always ask participant I to eat carefully due to his liver problem.

4.1.2. Family who Manage Information Empirically

In this section, families include family C, E and F reflected the characteristic of empirical health

management in family. Mother in this section is typically a traditional mother who takes health information as an inheriting experience from original family and learns health knowledge from empirical practice. Interaction of health information within family in this section is not parallel, which indicated that mother is holding most of the health information in family, and children received information passively from mother. Nevertheless, the information of health in family is possible to pass down to next generation due to the experience children see and learn from mother.

For example, family C included Mrs. Shen as housewife, father who works abroad, her daughter who live at home and her son was studying apart from home and came back home once a week. Mrs. Shen is a traditional housewife who takes in charge of all domestic management. She cooks everyday for family and prepared traditional drink she made herself in terms of health consideration. Her cooking skill is learning from her mother and what she learned the idea of health and diet management from original family is empirically experiment. Thus she created an empirical health knowledge she learn from her own experience and original family, which facilitate the management of health information.

In Family F, Mrs. Fung is a traditional housewife who owns a to-fu shop in front of her house. She prepared meals for family as well as manage her to-fu shop. She takes health management in family as her responsibility and arranges healthy food or medicine properly in her own way without mention to other family member. When family members suffer from health problem, Mrs. Fung will take care of them by her past experience.

4.1.3. Family who Share Information Equally with Members

In this section, health information is shared in parallel within family members. Information is not only hold in one's hand but rather than sharing with others. By the frequency of interaction with family members, the principle of traditional seniority is not revealed obviously in this family which encourages children, as a mobile people, willing to share their ideas to family health management.

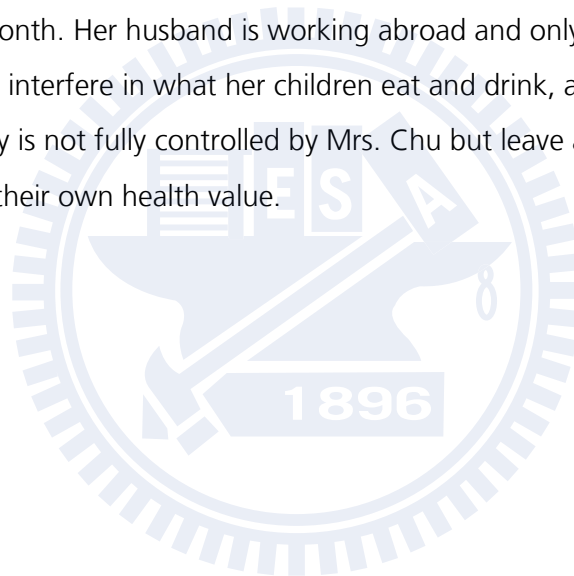
It is a typically example in family A. Mrs. Lin is a housewife with three daughter, and a husband who is worker live at home. Two of her daughters are stay at home and one is studying away from home and came back once a week. It is a family with frequent interaction in domestic

information. Mrs. Lin and her daughter share health experience and knowledge with each other. She teaches her daughter how to cook, and accomplish health knowledge with her daughter who suggested advice to her as well.

4.1.4. Family Who Hold Non-Interference Policy

Family B and H are the families that manage their information leisurely. Mother in this section are not controlling information too seriously but leaving a space for other family members to construct their own perspective about health management in family. The non-interference policy in family also creates divergent ideas of health and diet value within members.

In family B, Mrs. Chu is an office worker with two children studying apart from home and came back home twice a month. Her husband is working abroad and only came back home once a year. Mr. Chu seldom interfere in what her children eat and drink, and the health information management in family is not fully controlled by Mrs. Chu but leave a flexible space for family members to shaping their own health value.



4.2. How families archive their health and diet information

The first stage in attempting to understand the management of domestic information was to analyze the statements collected from participants. According to the result analyzed by affinity diagram, the health and diet information in family can be divided into five main categories: internal inheritance, internal information communication, external influencer, medium between internal and external influences, and physical environmental influence.

4.2.1. Archive from Internal Inheritance

Internal inheritance comes from individual family experience which is not fluctuated by external influence. It is an inheritance gradually transmitting and passing by the time and period family accumulate health knowledge with each other. Family is able to create a specific health and diet pattern due to the inheritance and pass down from the last generation to next generation (Table 4.2).

Table 4-1 internal influencer

Internal Inheritance	Learning from long-term experience	Choose proper medical treatments due to practical experience.
		Standard health habits learn from past experience.
		Individual food preferences in home build family health habits
	Inherit ideas from senior	Health principles learned from original family
		Traditional dietary concepts in Taiwan
	Common healthy activity holding in family	
	Health record from reference public on news and magazine	

Learning from Experience

The experience of dealing health circumstances is one of the points that construct the information of health management in family. It is a family health principle learned from empirical study with continuously revise and practice on health events. It constructs a standard health reaction principle in distributed family which displays specific identification in different families.

Experience in physical health treatment is one of the examples. Mrs. Zheng, as participant C, was suffering from nose allergy for a long time. The medicine and treatment she has taken are not work for her. Once she took ganoderma which was advised from friend make her getting better, she started to take it in long-term treatment and introduce to other family members who were suffering in nose allergy as well. Mrs. Lin's daughter, as family A, was taking in both Chinese and western treatments due to her Menstrual pain problem. With plenty treatment experiences she has been through, Chinese medicine was considered as the most moderate treatment for her. Thus she continuously takes Chinese medicine to improve her health condition.

In daily food and diet of family, mother plays an important role to manage health experience into principles. By observing eating habit of family member, facial expression of children, and physical condition members display, mother in family is able to adjust and assign health management in daily life. Although the ins and outs of this information probably centralized on mother's own health knowledge, the result of dealing with this type of information in this section is explicated to family sharing with each other, and deeply effect and memorized by members. The evidence in this section is interpreted in sequence model in figure 4.1.

The trigger in sequence model occurs from the health problem of family members which reflect a series of reaction in management (part A in figure 4.1). The intentions are divided as three stages: secure, prevent, and self-healing. In the first stage of secure, participant is willing to understand and looking for references for improving the disease. After comprehending the knowledge from stage one, participant put the knowledge into practical experience in order to preventing relapse of condition. With the richness experience repeatedly practice from stage one and two, participant conducted an individual knowledge which facilitated the ability dealing with the health condition.

For example, participant E's daughter is suffering in allergic from her young age. In addition to

doctor seeing, her relative also provide the information of syndrome. In order to prevent relapse, she learned how to away from the allergens such as washing sheet frequently, preventing carpets and fabric furniture and asking daughter to drink warm water rather than cold one. When allergic occur again, she learned how to observe facial expression of her daughter in order to determine what time should go for doctor.

Inheriting from senior

In this section, health information is inherited from senior. It is wisdom of senior experience which passes down from generation to generation, and building a stereotype of health and food principle. However, the resources of this information mostly are untraceable, and easily being lost when inheritors left home or pass away. Another type of inherence is come from original family, especially come from mother. The past experience mother learned from her origin family influence her deeply in dealing with health information management in family. One of our participant explain the reason she bought medicine from pharmacy when she ill without seeing the doctor.

(All the conversations have been translate)

Quote:

"This is how we do when I was young. We never see the doctor but buy pills ourselves. Seeing a doctor was too expensive for us in that age. Even though I become a mother, I do the same thing because my parents do so."

-participant F

It also can be a possibility for present family member learning management from mother and passing down to children and the next generation.

The evidence in this section is interpreted in figure 4.2, Mothers bring traditional custom from original family, and "copying" the action of what they used to do without question. For example, participant C (part B in figure 4.2), as a traditional mother, is able to replicate the dishes from market or restaurant since she inherit the custom from her mother, who always experiment food-making in home without asking others for help. She started to make black fungus juice

when once she tasted it in market. With plenty personal experiments of making the juice, she had successfully make well-tasted black fungus juice and started to retail them to friends and relatives.

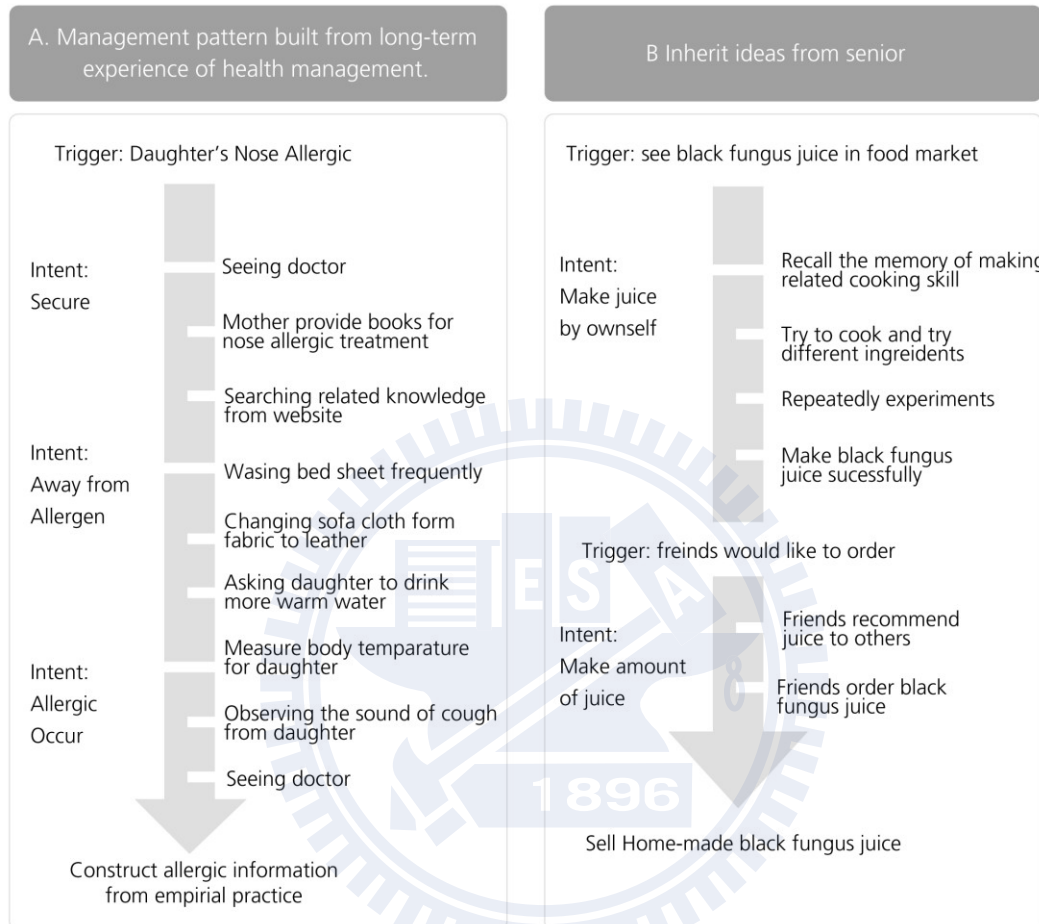


Figure 4.2 Sequence Model for inheriting information from senior

Recording/ preserving the references from public media

Two of our participants, as mothers, stated that they cut down the health reports or recipe from newspaper and attached to their own notebook for the improvement of their health knowledge. Another participant as mother states that she will keep the newspaper for family to read when she saw interesting health information on it. It is an artifact or behavior for mother to manage their health in a way of recording or preserving the information. However, the evidence of inheritance in domestic notebook from mother is not obviously in this section since the artifact is

not always public to family. It can be seen as personal enrichment of health knowledge within mother. One of our participant's son states that he doesn't know her mother's health notebook at all until we told him. In contrast, another group of participants are preserving this health knowledge in a purpose to share with other family members rather than keep in private. One of our participant said she will share her notebook to her family members in order to teach them her knowledge of healthcare. It is the same situation as participant A who will keep interesting report in newspaper for her family in terms of knowledge learning.

Holding activities routinely in family

Health management in this section reveals a strongly characteristic in the activities holding in family. It is public information that share a common experience and memories within family. For example, Mr. Chu, as a father in family B, came home once a year since he worked oversea. When the time he came back home, his family went to his favorite restaurant for celebration. The restaurant become a shared experiences which recall the memories where family spending time together. The evidence also reflects on participant C who went to specific restaurant when they decided to eat outside, thus the restaurant becomes an identification of where family used to go for diner.

4.2.2. Internal Information Communication

In addition to the inheritance, the communication between family members also reflected the interaction of health information within family. With the evidences we analyzed in affinity diagram, five characters are addressed below as the influencers of internal information communication: Changing health management due to dramatic events in family, dominating health information due to voluntarily concerning about members, Managing information due to division of labor, Personal perspective conflicting with other members, and flexible adjustment due to different schedule of members (Table 4.2).

Table 4-2 Internal Information Communication

Internal Information Communication	Alternation of health management	Changing health management due to dramatic events
		Family structure changed
		Awareness of age
		Individual habit influence others
	Dominating health information due to voluntarily concerning about members	
	Arranging domestic work by division of labor	
	Personal perspective conflicting with other members	
	Flexible adjustment due to different schedule of members	Compromising with family due to different daily schedule
		Forming the habit from personality

Alternation of Health Management

The management of health information in family is flexible and being adjusted during time or events happened within family. The dramatic event is considered as a trigger that change health management in family, such as serious disease happened in family, or family structure changed because of members moving out. Other factors are not alternated health information immediately, such as members who aware of eating dietary supplement due to the age getting older or individual habits effect family health management.

In the case of participant A, Mr. Lin started to see doctor for his liver problem since his father passed away few months ago because of liver cancer. Before his father passed away, he seldom go for doctor and less consider about his liver problem. However, the death of his father is vigilance for him and encouraged him to confront the disease he suffered from. Similar case is reflected in participant F. Mr. Syu used to go for blood donation routinely; however, once he was notice that his physical health was not qualified for standard blood donation, he started to adjust

his eating habit and health management in order to achieve standard health again. In these two examples we can see how health events affect personal health management. In addition, the change of personal physical health may also influence whole domestic health information. For example, participant D as a mother used to cook everyday for her family. However, she started to decrease cooking times due to her hand disease. The alternation of her family in health management is displayed on the sequence model on the left of figure 4.2. Participant D gradually bought less raw ingredients but more ready-to-eat meals in order to simplify the process of cooking. The domestic job of washing dishes became father's responsibility to release the loading of mother. Health information gradually changed the management in family to adapt mother's condition.

Besides, the alternation in family structure also deeply affects health management in family. The evidences reveal obviously in empty nest family, which is our target participants. Participant B, as a mother, used to cook everyday for family while all members still lived at home. Now she lived alone on weekday because her husband work abroad and her children left home for study. She states that it is lack of motivation to cook if no one home but herself.

[all the interviews have been translated.]

Quote:

"I did cook with more motivation when all family members still lived at home, even liked to search website for healthy recipe. But now we are all separated in different cities, I just buy what I want to eat after work; it is too bothersome to cook for only oneself. "

-participant B

Other evidences reveal in participant A, C and G as well. Mothers state that before their children study away from home, they cooked more frequently and were able to control their eating contents. Since their children left home, they change their health management such as decrease amount of cooking time, or fewer dishes in one meal. It also present a difficulty that mothers are hard to control whether children eat health or not when they away from home, which comes to a gap that the health information of children, as mobile people, lack of health information connecting to family.

Furthermore, the awareness of physical body condition also influence the conversion in health

management within family, such as taking nutritious food to prevent osteoporosis, or eating tremella to against menopause. This type of information mostly affected to individuals, however, in contrary, personal condition can influence family management as well, such as participant B, as a mother, cook Chinese medicine to her daughter because of menstrual pain but also share to other members.

In this section, the health management in family is alternatively changed after the events factor affect family members. The custom in family will gradually adapt to new principles of health management, but the information before the factor is easily to be forgot or alternated due to the period of time member getting used to new way dealing with health management.

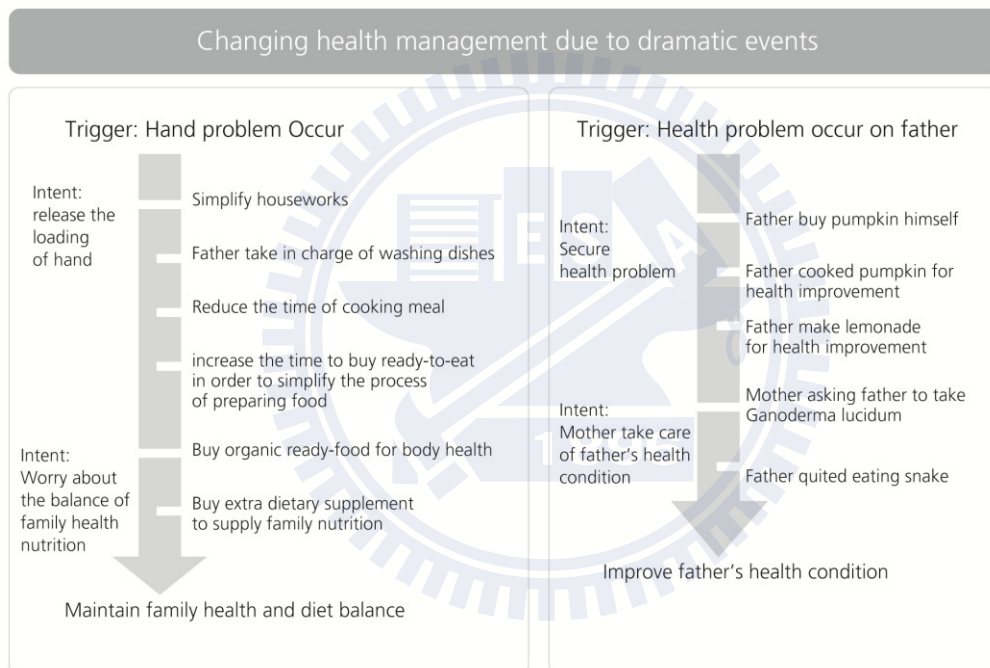


Figure 4.3 Sequence Model for Dramatic Events

Arranging domestic work by division of labor

Traditional arrangement of domestic work is basically divide in two parts: father, as a householder in family, takes in charge with the resource of fund, while mother takes in charge in food management in family. It is for the purpose that various works in family can be solved efficiently. However, the division of domestic labor might cause a lack of communication between different working content hold in member. In our in-depth interview, it is obviously that mothers control all the health information in family, but fathers rarely intervene in domestic

health management. The evidence such as participant D's husband doesn't like to take his wife a ride to supermarket because he think his vehicle is aimed for work but not for food shopping. Such factors are deeply influence on the communication within family members and cause gaps between father and other family members in health information management.

Personal perspective conflicting with other members

There are several evidences indicated that the communication of health value in family are conflicted. The evidences are obviously revealed on the role of father in family, and the phenomenon reflects on the flow model in figure 4.3. Traditional division of labor cause a fact that fathers worked out for long time but less time stayed at home. Thus, mothers take in charge of domestic health management which highlights the control of health and diet information on younger family members. Most of the participants, as mothers, states that father usually creates isolated health information from his colleagues which is conflicted to family members' perspective. For example, participant D, as a mother, said her husband started to take folk herbal medicine due to his health problem. It is completely conflicted the health idea participant D built in their family.

[all the interviews have been translated.]

Quote:

"It is ridiculous. I can't believe that he is taking folk medicine which is neither clear with resource nor good for his health. It doesn't make any sense at all and it's useless to ask him not to do so. I just wait and see what will happen. "

- Participant D

The evidences also reflect on participant A, whose husband heard the ideas of eating boiled pumpkin and oatmeal gruel in order to keep physical health from his co-workers (Fig 4.3). However, this health ideas keeping from father and doesn't pass to other family members. Participant A said that father bought his ingredient himself and cooked his health dishes himself without sharing to family.

Quote:

“He will buy pumpkin himself and put into fridge. Neither do I nor his daughters will move or cook his ingredients; we have no interest on it.”

- Participant A

As the evidences reveal above, it is a fact that father in family construct an isolated health perspective learning from his social circle which is not acceptable to family member. In contrast, the health ideas in family sometime are denying by father as well. One of our participants states that father refused to take nutritious food because he thought nutrition is took from daily meal without extra intake. The evidences reveal on the flow model in figure 4.4

Thus, there are numbers of evidences address the confliction between father and other family members. The management of health information in this section is not well-communicated which is hard to pass to next generation continuously.

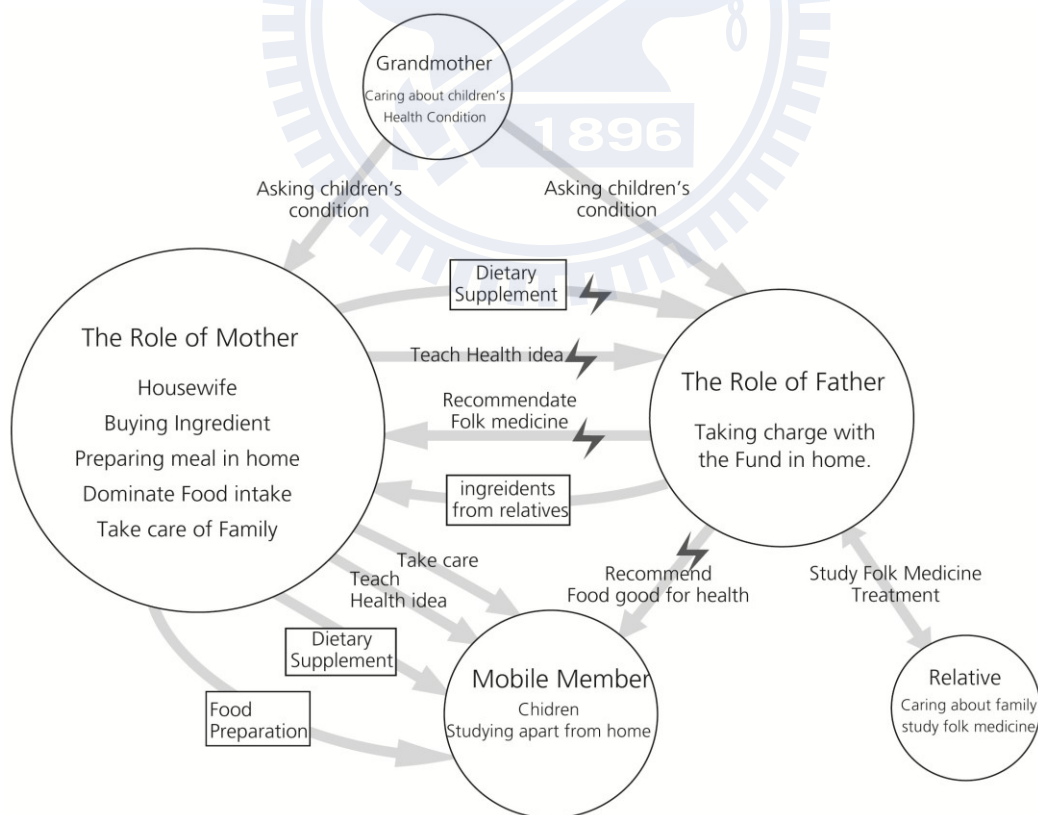


Figure 4.4 Flow Model for Internal Communication

Dominating health information due to voluntarily concerning about members

While mothers dominate the health information in family, they construct a sense of responsibility in family members' physical health condition. Under this situation, mothers control most of health information more than other members in family (Fig 4.5). Sometimes mothers did not communicate with others about health information because she took it as her responsibility and consider it is unnecessary to inform every detail to others.

In the interview of participant F, mother placed the medicine cabinet and other drugs into specific shelf without inform other members. She explained to us that it is unnecessary to tell others where she puts those medicines because they will ask her when they need it. Participant D also dominate what family eat every day and she states that family member eat what she buy so she won't ask them what they prefer to eat. In addition, with the respect of health responsibility, mother constructs a health and diet management within family and constructs a high expectation on their health condition. While the health expectation was not fulfilled, mother would compensate the nutrition in other way. For instance, participant D seldom cooked since her hand under health condition, but she bought better fruits and organic food to compensate the lack of nutrition. It also reflects on participant G that mother bought more dietary supplement for family in order to compensate the lack of sufficient fruit intake.

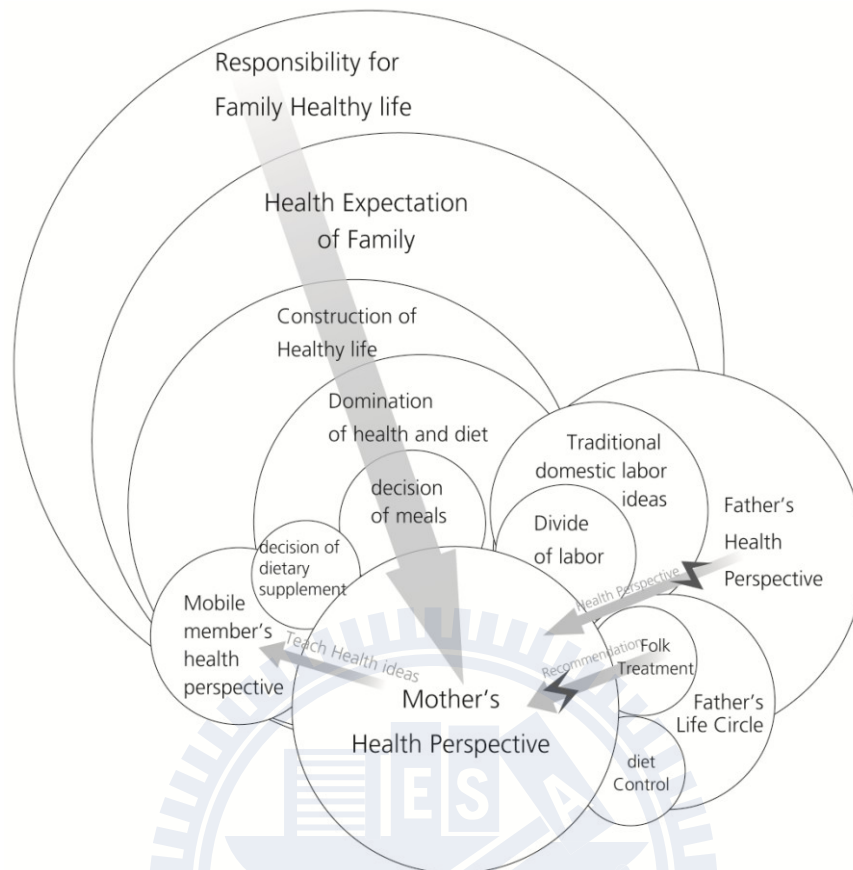


Figure 4.5 Cultural Model for Internal Influences

From the cultural model in figure 4.5, it is obviously to see that mothers dominate health and diet management through the ingredients she buy, the health food she choose, and the division of domestic labor in family. Under the careless of mother in family, an identification of family health and diet life has been conducted which create an expectation of healthier life within family. With the expectation of health life, mothers take a strong responsibility of health and diet management in family.

Flexible adjustment due to different schedule of members

In this section, mothers are able to minor adjust diet information due to different habits of food which also influence health management in family. The adjustment included food habit from different members, different daily schedule, different personality of members, and minor adjusting contents of daily dishes. In participant D's example, mother wake up at five for the purpose of making breakfast for family and go back to sleep till eight. Participant A states that she will go hiking with husband but her daughter won't come with them because it too early for

them. In addition to daily schedule difference, food habit and personality can influence health management in family as well. For example, participant C states that she will choose specific ingredients family prefers to, but rarely buy food they dislike such as green peppers because her daughters won't eat them. Another example is participant D who never worried about the diet of her daughter away from home because she knows her daughter won't buy unhealthy food due to her perspective of health life. The health information in this section is more personal than others, which reveal a strongly characteristic of family health management.

4.2.3. Affected by External Influences

In addition to internal influencer, external information also influenced the management of family health and diet perspective which divided in two aspects: the interchange of health knowledge with exterior, and the influence from public media (Table 4.3).

Table 4-3 External Influences

External Influence	Interchanging health knowledge from external information	Sharing health ideas to others
		Selecting specific health food due to others recommendation
		Family health habit influenced by friends
		Noticing family condition through others
		Learning more health knowledge provide from relative
	Influenced by public media	Increasing health food in home because of trendy health information
Enhancing health knowledge from books and website		

Interchanging health knowledge to external information

In the previous research studies we have reviewed, scholars state that External influences affect families create their own family identity, such as neighbors, social life circle around home (van der Klis & Karsten, 2009). In the evidences we analyzed, the interchanging of health knowledge to external information is addressed in two aspects: one is being impacted by exterior, another one is sharing with exterior. Since the role of mother dominate domestic work in family, the social life from mothers are easy to impact the management of domestic health information, such as the recommendation from friends or relatives, or friend's habit affect health ideas of mother. The evidences reveal on all participants we interviewed.

For example, participant D, who suffering from spine problem, went to Chinese doctor for treatment once a week. Once she went for doctor with nose allergic problem in the meanwhile, one of the patients in clinic recommended specific glossy ganoderma treatment for her. Therefore she started to take glossy ganoderma and it indeed improves her nose problem, and further recommend to her daughter who had same health problem. Participant F, as a mother, has a good relationship with neighbors and always share or interchange health information with her friends. Her neighbors recommend her to take specific dietary supplement to improve knee's problem thus she took it routinely till now. The evidences also reflected in participant B and C who receive advices from friends taking some treatments to improve unwell feeling in climacteric.

In addition, social activity is also the evidence that impact health management in family. We found some instances indicated that social activity can influence mothers' perspective of health ideas because of different families show their own health principle which encourage them sharing health ideas with each other. The family of participant B likes to drink a cup of coffee in the morning. Participant B said that the habit of drinking coffee is from their neighbor.

[all the interviews have been translated.]

Quote:

"We have this habit (drink coffee) at least ten years... but we drink Chinese tea in the beginning. It is because our neighbors like to drink coffee when we hold activity chatting with each other in community; my husband and I started to consider coffee as a good choice... Then we gradually cultivate this habit till now. "

-participant B

The evidences also can found in participant A who took baking class recommended by friends in community college and learn the skill of making breads, which impact food content in family. There are many examples addressed that social life circle around home affect mother's perspective of health ideas, and further impact the health management in family.

Additionally, the behavior of sharing with social circle is also found in this section, such as mothers share health ideas while chatting with neighbors or friends, or discuss about food and cooking skill with each other. The behavior of sharing health information is not only increasing their health knowledge but also construct a sense of home in social life circle.

Influenced by public media

During the massive media technologies go into the public, family can receive health information in various resources such as television show, websites, magazine, books or even supermarket. Since the public media divide health information into more specific and more professional, mothers are able to increase their health knowledge without interchange ideas to others, but received from public media in one way. The contents of popular health information are different from time to time. For instance, participant C used to squeeze fruit for juice to her family because Food processor was popular at that time. Participant F and her husband was taking specific calcium supplement due to the population of television advertising on specific supplement brand.

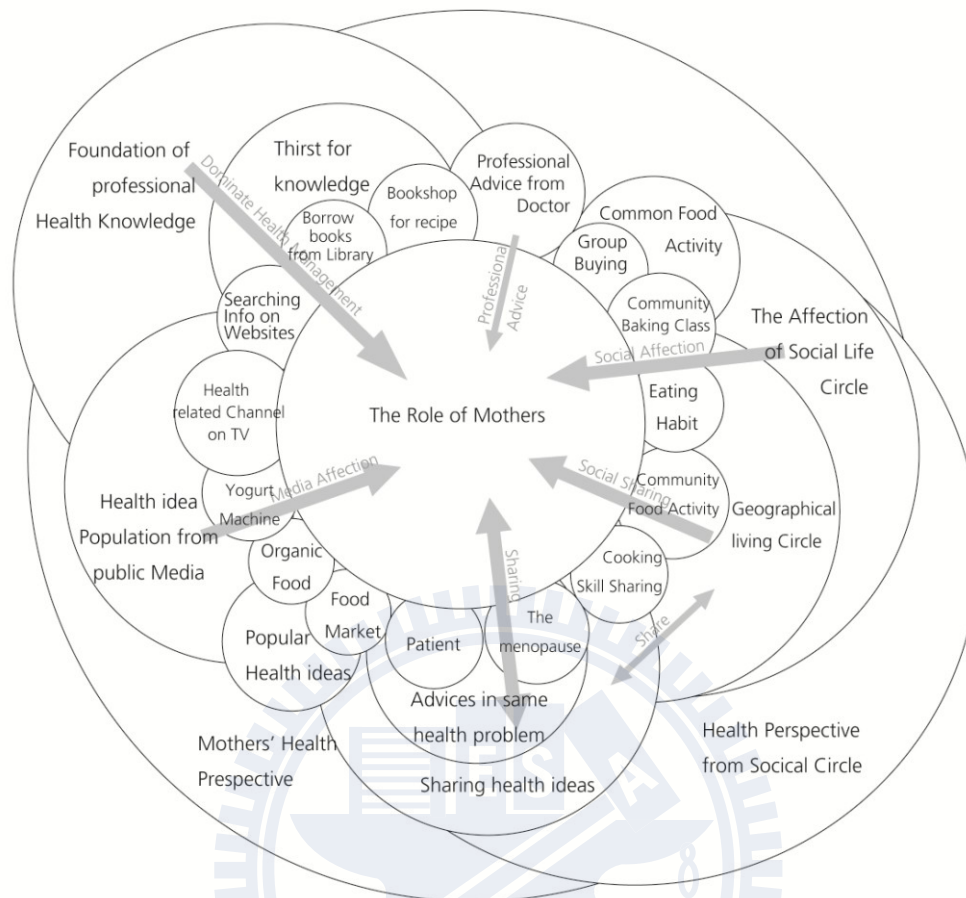


Figure 4.6 Cultural Model for External Influencers

Beside, the phase that public information influenced in health management within family is sometimes not only influenced temporary but long-lasting. For example, participant D's family started to eat organic food since the rise of organic food shop ten years ago. Another example is participant C, who like to make drink at home, started to make traditional black fungus juice for her family till now since she once saw vendors in markets selling black fungus juice which was popular to drink so to keep body health. Therefore, popular health information through different time periods can reflect on family health management for temporary influence or long-term periods.

In conclude, the influences of external information are interpreted as cultural model in figure 4.6. The cultural model indicated that family health perspective in this section is influenced by two aspects: one is influenced from social life circle, another is influenced by professional health knowledge building by popular health information. For the community activity family involved and the common interest share with neighbors, the social circle from regional contact affect the

management of health information within families. In addition, mothers' desire for health knowledge due to their responsibility is revealed on searching information from books or website, and receiving health knowledge from public media. With the knowledge mothers hold, they are able to build up their own health principles within family, and further increase the identification of health management in family.

4.2.4. Observe Family Health Condition through Medium Linkage

In this section, the evidence of how mobile people display their health information within family are revealed in tangible medium they have been connected with families. We observed some specific medium that support family control the health information for mobile people, such as instant food family prepare for mobile people or controlled health information through phone contact (Table 4-4).

Table 4-4 Observing members' health condition through medium linkage

Observing members' health condition through the linkage of medium	Controlling member's daily life through phone contact
	Controlling member's health condition through food provided
	Failed to control member's condition due to apart living

The evidence almost reveal at all participants' family. As family G for instance, mother will prepare different flavor of food for her daughter to when she back dorm. Participant G, as a mother, states that she feel relieve worries if her daughter eat what she prepare for her due to the control of eating content. Similar examples are also reflected on participant A, C and D. Mothers provide healthy food for mobile people to bring back dorm in order to control their food and diet. This type of behavior can presented the evidences that mobile people place domestic health identification through the food and health supplement they bring from family.

However, it is still lack of sufficient supports for mobile people to connect family in health information, which cause failures of health management in family. For example, participant G stated that she always worry about her daughter's Goiter problem but it is difficult to control her

condition since her daughter away from home, but only care about her condition by phone call. Here it revealed the evidence that mother is hard to control mobile people's health information. In the meantime, the situation happened vice versa. In participant F's family, Mr. Fong as a child in family stated that he worried about his father's Hypertension problem, but it is hard to care about what his father eat every day.

4.2.5. Affected by Geographic Environment

In addition to interpersonal interaction, geographic environment also influence the management of domestic health information. The relationship with neighbors we mentioned above reflects great evidences of geographic affection (Table 4-5).

Table 4-5 Affected by Geographic Environment

Affected by geographic environment	convenience
	environmental change

Besides, health management in family will be adjusted to fulfill geographic convenience due to different purpose. For example, participant C went for breakfast to the bakery near her home. Participant D states that she seldom go to shopping mall because there are full of various types of shops near her home. With the affection of environment, environmental change is also obvious evidence revealed in this section. Participant E states that her family prefers to eat Chinese breakfast rather than western breakfast. However, since they moved to the house they live now, there are rare Chinese breakfasts nearby, so they passively accepted to eat western breakfast in the morning. Another example is participant A, who started to rent books for health knowledge enhancement frequently since there is a brand-new library build up near her home.

5.

RESEARCH DISCUSSION AND DESIGN IMPLICATION

The research presented in previous finding speaks to the factors of how family manages domestic health information, and what influencers affect domestic health management. In order to apply domestic information for homing in mobile life, two mainly discusses are display in this chapter. Firstly, a further extension of the sense of belonging to the family for mobile people through domestic health information is addressed in this chapter comparing to the literature we reviewed in chapter two. Secondly, family archive in the perspective of domestic information is also presented in this chapter to help mobile people create the sense of belonging in new residence through the materials from domestic information centre of their own families.

In the beginning, several features of health information have been highlighted as the characteristic of domestic health information. Besides, five key factors that evoke the sense of belonging to the family in domestic health information are proposed to indicate the potential of homing in mobile life. Thirdly, *Information Artifacts* have been provided to clarify domestic information categories based on family members' mind. Finally, design implications are proposed for designers who intend to cultivate domestic information archive among mobile people.

5.1. Domestic Health Information

Referring to the finding and result in previous chapter, some highlights of health information are addressed in this section in order to emphasize the valuable part of domestic health management.

5.1.1. The Importance of Inheritance

According to the results, we found that the inheritance from ancestor or senior profoundly influence domestic health information. It is a specific health perspective with abounding experience and inheriting the wisdom from senior, and passing through one generation to another. Scholars have proposed that one of the reason for archive is connecting with the past (Sellen, 2011), which also reflect to our results that the domestic health information inherit from the past enhance the value of archive.

We also found that the inheritance of domestic health information is a share belief within family members. With the respect of this belief for domestic health information, most of our participants hold it as a law which is neither replaceable nor impacted by other influencer. Evidences from results reveal the characteristic obviously in traditional health information management. The instance such as seeing whether Chinese or western doctor is different from families who conducted the perspective from their own seniors. We also found another similar examples display that the ingredients and the times to intake Chinese herbal medicine treatment reveal different characteristic among families. This kind of information is displayed as a rule (or law) without question, as well as built up a sense of identity differentiates different families.

5.1.2. Experiences Construct Health Knowledge in Family

In addition to the inheritance from senior, family members also conduct domestic health information in present, with repeatedly practices and empirical experience in health management. One of our participants, as a mother, states that she went to different bakeries looking for delicious breads. After several shopping experience in different bakeries, she constructed the rule in which bakeries sell specific delicious breads. Another example is the prevention from nose allergic in participant E's family. Participant E makes lots of effort to prevent her daughter from nose allergy, which encourage her to enhancing the knowledge and repeatedly practice the prevention in daily life again and again. She states that the long-term illness can make people a good doctor, thus a standard process of allergic reaction has been conducted to deal with her daughter's situation.

Referring to the examples above, the domestic health information can be interpreted as a continuous practice of health processing capacity which conducts an identification of health

information knowledge within family. One of our participant points out the way she deal with the health information is receiving advice from friends, and then asking others for confirmation. This is a typically health managing process conducted by mother and further internalized as the principle of domestic information management. Thus, the experience of health management in distributed family also present family identity through the knowledge participant constructed.

5.1.3. Affected by External Influences

In the results we have analyzed, exterior influencer is another highlight affect domestic health information management. As we mention previously, experience is one of the key factors that either interact with family members or interact with friends to consist the experience.

According to the reference, scholar states that social interaction makes people feel the sense of belonging with the dwelling (Cuba & Hummon, 1993a, 1993b; Douglas, 1991). There are plenty of evidences reflect the impact from social affection. The instances such as being recommended the treatments by others, attending baker class, or group buying in office are social activities that highlight external influencer in domestic health management. In order to construct the health knowledge, participants interchange ideas with others and filter the information into self-knowledge. One of our participants states that her Chinese doctor recommend her to intake collagen to prevent osteoporosis syndrome, thus she started to intake so after she ask her friends for further advice. Another example is one participant enhance her health knowledge from the nutrition class she took years ago and influence how she managed health information at home with the professional knowledge she had.

Apart from external recommendation, public information also profoundly affects what family eats or buys in health management. This type of information influence domestic health management temporary from one period to another. For example, participants start to by organic ingredients rather than go to traditional food market since the organic idea has being overwhelming spread in ten years. Another example is participant's husband ate oatmeal gruel for body health since public media started to propagated the benefits of oatmeal gruel on television. Participant B also states that she own a yogurt-making machine because it is popular two years ago. These evidences highlight the affection from public media, and further change the content of health information in distributed family.

5.1.4. Information Asymmetry

Since the result has illustrated that mothers are the role to dominate health information at home, there are some evidences indicate that domestic information is not transparent within family. The centralization of health information conflicts the experience of sharing between family members. There are two contrastive examples reveal this phenomenon, one is participant B states that she did not inform others where she place the medicine specifically because her family members used to ask her about health information. However, there is an contrast example that participant A often share cooking or bread making tips to her daughter, and well-interact with family members. Her daughter also states that she would make bread herself when apart from home. Families with more interactions are taking more possibility to interchange health ideas rather than dominated in one person.

Besides, from the evidence we investigated, father is a unique role of domestic health information management in family. Almost all of our participants illustrate the fact that fathers stand out of the domestic information circle in family. They manage their health knowledge neither impact family food content nor influence health perspective in family. Fathers constructed their own health information from the advice of their co-workers or friends. There are some examples such as father intake Chinese herbs which conflict health perspective of mother, father who intent on breathing technique therapy but not share the idea with family, or father who cook his own pumpkin dishes for his health condition but rarely share with family. All these evidences illustrate the conflict between father and other family members.

5.2. The Sense of Belonging to the Family

From the previous research studies review, the meaning of home is clarified as a continuum from physically identity to mentally identity. Comparing the result analyzed from last chapter, several factors that influence family identity and the sense of belonging to the family for mobile people are interpreted as follows.

5.2.1. The belongingness in Domestic Health Information

Geographical health Information

Our research results highlight the belonging of home in the geographic environment within family. It presents physical factors making people identify their family, such as a birthplace for family members. In domestic health management, the location of home deeply influenced how family manages health information. Considering about the convenience of daily routine schedule in health management, participants go to places nearby their home, such as food shopping location, doctor seeing location, which form a geographic life circle. Research has states that an experience with specific place is able to build up the sense of home (Cuba & Hummon, 1993b). According to the geographic pattern around home, family can conduct the belongingness due to the path they walk daily time and familiar with the experience they have been through every day.

Mother's Work in family

In addition, mother also plays an important role to create the sense of belonging in family. Some research states that the domestication of women's role is thought to enrich the experience of being at home (Gurney, 1997). Other research studies also stated that the sentimental objects family archived reflect family identity in a way of how mothers arrange and storage these objects which display an distinctive appearance of home (Taylor & Swan, 2005). Because the domination of health information is holding by mother, the management of how mother prepares or initiate domestic health knowledge to other family members also becomes the specific identification of family.

Family Health Beliefs

As previous research review mentioned, family identity is what people think home emotionally,

with the experience shared within family and the memories family own. Referring to domestic health management, the information inherited from senior highlight the characteristic of family identity. In the results we analyzed, health information has a strongly characteristic of inheritance due to the respect of traditional health knowledge from ancestor or the empirical experience from senior. From the food family choose, Chinese or western doctor family see, and health life ideas family follow, health information is deeply influenced by the principle built up from old experience. This type of health information founded a shared system of beliefs within family member, which centralized family perspective among health ideas. Bennett et al. (1988) stated that the belief addressed the family legacy from generation to generation, and represented the current states of family in the world. As a result, domestic health information inherited from senior is considered as a share belief which presents the identification of family.

Empirical Practice of Health

In additionally, the experience what family been through also play an important role to place family identity. The management of domestic health information is, rather than conducted by general public health ideas, conducted by learning and experiencing individual health information at home over and over again. This type of health information also treated as a life trace among family, thus it creates specific health principles which emphasize the identification in different family.

Health Expectation

Mallett (2004) proposed one of the dimensions of the meaning of home is an ideal paradise. In the perspective of domestic health management, it is able to see the ideal expectation to make family member living healthier. The manager of domestic health information, which is mother in our research study, cultivate health and diet principle within family with a responsibility of keeping family in good condition. With this point of view, a healthy life circle expectation is conducted in family. In the finding we have analyzed, it presents numerous evidences that mother hold a balance of diet within family, as well as makes effort to take care of member's health condition.

Furthermore, mother will compensate the distribution of diet composition if health balance has not achieved. From the result we analyzed, mother will look for other supplements in order to

substitute the lack of food intake. Besides, the health information management in distributed family is not only about caring but also about how to control. Putnam and Newton (1990) have proposed one of the meanings of home was focus on control. From the participants we interviewed, mothers likely to control family member's eating and health condition due to their responsibility of healthy life circle. One of our participant states that she controlled the food content in family in a purpose of keeping family away from unhealthy food. Another participant states that because she has the rights to decide the ingredients in family, she can dominate the health and diet information in family.

5.2.2. The belongingness to Mobile People

For mobile people, they face a new environment to familiar with the food and health information surrounding them. In present, they started to create a geographic life circle in the new residence. However, it is a lack of support for mobile people to connect health information from original family to new residence. Since they started to look for new clinic or new supermarket, personal health management has been changed to adapt new environment but less connect the information to original family. It caused a problem that mobile people's family cannot fully understand the situation from original family and in contrast, mobile people are hard to understand his/ her family health situation as well. The domestic information in here is dispersive from different location family member lived, which cause a barrier of domestic health management.

Besides, it is less evidence now indicates that domestic health information create the sense of belonging to family within their mobile life due to the lack of sharing experience with their family member. The connection of health experience in present depends on phone contact or online social network. Family only able to connect and manage health information over phone by understanding their lifestyle in new residence, and maintaining health information through the food mothers prepared for mobile people. For example, some of our participants state that they will prepare homemade ready-to-eat for their children bring back to their residence in order to control what they eat. Another example is that one of our participants, as a mobile people, said that his mother would check his sleeping time by his trace from social network.

In the perspective of geographical connection of family, the sensitivity of environment brought people back to where they belonging. From the result we understand that where mother bought

food somehow influenced by the place where family lived. In the meanwhile, the habit of what to eat is influencing family members as well. Chambers (1996) has stated that food can make people feel at home, and it is also reflected on the mobile people we interviewed. One of our participants, as mobile people, said that she would like to choose the food she used to eat at home rather than taste new flavor. For mobile people, it is an opportunity to maintain the belongingness for homing by recording the information through where family buys the food to how family cook the dishes.

Besides, health belief is another breaking point for mobile people creates their belongingness in new residence. It is a number of evidences indicate that mobile people own their health belief passing from their own family. For the families who manage health information professionally and empirically, health belief is directly inherited from senior. One of our participants, as mobile people, said that she think her food preference more or less influenced by where she born. Another example is participant F, as a mobile people, said he gradually accept the idea that medicated wine is good for health because his mother intake it for years. From the literature we reviewed, family identity play an important role when young adult leaving home and become the foundation for homing to people who want to create their own family as well (Douglas, 1991; Moore, 2000). Health belief present highly identification of family as well as construct the belongingness of where people came from.

Furthermore, it is possible to found domestic health experience through the custom mobile people carrying with from original family. Referring to eating habit among people, mobile people present their own characteristic by maintaining health principle in original family when living in a new environment. The maintenance of health custom or health idea from family is able to create the sense of belonging to mobile people

5.3. Information Artifact in Domestic Health Archive

When we turn our attention to family archive for domestic health information, the perspective of participants' mental pattern should be considered in research study. D. S. Kirk and Sellen (2010) stated that the values of family archive are to connect with the past and farming the family. Since the health information and belief are the key point for mobile people constructing their belongingness in new residence, we investigate what information is worth for homing for mobile people in their new residence in this chapter. Several health and diet information we recruited from result have been archived as *Information artifact* for the purpose to help mobile people farming their family and seek to the belongingness for homing.

Information Artifact is an idea applied from Artifact Model from the user experience methodology as a metaphor to interpret how participants organize health concept in mind and how to use it. Artifact model is an interpretation of tangible things people use to help them manipulate their work, and the model consists of structure, content, usage and intent (Beyer & Holtzblatt, 1998). In this research, *Information Artifact* is regarded as a prototype of how mothers manage their information in mind. The *Information Artifact* is consisted of three factors: content, usage and intent (Fig 5.1). Contents display different type of health data in family, usage is the way to manipulate information, and intent brings the affection into the *Information artifact*. The linkage between the three categories are represented the information connection. The structure from artifact model is not interpreted in the *information Artifact* in this research. *Information Artifact* is an integrated concept considering about participants' mental model of health management and the affection it could face. In this research, three main *information artifacts* are addressed as Food in family, Long-term Healthcare, and Daily Schedule.

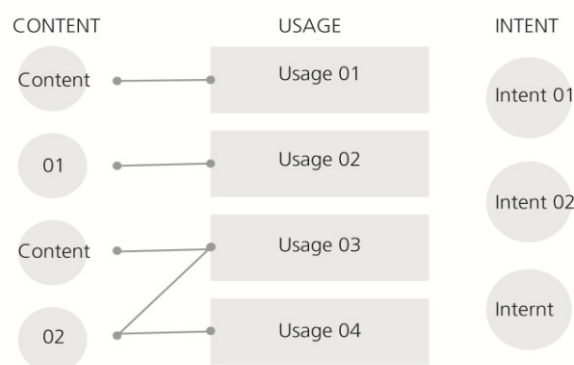


Figure 5.1 Information Artifact

5.3.1. Information Artifact 1: Food in Family

When we asked about health and diet information in family, it is no doubt that food preparation is one of the key elements affect health management. To consider Food in family as an *information artifact*, several contents and usages are display in figure 5.2.

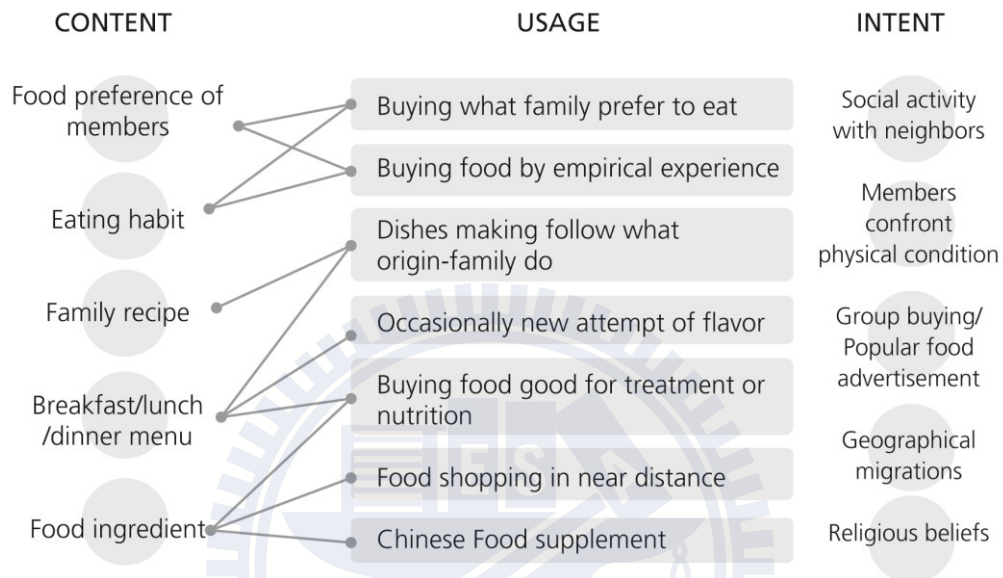


Figure 5.2 Information Artifact 1: Food in home

In this *information artifact*, it can be seen as participant's food management in family in terms of healthy life. The basic information in this artifact comprises member's individual food preference, eating habits, daily menu of meals, family recipe, and ingredient in family. Most of contents in this *information artifact* are transparent and shared between family members.

The usages mostly participants followed in food are focus on what to buy for family. When considering family's personal attribute such as food preference and eating habits, participants hold the usages of buying what family prefer. In addition, participants also buy food by empirical practice in diversity taste of different food. One of our participants states that because her family likes bread so much, she tasted different bakeries for diversity of breads in order to find the most delicious bread. Besides, family recipes are different from family to family due to its difference in cooking process passing through original family.

Apart from food preference, healthy diet is also considered in participants' buying list. To stay food diversity and buy food good for nutrition are both in the purpose of keeping family health. In the respects of building up healthy life, there is a balanced diet which motivated participant to manipulate food capacity and diversity. Some participants purchase other dietary supplement for nutrition compensation in order to keep family stay in healthy life. The shops locations are consider in usages as well. One of the participants states that she would buy ingredients nearby rather than went shopping mall far away. Furthermore, in the traditional health perspective inherited from senior or ancestor, seasoning supplement is necessary for body health even though family members are not ill. Thus traditional Chinese food supplement in different seasons is also become healthy diet usage in family. It is worth mentioning that the ingredients of Chinese food supplement are diverse from different family who inherit the prescription form their senior.

Intents are the purpose of activities or tasks in health management which influence the usages of food preparation in family. In the result, we found that social activity with neighbors is one of the intents that affect health management in family. Family sometimes changed or adjusted their health ideas and usages due to the interaction with neighbors. In our interview, there are plenty of evidences indicate that the activity with neighbor influences health usages in family, and the affection influence different levels of home management. From the results in last chapter, it reveals that participants are influenced by sharing and interchange diet ideas with others, such as soup making tips or cooking tips. Most of the affections are based on sharing with minor adjustment of food management in family; however, there are some evidences addressed that group activity can also change food habit in family.

One of our participants started to drink coffee since she attended their community activity with neighbors who drink coffee for years. It is highlight the possibility that social activity within families not only affect in sharing tips but also affect food habit in family.

In addition to social interaction, geographical migrations also massively influence food management in family. Participants are passively adapting new environment following the usage to rebuild family food resources, and empirically reconstruct food buying location in different shops nearby. One of our participants states that her family used to prefer Chinese breakfast, but there is no choice that they started to eat western breakfast since they move to where they live now. In this case, the usage of food preference is replaced by the distance of shop location, and the contents of breakfast menu changed as well.

Furthermore, according to our evidences in the result, it has been found that there is a great impact of food in family while family members confront physical condition. The consequence not only impacts the usage of management but also affects the contents in domestic health information. In the family of participant C, mother was suffering in hand problem thus the food management in family was being simplify to release the loading of domestic work within mother as well as rearranging the divide of labor in family. The usage of family food in this example was changed since some work has distributed to other family members. In the meanwhile, the content in this *information artifact* has changed as well since mother prefer ready-to-eat in order to simplify the process of preparing meals.

Other intents influence food management such as group buying in office or popular food advertisement is follow the rule of attempting new flavor, as well as changed food content in family. Group buying is an intent referring to social activity we mention previously, with sharing behavior of participants' preference and an attempt to try new flavor of food.

For example, participant who followed the group buying in her office states that she almost follow group buying every time, and the reason is not only because it's cheaper but also because it is worth to try what other people prefer to eat. Similar ideas reveal in the intent of buying popular food. From the finding we analyzed, it highlights the affection of public media influence diet content in family. There are some typical examples such as the popularity of pumpkin or home-made yogurt which brings a new type of food affecting what families eat at home. Besides, religious beliefs also influence family daily menu which both affect contents and usages in this *information artifact*. In our example, one of our participant's husband was the main person who under religious food principles, but when time goes by, the food content gradually influenced by husband's eating habit. These examples indicated that the intent can not only change the food ingredient in family, but also affect usages in food preparation.

In the intent of member moving out, which are what we mainly discuss about, family tend to adapt new life with member lived in distant place. Participants follow food managing usages to adjust food content which reflected on both daily meal menu and food amounts at home. In additionally, this intent also changed family eating habit as well. There is typical example that one of our participants, as a mother, started to buy instant food for dinner rather than cook since her family members all separated for work and study. In this case, participant simplifies her eating habit in order to adapt new way of life.

In short summary, the *information artifact* of food in family consisted in basically food ingredient, eating preference and habit with diversity of managing usages. The usage followed by participant's perspective of satisfying family preference and making family healthier which reflected on ingredient options and food diversity. The intents which influence *information artifact* are influenced from both internal interaction and external impact which mostly change the contents of the object but maintain the usage in food management. Some exception example such as religious beliefs is influence food management in both food content and usages.

5.3.2. Information Artifact 2: Long-term Healthcare

Following the food context in family, long-term healthcare are considered as second *information artifact* in domestic health management (Fig 5.3). The contents in this *information artifact* included basic health conditions of family, doctor information, domestic medicines such as clinic or OCT medicine, traditional Chinese herbal medicine, and extra dietary supplement, other information such as participants' knowledge from television, newspapers, website or books also considered in long-term healthcare contents. Since participants, as mothers, dominate health information at home, most of the contents are controlled in the role of mother but rarely share with other family members.

The usage in the *information artifact* is mostly built up by mothers as well. In order to take care of family members, mothers empirically observe member's health condition from their facial expression, and practice the treatment empirically. From the knowledge inherited by senior, participants also follow traditional Chinese medicine treatment as well as ask senior for treatment advice. Besides, participants also construct the usage to deal with the information from exterior, such as compare friend's treatment advice. Participants will filter the information from exterior and reconstruct it into domestic health management. Other usage such as searching treatment on website or books also considered as health knowledge complement of participants.

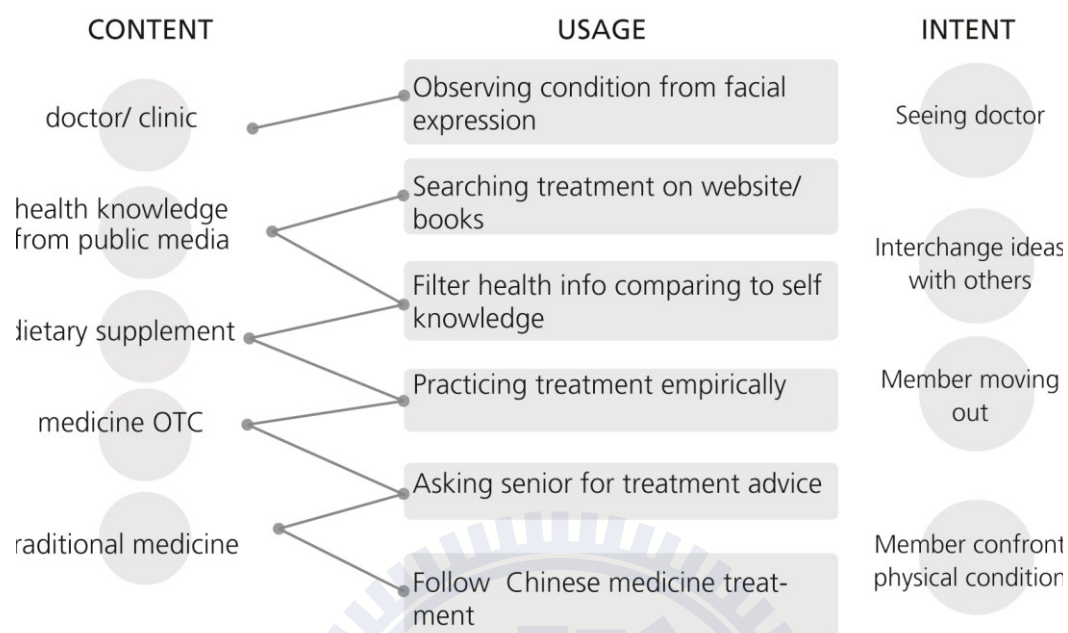


Figure 5.3 Information Artifact 2: Long-term Healthcare

Intent in this *information artifact* includes basically health activities which are seeing doctor for illness. There is a profound affection comes from empirical experience which conduct the principle of health information. The principles such as seeing Chinese or Western doctors different form families due to different experience of treatments. One of our participants states that she took her daughter for Chinese doctor because she thinks it is good for long-term syndrome. Another example is one participant prefer to buy OTC medicine due to her medicine-taking experience in her childhood period.

In addition, interchanged or recommended health information by friends or neighbors is another type of intents which profoundly affects health information in family. The health information can be shared in social activity within friends, and further change information contents by following the usage in healthcare artifact. For instance, one of our participants received treating tips for nose allergic from other patient in the clinic she visited frequently. Other examples such as recommend advices of allergic from relatives also influence the contents in this *information artifact*. These evidences indicated that the information in this *information artifact* can be affected by external influencers which become new domestic health information. Besides, some

participants share supplements of common syndrome such as menopausal syndrome in their tea parties or cooking party, or interchanged similar nose allergic syndrome with friends or neighbors. Apart from external influencers, family events are another intent influence long-term healthcare *information artifact*. In the example of members facing health problem, food content and usage has to change to adapt new circumstances. With respect of this, participants would conduct substitute scheme to compensate the lack of nutrition, such as taking dietary supplement. The usages in this *information artifact* are maintained to filter new information to adjust the content of *information artifact*. For mobile people who moving out apart from family, some of the usages is not suitable for participant to control their health condition, such as observing health condition from facial expression. Participants in present turn the usages into phone calling to care about mobile people but hardly fully understand the situation from them.

In sum, the *information artifact* of long-term healthcare is conducted by participants' health knowledge which follows the usage they build up and become unique health information distinguishing from other families. The content of domestic healthcare is affected by the recommendation from friends and the treatment from doctor. The usages in this *information artifact* are in the purpose of filter the information from exterior thus it is rarely influenced by the affection.

5.3.3. Information Artifact 3: Daily Schedule

In addition to food and healthcare management, daily schedule of family members also formulate the *information artifact* in family (Figure 5.4). Participants manage their daily schedule due to different events such as biological time within family member, opening or closed time of shops, or working time and school time. Participants, as mothers, memorized all daily schedules from other family member in order to deal with food or healthcare management.

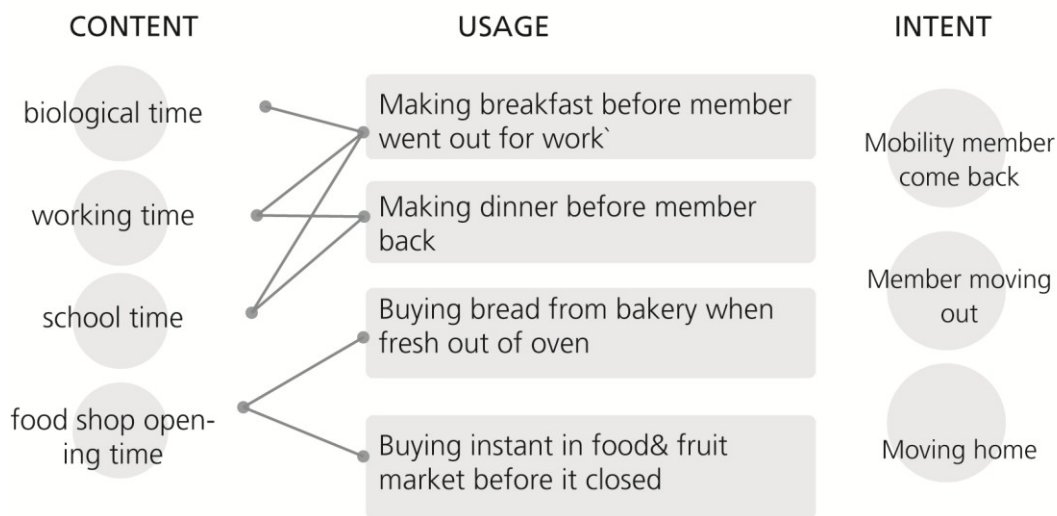


Figure 5.4 Information Artifact 3: Daily Schedule

The usages in this *information artifact* follow the schedule to manipulate daily work of participant. Some of our participants make breakfast for family before they went for work and ahead of waking up time to adapt member's school or working time. One of our participant states that she would go back to sleep after members went out in the morning. The usage of making dinner before members came back also consider as the usage for most of our participants. In this *information artifact*, it is obviously to see that participants follow these usages to fulfill the responsibility of domestic divide of labor. Besides, the opening times of shop and the closing time of traditional food market are also regarded as the usage in this *information artifact*, which indicated that external influences of food become the affection of daily schedule management

The intent in this *information artifact* mostly affects the contents with the usages family member followed. One of the intents is in the period when mobile people came back home, participants will adjust their time to map into the schedule of mobile people. One of our participants states that when the time her husband came back from work one a year, she would take the time at night to go to specific restaurants for celebration. In addition, moving home is another intent that affects content in domestic information. Since the geographic environment has changed, participants reconstruct domestic information such as rearrange the schedule of shop opening time.

In sum, it reveals that the intents deeply influence the contents in this *information artifact* but

rarely affect in the usage of family daily schedule. Members move home or come back from workplace affected the time of content but maintain the usage within family.

5.3.4. Brief Summary

According to the analysis of those *information artifacts*, it reveals that the content of information mostly being influenced by the intent from interior events or exterior activity but remain the usage to deal with those data. For instance, the *information artifact* of food in family such as eating habit influenced by popular media information, and food ingredients influenced by sharing with friends or neighbors. In the *information artifact* of long-term healthcare, the treatments are influenced by the recommendation of friends or popular dietary supplements. The *information artifact* of daily schedule is affected by the opening time of shops. Interior events such as members moving out or moving house is influenced the amount of food ingredients and daily schedule in family.

The usages in *information artifact* are rarely being influenced by the affection, but standing in the position to manage the information from exterior or reconstruct the health content in family. In interior affection, there is one exception that when member confront the health condition, the usage in *information artifact* would reorganized the divide of labor in family. For example, the domestic labor of washing dishes turns to father's responsibility due to mother's hand problem. Another examples is mother reduce the time using computer for searching health information due to her eyes problem. These evidences indicated the role of mother present an important position in family which leads to a result that the usage of domestic health information has to rearrange when mother faces health problem because those labor used to centralize on mother's duty and the domestic health rule mostly defined by mother.

It is concluded that participants dominate health information management in family as well as control the usage of *information artifacts*. As role of mothers, they engage in the responsibility of filtering the domestic information they received and convert into valuable health content in family. For mobile people who live apart from home, the finding indicated that they notice the health information in family but not well-knowing the rules mother constructed. They construct their belongingness through the eating habit maintain from family, buying food they used to eat at home, and seeing whether Chinese or western doctor they used to see. Mobile people carry the health information with them and display the characters to their daily life which

distinguish family identity apart from others. However, rules are mostly centralized in mother's health knowledge and rarely share with other family members. There is a strong evidence reveal in one of our participants who states that it is unnecessary to inform other members where she place the medicines, because members will as her for help if they need. It is rare evidences state that mobile people maintain domestic health usages in new residence, but rather than possess the health information to display family identity.



5.4. Design Implication for Mobile People

Supporting of cloud technology and mobile devices, people gradually adjust their behavior to adapt such technology into life. People are able to access and manage personal information without limitation of time and place as well as interchange information on mobile device whenever needed without a physical space that gather people together. The activity of where information interchanged in life is no longer limited in specific places but rather circulated between ubiquitous cloud technologies.

From the previous evidence we have discussed, it is believed that the domestic health information reflected highly family identity comparing to other domestic information. In the *information artifacts*, the usages and contents of information both emphasize the identity in families. Therefore, design implications for homing are proposed in several aspects as follow.

5.4.1. Share Information Appropriately

Family archive presents strongly connection with family members, especially in health issue due to its privacy and intimacy in domestic health information. It is different from personal archive which collect massive amount of data for personal information and life trace, rather, more focus on valuable and meaningful information of family members (Gemmell et al., 2006; Sellen, 2011). Petersen, Lynggaard et al. (2010) concluded that extremely mobile people act for homing through bubbling to construct self-belonging in temporary residence, such as excluding outside disturbances and form a personal space by their own. It is the behaviors that doing same things in different places to create similar atmosphere which make people belonging to certain places. In the perspective of domestic health information, the behavior of bubbling are considering as the habit of health and diet information sharing between family members. It reveals intensive family identity which help mobile people construct belongingness with the habit he/she bring from origin-family.

Many related research studies have made effort to increase the connection between distributed family and mobile people, such as contact through mobile phone, digital photos or web-based device (Grimes et al., 2009; Markopoulos et al., 2004). However, many research studies have mentioned about the consideration of whether keeping personal information in privacy or sharing with family members (Beaudin et al., 2006; D. S. Kirk et al., 2010). Those considerations

are focused on elderly or children who have less capability to take care of themselves. For the participants in this research, they mostly are independent grown-ups who have ability to look after themselves. What we suggest in domestic health information archive is, not focus on tracking member's health and diet information, rather, consider about what information member would like to share and interchange with other family members.

5.4.2. Construct Family Recipe

In the *information artifact* of food, it reveals strongly belonging to the family due to the food preference people choose. From figure 5.5, it displays that the food member prefer and eating habit family have, mobile people is easy to construct belongingness to origin-family. Family recipe and menu of daily meals also reveal family's own characteristic with the usage of following what origin-family do and maintaining healthy condition.

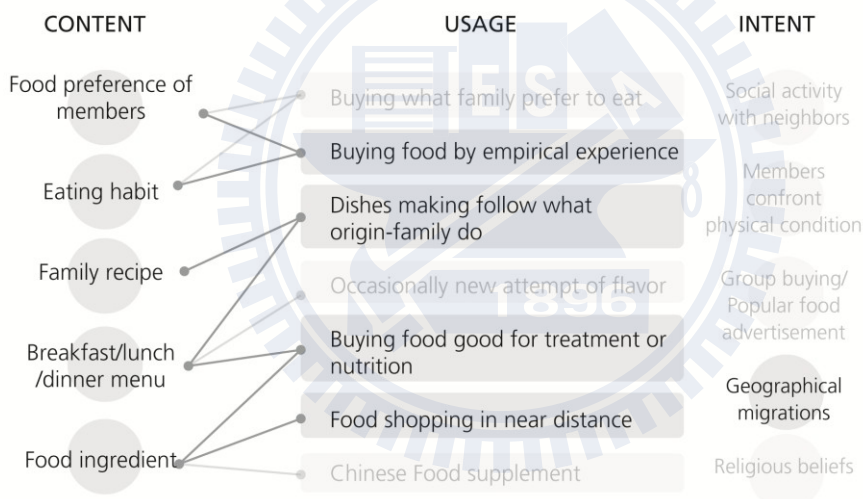


Figure 5.5 Food in home artifact for mobile people

In the perspective of mobile people, it is clear that individual food preference and eating habit reveal family identity of mobile people. However, since mobile people moving out, some information such as meals and food ingredient are different from original family due to geographical difference following the usage of food shopping in near distance. In the perspective of participants, as mothers, they intend to control what their children, as mobile people, eat every day. In current evidence, mothers are able to connect health information by the food they prepare for them, or by phone call.

As a result, the possibility of food in family for mobile people can focus on the inheritance of

family recipe. Since the flavor and ingredient of food display most of the identity in family, mobile people are able to replicate family recipe when apart from home. The content of family recipe can include basically information such as how to make dishes following cooking process of mother. It also can display ingredients mother used to buy, and specific food and the rules mother used to buy for nutrition. From the inheritance of family recipe within family, mobile people are taking more possibility to understand how mother manage food information in family, and feel the belongingness while they can cook or buy food they used to familiar.

5.4.3. Connect Information through Environment

In additionally, geographical connection between original family and new residence can be another possibility creating the sense of belonging for mobile people. Cuba and Hummon (1993) have proposed that environmental migration is able to emphasize the sense of belonging to the family within people, and Hummon (1993) point that long term residence can build up place identity. In further extension of family identity, it is possible to construct belongingness through the new environment mobile people lived in. As our participant for example, when mother went to food market, the health information she keeps in mind are family eating habit, member's food preference, or nutrition balance in family. Thus, food ingredients where mothers buy are highly affected by the distance of shops. If the food information such as where to buy specific ingredients can build up a geographical linkage between original environment of home and new residence, it display more possibility for homing to mobile people when they just arrived new residence.

5.4.4. Build up Family Health Knowledge

Different from the food information, long-term healthcare information is more like comprehensive health knowledge in family, with empirical experience mother has practiced and the wisdom inherited from senior in family. This type of information comparatively less share with family members but centralized in mother's mind (Fig 5.6).

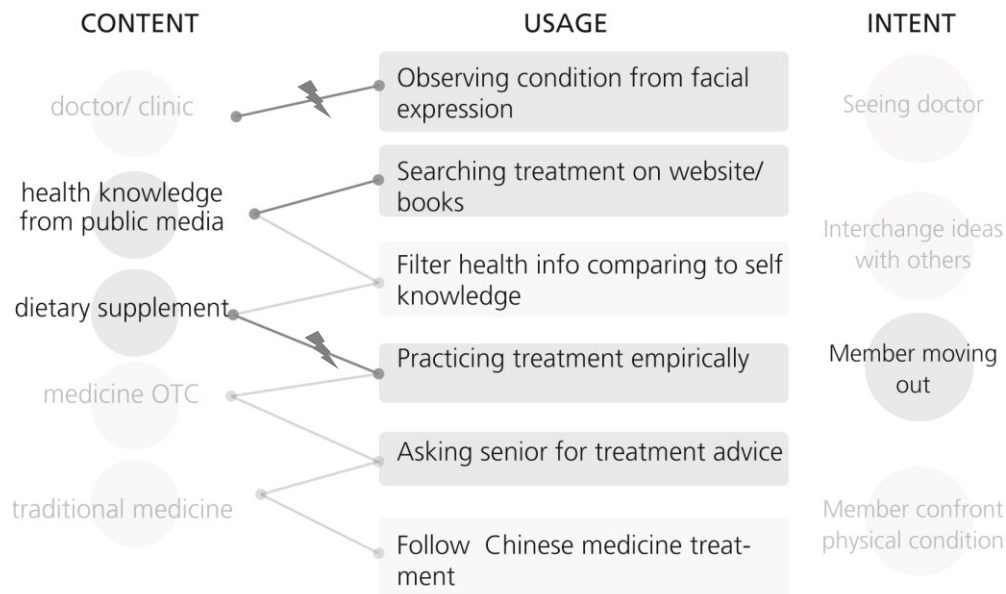


Figure 5.6 Long-term Healthcare for mobile people

In the perspective of mobile people, they used to receive the information of what their mother used to tell them to do. In the result we investigated, it is clear that mobile people bring basically health idea to new residence, such as see whether Chinese or western doctor following the original custom of their family, or intake specific dietary supplement bring out from home. In the perspective of mothers, they intend to know whether mobile people were in good condition or not. In some mobile people who suffer from long-term illness, mothers are paying more attention about their body health and whether they take medicine on time. Besides, the usage mother used to build up health knowledge in family such as observing member's facial expression and practicing treatment empirically are not supporting members who live in distant places.

With the respect of belonging for mobile people, the possibility should be built up on sharing family health knowledge. In the evidence we discovered from mobile people, they bring health information from family without integrated health knowledge. Furthermore, we also find out that mother hold a strong knowledge of health processing capacity due to the experience from practice and knowledge supplement from public media or friends, and the health knowledge display highly identification of how mother manage health information in family. Since member moved out, it has great possibility for family to lost mobile people's health information in family.

In order to create belongingness for homing to mobile people, the health knowledge in family supposed to share within family. With the open resource of health knowledge, members are

willing to manipulate their own health condition depending on the knowledge from origin-family, and reveal more potential for homing. Based on technology support in present, digital photos, videos, or sound recording are basic digital tools to collect information in their daily life, other materials such as web-based social network also provide an integrated platform for people to record personal information. However, such technologies are based on the material of digital data to collect and classify information; it is relatively less concern about how people manage their information in mind. Furthermore, despite technology provide different kinds of digital data to help people collect information, it still needs more and more diversity of tools to facilitate the amount of data collection (Sellen, 2011). For mobile people, it is defined that homing is a way of “copying” what original family have (Petersen et al., 2010). In the perspective of domestic health information archive, it provides an opportunity to copy the information from family and put the information into practice in new residence.

To fulfill this purpose, the format of domestic health knowledge can include the content such as basic medical record, medicines and tips for health treatment. It is mutual information which recorded with shared information in both family member and distributed family member. Due to information sharing, mothers are able to know the situation of mobile people, and vice versa. Besides, the usage of health information can also record on it, such as the method of how mother filter information from exterior, or how she deal with those syndrome when family member ill. It would be a useful knowledge for mobile people create the belongingness as well as properly manage their own condition when they confront illness.

5.4.5. Maintain Daily Schedule from Family Custom

It is obviously that mobile people have a great impact on daily schedule in family (Fig 5.7). When family member confront the situation of member moving out, not only the amount of food but also daily schedule will change in family. The biological time follow by members who live at home, mother’s daily schedule such as waking up before family member in order to make breakfast, and making dinner before member back home. These evidences indicate that the schedule of mother follows what other family member’s do daily time.

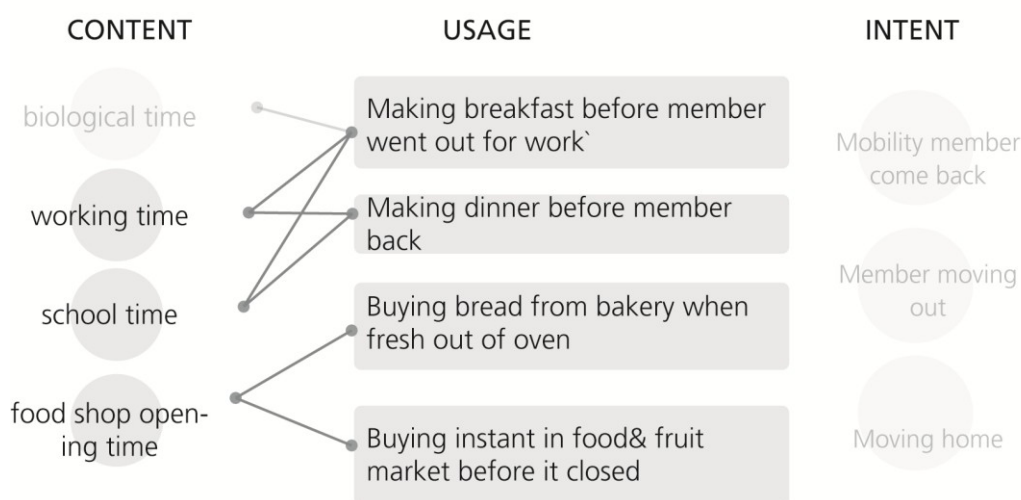


Figure 5.7 Daily Schedule for mobile people

In the perspective of mobile people, they create their biological time in new environment which may not same as the time they live at home. In the perspective of mothers, they mostly concern about biological time mobile people follow in order to understanding health condition. There is an evidence in our result that one of our participants seek the sleeping time of her son by his footprint in social website. It reveals that mothers are willing to know whether distributed family member sleep early or not. However, mobile people may not willing to share their daily schedule mutually due to their concern about not letting parents over-worried, or keeping privacy space of themselves.

Nevertheless, there are still some possibilities for mobile people set home feeling through daily schedule in family. In this *information artifact*, it display some family health custom related to family schedule, such as buying fresh bread in specific time in bakery, or making breakfast in the morning. The custom in family construct family trace in daily life which influence how mobile people arrange their daily life following the perspective of living schedule in original family.

In the possibility of homing in family daily schedule, it suppose to maintain the custom that affect daily schedule of family rather than control what mobile people do in distant place. The usage of how mother manipulate their schedule highly represent the identity of family custom in health information. With the custom mobile people have, it is easier to maintain the habit from original family and manage their health information.

6.

CONCLUSION

During the advance of technology in recent years, people are able to support family in health management with various ways in terms of health improvement. However, it rarely discussed about how people manipulate those health information to maintain domestic health circle for mobile people create a sense of home in distant place. Through the research study involving contextual interview and work model analysis, the possibilities of homing in domestic health information are proposed in this research. The contribution of the research not only focused on homing for mobile people, but also provides the possibility of domestic information archive. At the end, achievement, limitation, contribution and recommendation for further works of this research are displayed as follow.

6.1. Conclusion

For the purpose of exploring the possibility for mobile people to create belongingness in terms of domestic health information, the achievement are addressed correspond to four objectives.

A. The sense of belonging to the family in Health Information Perspective

In the comparison between the meaning of home in environmental psychology field and domestic health information found in evidences, it is said that people's belongingness to family can be seen as a continuum from physically environmental space to intimacy within family. For mobile people, we found that the identity of family highly evoke the sense of belonging to the family due to differentiation of families' characteristic. In the perspective of domestic health information, people are easily to create the belongingness from original family by tangible food supplements or dishes bring from origin-family. Besides, health beliefs in family indicated basically family identity which reflected on the inheritance from senior and health knowledge

conducted by family. In the most intrinsic value of family health and diet, mother plays an important role to achieve the expectation of healthy life within family members. The identification is found in mother's health perspectives which form distinct health knowledge in family.

B. Information Artifacts as Domestic Health Information Archive

With the respect of the evidence found from participants, several highlights are addressed to emphasize the characteristic of domestic health information, which reflected on the inheritance of senior, the experience that construct family health knowledge, the affection from external influences, and information asymmetry between family members. Based on the sense of belonging to the family for mobile people, we proposed *Information Artifacts* to classify the information based on mental thoughts of family members. In the category of food in family, the contents such as food preference, eating habit and ingredients are included in the category with constantly usage followed by family members. Daily schedule indicated that family members manage different time schedules due to the custom long-existing in family.

C. The Maintenance of Belongingness through the Usage of Information Artifacts

As a result, it is found that most of the principle of usages in *information artifacts* are not influenced by the intent from both internal and external influences, in contrary, the contents in *information artifacts* are the key elements being adjusted in different affections. This phenomenon presented the possibility for mobile people to maintain their belongingness through constancy usage of health information which inherited from family.

D. Homing toward Health Knowledge Circle and Geographical Connection

To fulfill the purpose for mobile people to place the sense of belonging to family in new residence, several design implications are proposed to represent the design implication in the perspective of domestic health information. In domestic health information, technology needs to provide more and more various tools for family to collect their data. It is concluded that mobile people are able to construct belongingness through food information such as family recipe which reflect the identity of family. Besides, to what extent family information should share with each other is important to be considered. Information Knowledge sharing is another highlights that

enhance the identity of family as well as facilitate the possibility of inheritance in health information archive. Maintaining custom of daily schedule also reveal a great opportunity of homing for mobile people. Furthermore, geographic connection also helps them create a sense of belonging in distant places. Through the information attach to the environment, family member construct a geographical map in mind to manage health data in family.

6.2. Contribution

Referring to the achievement we proposed above, this research contributed to the possibility for mobile people construct belongingness to family not only through tangible artifacts, but in the perspective of domestic information they carried. The research also provides guidelines of information archive in domestic health issue.

According to the *information artifact* we provided in the research, it displays a unique insight of information management through the mental aspects of family members. For the designers who aim to construct domestic information archive, the concept of *Information Artifact* is able to build up the framework of family archive. Besides, for the designers who want to create belongingness to family for mobile people, this research contributed to the design implication in various aspects as well as help designers to conceive ideas.

6.3. Limitation and Recommendation to Future Works

In this research, there are several limitation found in the research. Firstly, the age of participants show diverse backgrounds and values which influence different aspects of health information. Our participants, as mothers are focused on 45 to 55, and other participants as mobile people who are mostly students in the age of 24 to 28. This cause a result that it is comparably difficult to find the evidence from such group of mobile people settle their feeling of home in new residence with domestic health information, because they may not have enough experience to aware the meaning of home since they still somehow under the care of parents or live in independent life and have not construct their own family yet.

Furthermore, due to the lack of supporting technologies of information archive in present, health information seems rarely being recorded in family thus cause an unavoidable barrier for participants to recall their memories precisely in interview. It may influence the accuracy of the

data we have recruited. On the other hand, since our participants mostly focus on the relation of mothers and mobile people in family, this research was not speak to the perspective of father who may also influence health information in distributed family. Besides, according to specific participants we recruited and qualitative method that used in this research, the results may not apply to all families. Despite the lack of quantitative analysis, this research highlights a number of findings informed by our participants in in-depth interview which provide valuable insights of domestic health information management.

For further extension, the perspective of father can be involved in the study to fulfill all aspects of health information in distributed family. Although we investigated that father was the role that apart from domestic health information in family, it might still affect the information in another way. To support father getting into family, it is necessary to deeply understanding the context from father in further research.

Besides, different genders that influence domestic health information are another interesting aspect to be investigated. From previous research studies we reviewed, they have mention about different genders provide various perspectives in the feeling of home (Cuba & Hummon, 1993b; Gurney, 1997). Since the participants in our research mostly focus on females, it provides further works to another possibility for scholars to investigate such issue in the perspective of males.

Finally, the design implications in the research are suggested to put into practice in order to evaluate those design concepts we proposed. We have constructed the idea of domestic health information archive in the aspects of the sense of belonging to the family and *Information Artifacts* in health information. The ideas propose the guidelines to archive information in the perspective that mapping into family member's mind, and further provide possibilities for designer to create the sense of belonging for mobile people.

REFERENCE

- André, P., Schraefel, M., Dix, A., & White, R. W. (2011). Expressing well-being online: towards self-reflection and social awareness. Paper presented at the Proceedings of the 2011 iConference.
- Beaudin, J. S., Intille, S. S., & Morris, M. E. (2006). To track or not to track: user reactions to concepts in longitudinal health monitoring. *Journal of medical Internet research*, 8(4).
- Bennett, L. A., Wolin, S. J., & McAvity, K. J. (1988). Family identity, ritual, and myth: A cultural perspective on life cycle transitions.
- Beyer, H., & Holtzblatt, K. (1998). *Contextual design: defining customer-centered systems*: Morgan Kaufmann Pub.
- Chambers, J. (1996). Food can make the resident feel at home. *Provider*, 22(3), 36-38.
- Cuba, L., & Hummon, D. M. (1993a). Constructing a sense of home: Place affiliation and migration across the life cycle. *Sociological Forum*, 8, 547-572.
- Cuba, L., & Hummon, D. M. (1993b). A place to call home: Identification with dwelling, community, and region. *The sociological quarterly*, 34(1), 111-131.
- Davidoff, S., Lee, M., Yiu, C., Zimmerman, J., & Dey, A. (2006). Principles of smart home control. *UbiComp 2006: Ubiquitous Computing*, 4206/2006, 19-34.
- Douglas, M. (1991). The idea of a home: a kind of space. *Social Research*, 58(1), 287-307.
- Gemmell, J., Bell, G., & Lueder, R. (2006). MyLifeBits: a personal database for everything. *Communications of the ACM*, 49(1), 88-95.
- Gieryn, T. F. (2000). A space for place in sociology. *Annual review of sociology*, 463-496.
- Grimes, A., Tan, D., & Morris, D. (2009). Toward technologies that support family

- reflections on health. Paper presented at the Proceedings of the ACM 2009 international conference on Supporting group work.
- Gurney, C. M. (1997). "... Half of me was satisfied": making sense of home through episodic ethnographies. *Women's Studies International Forum*, 20(3), 373-386.
- Kaye, J. J., Vertesi, J., Avery, S., Dafoe, A., David, S., Onaga, L., . . . Pinch, T. (2006). To have and to hold: exploring the personal archive. Paper presented at the Proceedings of SIGCHI conference on Human Factors in computing systems.
- Kirk, D., & Sellen, A. (2008). On human remains: Excavating the home archive. Microsoft Research, Cambridge, UK.
- Kirk, D. S., Izadi, S., Sellen, A., Taylor, S., Banks, R., & Hilliges, O. (2010). Opening up the family archive. Paper presented at the Proceedings of the 2010 ACM conference on Computer supported cooperative work.
- Kirk, D. S., & Sellen, A. (2010). On human remains: Values and practice in the home archiving of cherished objects. *ACM Transactions on Computer-Human Interaction (TOCHI)*, 17(3), 10.
- Lee, Y. S., Basapur, S., Chaysinh, S., & Metcalf, C. (2011). Senior wellness: practices of community senior centers.
- Mallett, S. (2004). Understanding home: a critical review of the literature. *The sociological review*, 52(1), 62-89.
- Markopoulos, P., Romero, N., van Baren, J., IJsselsteijn, W., de Ruyter, B., & Farshchian, B. (2004). Keeping in touch with the family: home and away with the ASTRA awareness system. Paper presented at the extended abstracts on Human factors in computing systems.
- Maslow, A. H. (1943). A Theory of Human Motivation. *Psychological Review*, 50(4), 370-396.
- Moore, J. (2000). Placing home in context. *Journal of Environmental Psychology*, 20(3),

207-217.

- Patrick, H., & Nicklas, T. A. (2005). A review of family and social determinants of children's eating patterns and diet quality. *Journal of the American College of Nutrition*, 24(2), 83-92.
- Peter, C., Bieber, G., & Urban, B. (2010). Affect-and behaviour-related assistance for families in the home environment. Paper presented at the Proceedings of the 3rd International Conference on Pervasive Technologies Related to Assistive Environments.
- Petersen, M. G., Lynggaard, A. B., Krogh, P. G., & Winther, I. W. (2010). Tactics for homing in mobile life: a fieldwalk study of extremely mobile people. Paper presented at the Proceedings of the 12th international conference on Human computer interaction with mobile devices and services.
- Pratt, W., Unruh, K., Civan, A., & Skeels, M. M. (2006). Personal health information management. *Communications of the ACM*, 49(1), 51-55.
- Rabbi, M., Ali, S., Choudhury, T., & Berke, E. (2011). Passive and In-Situ assessment of mental and physical well-being using mobile sensors. Paper presented at the Proceedings of the 13th international conference on Ubiquitous computing.
- Rashid, U., Schmidtke, H., & Woo, W. (2007). Managing disclosure of personal health information in smart home healthcare. *Universal Access in Human-Computer Interaction. Ambient Interaction*, 188-197.
- Rutherford, J. (1990). A place called home: Identity and the cultural politics of difference. *Identity Community Culture Difference*, 9-27.
- Sellen, A. (2011). Family Archiving in the Digital Age. *The Connected Home: The Future of Domestic Life*, 203-236.
- Stevens, M. M., Abowd, G. D., Truong, K. N., & Vollmer, F. (2003). Getting into the Living Memory Box: Family archives & holistic design. *Personal and Ubiquitous*

Computing, 7(3), 210-216.

Taylor, A. S., & Swan, L. (2005). Artful systems in the home. Paper presented at the Proceedings of the SIGCHI conference on Human factors in computing systems.

Tollmar, K., Bentley, F., Moore, J., & Olwal, A. (2011). Mobile wellness: collecting, visualizing and interacting with personal health data. Paper presented at the Proceedings of the 13th International Conference on Human Computer Interaction with Mobile Devices and Services.

van der Klis, M., & Karsten, L. (2009). Commuting partners, dual residences and the meaning of home. *Journal of Environmental Psychology*, 29(2), 235-245.

Winther, I. W. (2009). Homing oneself - Home as a practice. *Haecelty papers*, 4(2).



APPENDIX A: Interview Scripts

家庭飲食健康與家庭歸屬感

活動和生活儀式的討論

1. 請問大名? 家中的成員與各自的工作是?
2. 平常是誰在家裡? 什麼時候回家? 最近一次跟在外家人連絡的時間?
3. 媽媽的生活形態是?(從早上到晚上)
4. 家裡的飲食習慣是怎麼樣呢? 幾點? 吃什麼? 怎麼準備飲食? 誰去買菜的? 怎麼決定食物呢?
5. 家裡除了三餐之外, 還會另外準備什麼食物嗎? 什麼樣的食物? 為什麼?
6. 家裡有飲食健康的觀念嗎? 什麼樣的觀念? 從什麼時候開始的? 為什麼有這樣的想法? 哪裡得知這樣的訊息?
7. 家裡除了飲食之外, 還會注重什麼保健資訊嗎?(例如吃中藥或是健康食品? 為什麼? 怎麼來的? 從什麼時候開始吃?)
8. 請回想一下上一次家人團聚吃的東西? 吃了什麼? 為什麼?
9. 家裡有什麼共同的跟吃東西有關的活動嗎? 一起去吃飯或是出去玩之類的? 為什麼會有這些活動? 從什麼時候開始? why?
10. 請問家中的飲食生活有過什麼改變嗎? 回想過去跟現在有什麼不同嗎? 小孩在家之前跟離開家之後有改變嗎? 改變了什麼? 為什麼改變了?
11. 家裡有沒有曾經調整過飲食習慣呢? 像是有家人生病了會怎麼改變飲食作息呢? 可以舉例嗎? 為什麼這麼做呢? 誰在照顧?
12. 家人生病都怎麼看病? 怎麼去看醫生? 誰陪伴? 上一次的經驗是?
13. 平常如何取得這些健康資訊呢?
14. 對於掌握家庭成員健康狀況上, 有沒有覺得困難的地方呢?
15. 提到飲食健康, 還有沒有什麼過去的經驗可以跟我們分享?
16. 你覺得家裡有沒有什麼習慣是家裡特有的?
17. 可以被記錄下來的資訊是?

APPENDIX B: Initial Statements

<p>喝咖啡習慣大概有十年了，那時候剛開始喝茶比較多，但因為鄰居假日會在外面擺桌子打屁聊天，就會泡茶或煮咖啡，那時候慢慢覺得喝咖啡還不錯</p>	<p>因為如果只有周六周日去菜市場買，因為菜也容易壞，所以也不會買太多</p>	<p>以前有煮飯的時候比較會想要做什麼菜，上網查一些資訊，全家人的話就會比較注重營養，現在的話一個人想吃了什麼簡單的就買回來簡單解決</p>	<p>像我們家的習慣就是我最不贊成喝太多飲料跟甜食，但小孩子通常不聽也沒有辦法，阻止也沒有用</p>	<p>小妹都帶去學校吃，先生都吃麵包配牛奶麥片，我是等他們出去在自己吃這樣，因他們都趕著上班上課</p>
<p>平常家裡比較喜歡中式的感覺，我們有茶具，咖啡算是比較西式的，因為鄰居會提供西式咖啡的訊息，當時也會去山上逛逛喝喝咖啡，漸漸養成習慣</p>	<p>平常在台灣的時候其實爸爸也不太會吃當場切的那種肉食，除非說是新鮮的肉食或是蔬菜他比較能接受</p>	<p>跟鄰居再一起就會去誰家吃飯，上周有人學做了壽喜燒，就邀請四戶人家大家做在外面邊做邊交流</p>	<p>我買的食物他們不見得愛吃，有時候吃完以後他們兩姐弟會自己跑到便利商店去吃東西，我比較沒辦法掌控他們吃什麼，因為他們也不聽我的</p>	<p>因為家裡附近最近開了一個新圖書館，所以會去圖書館借書來看</p>
<p>有時候爸爸回來小孩回來就會選一家餐廳聚一聚，決定餐廳的方式都會互相問大家的意見，但最後都會以爸爸為主，爸爸想吃什麼就去吃什麼，因為爸爸在大陸比較少吃到</p>	<p>平常是想吃健康食品，但都沒有按時吃，爸爸不接受吃健康食品，他覺得營養應該從三餐去攝取，他覺得那種藥沒有必要</p>	<p>再跟鄰居的活動也會互相交流啊，看怎麼做菜怎麼切菜怎麼做好吃這樣，大家就會學一下</p>	<p>公司有團購我就會跟著買，像是買蛋塔跟著別人一起買，會上網看看覺得不錯，幾乎每一次都會跟著買</p>	<p>買菜會去我們這邊的傳統市場買菜，大部分我會跟小農買比較多，因為我覺得這感覺比較安全，而且吃起來口感比較好吃</p>
<p>上一次煮菜的時間是我兒子女兒回來那次，現在他們都兩三個禮拜回來一次，所以煮菜的時間會變得很少</p>	<p>上了年紀所以會補充一些教原蛋白，是從鄰居的媽媽有更年期以後會補充，但我的話是沒有固定再吃，她覺得吃那個可以補充一些流失的滿有效果的，所以跟著吃</p>	<p>家人生病的話只有感冒就會去家裡附近診所看診，診所看了十幾年了，搬過來 12 年了，就固定在那邊看</p>	<p>我比較常買一些茶點，因為假日跟鄰居一起泡咖啡聊是非的時候，幾乎每一戶都會自己帶東西出來共用這樣</p>	<p>菜色會選擇吃比較當季的，也會挑誰喜歡吃的，大家都不喜歡吃的東西就比較不會買，不會買青椒苦瓜</p>
<p>會準備甜食是因為鄰居有時候會來家裡坐坐，所以會準備一些茶點讓他們吃</p>	<p>女兒嘴巴破的時候有到西藥房去問，網路上也會接收一些資訊，我都從網路上看健康相關</p>	<p>不太會吃中藥，但以前會燉四物湯給以潔，然後全家一起喝這樣</p>	<p>我也會擔心他們在外面的吃，會勸他們吃一些營養的東西，長這麼大了他們自己應該會判斷選擇吧</p>	<p>鄰居也有一起相約去爬山，早上到山上涼亭去吃早餐，但是他們大部分目的都是為了八卦聊天不是健康，所以我不會跟他們一起去</p>

材料上面採購比較難，畢竟是下午了菜沒有真的新鮮，公司對面有黃昏市場，利用下班時間趕快買回來做飯	自從我們四個人分散四個地方之後，以前是正常的生活吃飯配菜，突然變一個人之後就比較不注重了，覺得一個果腹就好	燉四物這件事情不是大家都知道嗎，會去中藥行買，跟中藥行老闆說自己的狀況，他們會依據我講的狀況作調整	以前會較她帶東西回來，他們都會覺得很重所以之後就沒準備了	我也會在家裡騎腳踏車，小孩子不會騎，我本來要買給他們騎的，但他們都不騎現在都是我在騎
爸爸最近在吃草藥，我覺得很不可思議，我勸也沒有用，會在旁邊看他怎麼想，因為該講也講過了	電視上看的我也會記錄下來，可能有些是可以搜尋來源的話，我會叫小孩子去電腦蒐集些資料這樣	如果有人需要我會提供給人家，我會收在我自己的櫃子裡面	我會問思亭搬回宿舍的話會吃什麼，但也是沒有辦法控制太多她的飲食，叫她自己要過濾	我平常在家裡附近就可以買了，不會喜歡去大賣場
爸爸的知識是同事聽來的，因為他之前攝護腺問題，我會拿她買的東西來看是哪裡做的，也不合格	爸爸也是二月份開始吃靈芝，他吃東西比較不像我們這麼小心，他會有自己的主張	因為我眼睛有一些狀況，所以我現在沒有用電腦，但以前有用電腦	我比較不擔心思亭，因為她也是會以健康為第一要件，他比較不是注重口味的小孩	這些店大部分都在家裡附近，我騎摩托車都會到，新店不太大
有些健康的概念爸爸很沒有，但他沒有聽的很進去，我也會叫他吃靈芝	家人生病會帶去附近的西醫診所，雖然我家旁邊有醫院，但覺得診所時間的比較有彈性所以會去診所看	爸爸不大會煮菜，只會簡單的東西，她就是那種少爺不大會煮，但是他也不會去問，就會出糗	健康的觀念會跟他們說，叫他們吃總是要告訴他們為什麼要吃這些東西，跟他們溝通，他們才會去吃	思亭回來我會特地多準備一點水果，因為她愛吃水果，其他可能一般的份量會多買一些，我沒有辦法頓太多東西，但水果會多買
因為那時候都在讀書都做在那邊都不去運動，所以就說買健身腳踏車給他們騎，大概四五年前	家裡的食物通常是我決定再買什麼，我先生有時候回去會帶過來，因為他們家裡有種菜	會想小孩子是不是水果吃的不夠，所以買這些健康食品補充	爸爸早上會自己泡牛奶麥片，但我們看起來都覺得不好吃不吃，爸爸覺得吃麥片可以降低膽固醇	爸爸會熱衷各種療法，以前是氣功會去上課，或是看書看到太極拳覺得不錯就會回來練習，或是靜坐，是以前跟阿公分享或是書上看到或是同事推薦，但我不會跟著去
就是，我去我朋友家看過他們說他們都沒有運動所以買一台健身腳踏車，我就說我們家好像也都不運動，所以舊也買一台要給小孩騎，結果小孩都不騎	家裡會有水果，偶爾會做餅乾，做餅乾是看書比較多	家裡有人感冒了就會看醫生，看西醫，附近的診所特定的，以前有換過滿多個的，但現在這個覺得不錯所以都常看這家	之前廣告開始強打的時候爸爸就開始吃，但我們都不愛	因為爸爸都在金門很少回來，所以比較不太掌握他的訊息
我偶爾也會做瑜珈，會買書或借書回來看怎麼做瑜珈，我們一直都會這樣子運動	以前有上過烘焙課，大概五六年超過，因為社區大學有人來發傳單，看到覺得做麵包課程覺得不錯所以去嘗試做麵包，餅乾是後來做的	爸爸有 b 肝，最近開始才去看醫生，因為我阿公之前肝癌胃癌生病過世，想說直系血親所以就開始看病吃藥，以前會叮他去，後來他自己覺醒才去看醫生，以前不喜歡吃 b 肝的藥	家裡不太吃中藥，但路西經期不順所以會去開處方籤，因為看西醫都沒有用，有時候看西醫有時候看中醫，看什麼樣有效果，現在都看中醫	飲料盡量不要去外面吃，能在家裡自己做就自己做，做起來也簡單

爸爸就會一起去爬山，假日一起去，小孩不去因為覺得太早了，他們覺得假日就要睡覺	做餅乾的時候他們會參與，就他們有空就來做，因為很簡單所以就教他們一起做	也會讓他們戴東西回去，但有時候會太重或是時間上無法控制所以沒有帶，會帶水果餅乾也會帶一些熟食讓她回去加熱	這些料理是回去的時候媽媽跟姊姊都會覺得這樣煮好吃會推薦，自己回來就會煮	買麵包的地方不一定，我會去很多家嘗試很多家，會慢慢知道什麼樣的麵包去哪家吃比較好 吃，慢慢嘗試
晚餐一定會煮，就是大部分都有吃魚，肉比較少，魚的銷路比較好，我會看大家吃飯的習慣決定吃的東西，大部分都會有兩樣青菜	做的中間也會失敗，就會在看書再做精準一點	報紙的健康資訊也會留下來，有時候會剪下來，有時後會整張留下來等他們回來拿給他們看，但不太會整理，太久了還是會丟掉	我看食譜學做菜比較多，很少看電視，會去書店買食譜，覺得這本不錯就買這樣	整脊大概兩年多前開始，再吃靈芝之前的半年才開始常常去，因為那時教會有一個姊妹給他保養很久了
現在比較少吃肉，因為煮了好像也沒有人要吃，以前煮的話因為他們要帶便當，有肉帶去就吃了，現在不帶便當，所以吃比較少	我們很少吃外面的東西，也很少喝飲料，像是中元普渡之後，家裡的飲料也常常放到過期	爸爸比較少參與我們的對話，因為他也比較忙下班回來都晚了	之前我姊姊來，覺得這道菜很不錯，他說要煮去給他們聚會的時候吃，我就跟她說怎麼做他就會了	我自己以前有什麼問題就會看中醫或是西醫的復健科，覺得沒什麼效，那時去看這個整脊覺得滿有效的
我是家裡主要的食物決策者，我買什麼他們就吃什麼這樣	之前我就想說去做整脊，但其實現在發現整脊也不能幫忙很多，應該要運動	我朋友大部分也會吃他們覺得不錯的東西，有些人去 costco 買美國的，也有吃其他不同牌子的健康食品，一樣會分享	思亭比較隨和，所以爸爸弄的東西他都會吃，可是我跟妹妹就不會什麼東西都吃	大概生妹妹的時候，就比較有補充一些魚油或是葉酸，所以會去吃一些健康食品，進而上營養學的課程
爸爸都是為了他自己要吃得自己會去弄，像是南瓜他自己吃要保養	以前我有上過類似營養學的東西，以前吃過健康食品的會提供營養學的課程，所以比較有概念	之前有個中醫跟我說要吃膠原蛋白，然後我就會主動去問我吃過膠原蛋白的朋友好不好，如果好我就會吃看看	我會剪這些報紙或是說明書會留起來，我會看，有一些手邊的資料可以參考	氣喘的話會去看氣喘專科，我會去問別人小孩子氣喘會去看哪一家，聽看看別人看的好不好決定去
爸爸他自己會買，不大會幫我們買，我們也不會吃他買的東西，主要是不合口味啦	大概一二十年前上過這種課，剛好有再吃其他健康食品，但那些東西吃起來比較沒感覺，覺得沒有效	幾個月前有去看中醫，但現在我就去看整脊，因為我有五十肩	因為思婷有時候會經前症候群，會讓她吃一些大豆異黃酮，植物性荷爾蒙可以調身體，會讓他帶去吃，取代吃止痛藥等等	我真的比一般人比較知道怎麼講，比較一般人比較有概念
平常比較少跟致軒連絡，因為她太讓我放心了	我剛開始做黑木耳也是會煮不好，就會慢慢自己改進慢慢靠經驗學	果汁比較像是中途的點心，有時候下午三四點的時候打，想喝的時候隨時都會打	中藥行去附近買就好了，家裡附近買東西也滿方便的	妹妹比較怕吃藥，所以很少看醫生都讓他自然好
黑木耳是因為有一次去菜市場看到人家賣，自己喝一喝自己來做，用了之後請我朋友喝他們覺得很好喝，請我做然後賣給他們	因為我表姊在聖功醫院上班，我會拿去給他們喝，我也自己會包水餃，他們會訂我就會做會包，量也不會很大，我就久久做一次固定包給他們	我們可能小孩子比較挑食，所以我都買他們愛吃的青菜，像我女兒愛吃高麗菜花椰菜等等，以小孩子為主	我的個性比較喜歡去逛，平常沒事也會自己煮東西，比較自己嘗試，可能是從小看媽媽他們煮過，覺得有印象就會自己摸索	我們都看西醫比較不看中醫，因為我覺得中醫是調養身體用的

<p>我去菜市場看到有在賣，賣很貴，我就想說可以自己來做</p>	<p>香蕉牛奶是刻意的，因為我女兒喜歡喝香蕉牛奶，好事多有在賣，一小罐很貴，覺得他喜歡喝就自己打</p>	<p>像小孩子喜歡外面買飲料，他們小時候我會自己煮奶茶，因為小孩子愛喝，我很少讓他們在外面喝飲料</p>	<p>我不太會去問自己媽媽，覺得自己好吃就好了不會特地去問他，因為看過大概放過什麼料，就自己煮就好了，除非味道不對，有時候還是會問</p>	<p>人參雞也是小時候聽媽媽或是鄰居的媽媽說人參雞補氣，所以致軒讀書累了就會煮來吃</p>
<p>因為我的興趣是吃到好吃的東西，回去就會自己想，自己買材料來煮</p>	<p>果汁機很久了，大概快十年有了，以前比較沒有，是因為現在比較沒事做所以會打，我有一段時間有在上班比較忙，因為現在比較閒會做這些東西</p>	<p>像我們每個星期四會有好朋友會有姊妹聚會日，如果在我家就我準備，如果去外面就去外面吃</p>	<p>因為自己差不多要更年期了，聽朋友說白葡萄乾對更年期好所以我去嘗試</p>	<p>我不太看報指，不過報紙裡面會有果汁或是茶對身體好就會剪下來，或是有食譜我也會剪下來，有空的時候會煮看看</p>
<p>我都自己去研究怎麼做，沒有問別人，也沒有找資料，因為我對吃的比較喜歡做這些有的沒有</p>	<p>致軒在家的時候我大部份都會煮，因為我跟妹妹兩個人比較不好煮，所以都簡單吃</p>	<p>像是酸梅湯，朋友聊天的時候會聊到，就會想說自己也來煮看看，量就自己微著</p>	<p>之前流行優葛我也買優葛的機器，但現在比較沒做了因為吃膩了，但現在夏天到了天氣變熱可能又會做</p>	<p>我有一個剪貼簿就會放在上面，想到的時後翻一翻就會是看看去煮</p>
<p>我想到的時候也會自己做蘿蔔糕，是自己學，可能是以前小時候看過阿媽或是媽媽他們做，我們在旁邊看過怎麼做，可能自己也有點天份跟興趣所以自己做出來的</p>	<p>因為致軒在外面都外食，所以我會想說煮魚煮青菜煮肉給他吃</p>	<p>有時候這些東西也會去中藥行買，他們會提供一整包的販賣，就買回家自己煮</p>	<p>他們生病就是感冒而已，可能省致軒小時候比較會感冒</p>	<p>最近流行南瓜，就會煮南瓜牛奶</p>
<p>因為我一下當貴手一下五十盾，所以沒辦法做太多家事，我現在都盡量把家事簡化</p>	<p>牙醫給我的概念是不能一直吃同一種東西，會對腎有負擔</p>	<p>會包東西給思亭回新竹，現成的食物或是靈芝補貨</p>	<p>靈芝牌子很多，因為有人吃這個牌子覺得還不錯，所以就試試看，吃完覺得還不錯</p>	<p>大概是十年前，有機店開始賣一些肉類，因為剛開始沒有賣肉，但石年前開始有雞腿肉類等等</p>
<p>其實我覺得我不是一個很好的模範啦，因為我覺得保持健康就是需要運動，但我又沒有在運動，所以我現在就開始慢慢要把運動的習慣養好</p>	<p>以前吃過維他命，但現在沒有了，自從吃靈芝之後其他健康食品就沒有吃那麼多，什麼魚油大蒜精感覺負擔很大，小朋友也不會記得吃那麼多，只吃靈芝感覺比較單純有效率</p>	<p>我是一個比較挑剔的人，對吃的，但我又會去嘗試，對背景有了解我就會去吃，但我也會想筆要多</p>	<p>因為我沒有在運動，有一些筋骨的問題，所以會去整脊調整</p>	<p>傳統市場東西也不一定便宜，食物的來源也不一定知道</p>
<p>我自己是滿雞婆的，其實知道吃靈芝等等不要隨便亂推薦比較好，但有人問我就會講，會去推薦給別人</p>	<p>去大賣場買東西，我以前的同事是沒有上班的主婦，他會去比較遠的 COSTCO，我會搭便車</p>	<p>我老公很少去大賣場，他的東西是上下班用的不會去大賣場，爸爸不喜歡逛大賣場</p>	<p>這個牌子沒有有名，也會懷疑這麼多靈芝到底吃哪一種靈芝比較好，我跟這家的業務聯絡，來告訴我我是義美的老闆自己在吃的</p>	<p>我是算比較敏感的人，如果我買冷藏的東西我一定會帶保溫袋，我覺得食物保存過程要很好，吃下去才比較有保障</p>

<p>我的剪貼簿也會跟家人分享，跟朋友分享，來我家就會做給他們吃看看，他們說好吃我就會告訴他們怎麼做</p>	<p>大概五點多起來，五點多要做早餐，因為妹妹跟爸爸要六點半出門。</p>	<p>我常常會看報紙看電視得知這些知識，我的朋友也會討論這方面的事情，我們會彈說買什麼買些什麼吃些什麼</p>	<p>我們都吃靈芝，可以增加抵抗力，有持續在吃這個，所以我比較不在乎有沒有煮太多營養的東西，不要弄得太複雜的參，但我有補充健康食品，或是盡量偏向水果類的東西來補充</p>	<p>義美有自己的一個檢驗室，感覺自己更有把握說他們自己會檢驗好自己的東西再拿出來賣，心裡也比較安心</p>
<p>我會電話關心他有沒有吃，因為他很省很節儉，所以會告訴他不要省</p>	<p>我不跟他們一起吃早餐，因為還要回頭睡覺感覺吃完睡覺不健康</p>	<p>但我的朋友也會吃很多牛肉啊，牛腱啊包水餃會弄很多肉，但我自己是比較偏輕食，比較不要吃太多肉的</p>	<p>因為我有過敏體質，思婷也，我吃完發現過敏的情況好很多，我覺得我們過敏情況改善很多，平常也必較不會感冒</p>	<p>之前手比較可以的時候會去生機飲食的店買一些肉啊蔬菜，買一些生的肉，現在手比較不方便就在生機店買比較精緻一點的熟食</p>
<p>我大概兩年多前開始做黑木耳漿，我們南部很流行這個東西，很多人在賣黑木耳漿，我都習慣喝自己煮的</p>	<p>我大概下午的時候買隔天的麵包，下午兩三點出爐</p>	<p>中午的話我一個人我不太會自己做，我沒辦法洗太多碗，爸爸會幫我洗碗，因為我的手有點皮膚的狀況，所以不想用太多碗來洗</p>	<p>我們大概吃靈芝吃快兩年，剛好整齊的地方的病友看到我一直在打噴嚏，就推薦我吃這個牌子的靈芝</p>	<p>有機店喔，因為有機店感覺上保存食物比較安全，沒有放在外面曝曬，份量價格產地也都標的很清楚，颱風天的時候也不會隨便哄抬價格，品質比較穩定</p>
<p>妹妹不會跟我一起去買菜，他沒有興趣，我也會想要教她他都不想學</p>	<p>不可能每天都吃火腿蛋，也是會膩啊</p>	<p>洗碗都是爸爸幫忙，偶爾我會戴手套自己洗，他晚上回來吃完飯會幫我洗</p>	<p>說時在我很少去大賣場買東西，會去買是因為我朋友團團一起去買，但大賣場的吃的東西我覺得其實是不合格的，不會買很多</p>	<p>我會去挑精緻的蔬菜水果或是好一點的半成品來彌補，我沒辦法就會買一些精緻東西來代替，或是買一些補充營養或是健康食品來代替</p>
<p>我常常覺得自己做比較快所以都自己做，教不動他們就不會勉強，但其實這樣是不對的</p>	<p>我自己是掌控一些他們吃的東西，我不會買很多肉，思亭不會，但妹妹可能高中生還要發育所以要吃肉</p>	<p>手的狀況大概有五六年囉，所以我的狀況是在家裡沒有辦法洗太多東西，我就會去找好的東西，我不會隨便去亂買什麼便宜便當</p>	<p>火鍋我們都會去吃聚火鍋，因為我覺得那種火鍋湯比較鮮品質比較好，是因為朋友請我們去吃我們才知道的</p>	<p>媽媽是家庭主婦，如果回到中壢，家裡吃飯很準時，12點就12點</p>
<p>以前住交大宿舍，東西已經很多了所以不會想要再搬更遠</p>	<p>對，早餐跟午餐一定都在公司吃，但晚餐就會盡量不要在公司吃了，因為就會想吃其他東西</p>	<p>假日... 假日有時候會睡到中午，早餐沒吃直接吃午餐，午餐時間比較晚可能到一點才吃</p>	<p>對啊，就是覺得我跟我妹至少有一個人多回家看看爸爸媽媽，還不錯</p>	<p>一定會有青菜，一定會有魚，肉不一定會有</p>
<p>通常是，我媽不喜歡有人進她廚房，她喜歡他廚房保持乾淨，不要有其他人碰。除非是她真得覺得她忙不過來才會要我們去幫他，否則我們其他人她都不喜歡我們進她廚房。</p>	<p>我媽媽一直希望我的過敏趕快醫好來，但其實我之前很不想看醫生，因為看醫生要一直吃藥</p>	<p>我通常跟他說我不想吃藥，吃了也不一定好，覺得吃這些藥不一定是有邏輯，吃了就會好這樣，所以會去拒絕這件事情</p>	<p>大概兩三個禮拜吃前吃中藥，因為我有一個朋友介紹我</p>	<p>我朋友也有皮膚過敏，她看過一家中醫覺得很有效所以推薦我，所以我也去試試看</p>

因為之前有跟媽媽吵過架，她希望我要去治療，所以我最近就開始看中醫，也是剛好朋友介紹我中醫	在這裡不買奶粉喝，因為只有我一個人喝會過期，爸媽在家裡是天天喝，所以食物不會壞掉	我們家爸媽每天都會喝茶，喝綠茶，從早到晚都會泡茶喝，但我不喜歡喝綠茶所以我不喝他們泡的茶	在外面比較少吃水果，在家裡就會吃，桌上都很多，看到就會吃，但在外面就不一定會想要吃水果，因為有可能是要自己買的關係	在家中就不會去買其他東西帶到家裡來吃了因為媽媽都會煮好飯菜
爸爸從開始喝茶之後痛風狀況的確有比較改善，但我覺得是喝水的關係不是喝茶的關係，但也無從證明	現在會買香蕉，但我妹妹也是不吃，因為他覺得習慣已經養成所以不會特地去吃	會從電話中得知他們訊息，但我自己比較少主動提供訊息	爸媽也覺得如果吃什麼東西可能對健康不一定有好效果，吃食物不一定有絕對優點或絕對缺點，所以均衡飲食就好，分散風險	從小到大都喜歡吃麵，外食的話選擇麵的頻率就會高很多
爸爸有些痛風跟高血壓，所以媽媽會煮很清淡，像是青菜都是用燙的，完全沒有家調味料	我很少吃冰的東西，因為小時候鼻子過敏，國小去看中醫診所，醫生很嚴厲的斥責我說不能吃冰，所以我後來就養成習慣不吃冰的東西。	至少在喝茶爸爸覺得他能夠安心，身體狀況也好，覺得這樣生活方式他也開心的會就讓他選擇這樣	家裡很少看西醫而偏向看中醫，因為弟弟的氣喘毛病西醫總是看不到，而中醫卻有效。	久病成良醫，平時用觀察的方式從女兒的咳嗽聲、精神狀況來判斷是否有狀況
我妹回家會特地準備很多青菜，因為我妹不喜歡吃青菜，會特地留一個區域給我妹說這是留給他的，一定要我妹吃青菜	我跟我妹回家的時候媽媽會特地說，我今天有煮魚，她覺得魚很健康	媽媽有教我煮菜，幫他忙的時候會教我，比較簡單，幫她很多次就會記住怎麼做菜。	最近嘗試家庭醫師，因為能夠掌握完整病例，但要讓人值得信任	為防女兒過敏，減少塵蟎，周末有空會洗被單、多曬太陽、用除濕機、窗簾和椅子盡量不買布面、平日叮囑女兒早起喝溫開水加外套、不喝冰水不吃冰、不買絨毛玩具
黑糖是生理期的時候會用來喝，是同學建議我喝的	因為他吃鈣片，所以才叫我們小孩子要多喝牛奶，現在比較有效果	爸媽有一點點乳糖不耐症，所以牛奶不會喝太多，多吃鈣片補充	小風只要有點不舒服就會講，只要靠過去叫媽媽，然後不說話媽媽就知道了	維他命放在廚房，因為要配水喝比較方便
我覺得有時候吃了某些食物會讓自己心安，覺得我有做這件事情對自己有助	是媽媽叫我帶來的，她希望我少吃外食。	生病時不會特別提醒我飲食的東西，因為平常就已經說了很多了	因為自己小時候沒健保，都吃成藥，如果能自行回復就好，盡量不吃藥	家中有放置補品，媽媽會煎藥膳給全家一起吃，因為可以補血氣可加強免疫系統能力。
我知道家人有什麼吃有什麼不吃，但我家人不會因為誰不吃什麼東西就不煮	我覺得飲食多少會受家裡影響，因為從小養成的習慣很難去改變	水果都爸媽去買的，飲食的食物都是爸媽在掌控。	方媽說自己平日手痛的時候會擦些外用藥	方媽會在秋冬天會給家人補一下像是麻油雞或是煎鱸魚
我們家會有喝茶習慣是因為我爸爸有痛風開始，我爸聽來說多喝茶可以改善，喝茶同時是在喝水，所以覺得有幫助	我爸爸的健康觀念都從新聞跟報紙得知，但我對新聞報紙比較處於懷疑的態度	從小到大會吃的都那些，所以不會刻意去買沒有吃過的東西來吃	第一次煮雞湯是請教媽媽學來的，之後就自己拿捏	媽媽平均每個禮拜會打兩次電話給小風，想到就會打，關心小風帶去的水果吃了沒。
我妹妹小時後腦部開過刀，有西醫還是中醫說腦部開刀不能吃香蕉，所以有陣子不吃香蕉	報紙的健康研究常常反覆，所以我也不太會相信	在家裡吃剩下的晚餐會帶來住處，當作回新竹的晚餐	爸爸會開始注重飲食與身體健康，是因為他不能捐血，以前會有捐血習慣，一個月捐一次	方媽說隨著自己年紀增長，會更注意要吃哪些補或食物來照顧自己的身體

我自己覺得外面的東西也吃膩了，家裡的東西也比較少吃到，所以不排斥吃	其實外食比較不容易吃到魚，所以我覺得媽媽在我回家會特別煮魚，魚不常吃	有些報紙的研究都很片面不確實，我以前碩班做實驗都知道有漂亮的結果但過程都可以作假	媽媽去找小風時會特地帶花椰菜給他吃，因為小風有特殊身體狀況，吃這個對她很好。	婆婆很常打電話來關切孫女健康，孫女小時候頻率很高，年紀漸長後變成一個禮拜打來兩三次
會帶比較輕的東西回來住處，比較方便帶的東西，像是比較麻煩的東西就不會帶來	家裡有電動測量耳溫槍，女兒發燒時會自己量	因為媽媽很敏感，所以只要身體有一點不舒服就會吃藥，想辦法解決	之前沒甚麼調養女兒身體，今年婆婆才開始帶她去看中醫	先生不太挑食，而女兒愛吃雞肉，所以會特別去菜市場買
方媽認為身為方媽本來就應該知道家人的健康狀況	因女兒過敏，從小照顧她時就有透過查書和網路，了解該如何照顧過敏體質	方媽認為清淡飲食就好，菜色要有綠色、白色，且準備時有魚就不會有肉	看準備給小孩的食物都有被吃完，媽媽心中比較放心。	婆婆打電話到家裡來會先關心孫女的健康，或是打去先生的公司問
家裡有醫療箱，裡面的東西都是媽媽在張羅。	女兒小時候會替她收集保健方面的文章，然後用 email 轉寄給先生	方媽認為備菜一定要有蔬菜，會視情況留下昨日的菜，但也不能都是舊菜	會準備食物讓小孩們帶去住處煮來吃，因為擔心他們營養不夠，在外吃的不夠健康。	一開始都是由婆婆帶孫女去看中醫，但因住較遠，後來改由先生帶，如果先生也不行才由自己帶
方媽買了藥品不會特地告知家人，認為這是一件小事情，有遇到才隨口提一下	主臥室裡一個抽屜放全家用的藥箱，而女兒房間有她自己專用的藥箱	早餐會買三明治跟麵包、牛奶、玉米片或吐司煎蛋，以方便為主，會盡量變換口味	會準備食物讓小孩們帶去住處煮來吃，因為覺得小孩都太節儉了，怕他們捨不得吃。	全家喜歡中式早餐，但家附近沒有賣，只好買西式的
女兒小時候給婆婆帶過三年，所以婆婆到現在還是很關心她	媽媽去找小風時會帶花椰菜給他吃，因為小風舅舅有去查吃花椰菜很好，去問醫生也得到認可	媽媽帶給住在外面小孩的食物，會準備很多種口味，希望讓他們每天都可以吃到不一樣的東西，方便的配飯或配麵。	爸爸有高血壓，如果吃太油，太鹹，變胖就會唸他，但因為後來不住家裡，所以就看不見到這件事情，就會忘記了，比較少念	過去爸爸信仰宗教所以吃素，所以也讓家人一起吃素
老師會在聯絡簿交代女兒在學校的狀況，譬如撞到頭受傷	婆婆會買健康書和雜誌，但自己比較懶惰，健康資訊不會特別去做紀錄，都記在腦中	媽媽會在小風出門時讓她帶一瓶水出去，回來會查看她是否有喝完並叮嚀她這樣對新陳代謝不好。	小風去檢查時發現腫瘤有變大一點，因為他在研究所睡覺沒有正常，藥也沒按時吃	

APPENDIX C: Quotes

Participant A:

“小妹都帶去學校吃，先生都吃麵包配牛奶麥片，我是等他門出去在自己吃這樣，因他們都趕著上班上課，因為我先生他會比較早起，我東西會幫他弄好，牛奶他會自己泡。”

“因為家裡附近最近開了一個新圖書館，所以會去圖書館借書來看。”

“晚餐一定會煮，就是大部分都有吃魚，肉比較少，魚的銷路比較好，我會看大家吃飯的習性決定吃的東西，大部分都會有兩樣青菜。”

“以前有上過烘培課，大概五六年超過，因為社區大學有人來發傳單，看到覺得做麵包課程覺得不錯所以去嘗試做麵包。”

“會想小孩子是不是水果吃的不夠，所以買這些健康食品補充。”

“爸爸有 b 肝，最近開始才去看醫生，因為我阿公之前肝癌胃癌生病過世，就想說直系血親所以就開始看病吃藥。”

“爸爸早上會自己泡牛奶麥片，但我們看起來都覺得不好吃不吃，爸爸覺得吃麥片可以降低膽固醇，之前廣告開始強打的時候爸爸就開始吃，但我們都不愛。”

Participant B:

“喝咖啡習慣大概有十年了，那時候剛開始喝茶比較多，但因為鄰居假日會在外面擺桌子打屁聊天，就會泡茶或煮咖啡，那時候慢慢覺得喝咖啡還不錯。”

“有時候爸爸回來小孩回來就會選一家餐廳聚一聚，決定餐廳的方式都會互相問大家的意見，但最後都會以爸爸為主，爸爸想吃什麼就去吃什麼，因為爸爸在大陸比較少吃到。”

“上了年紀所以會補充一些膠原蛋白，是從鄰居的媽媽有更年期以後會補充，但我的話是沒有固定再吃，她覺得吃那個可以補充一些流失的滿有效果的，所以跟著吃。”

“自從我們四個人都分散四個地方之後，以前是正常的生活吃飯配菜，突然變一個人之後就比較不注重了，覺得一個果腹就好。”

“以前有煮飯的時候比較會想要做什麼菜，上網查一些資訊，全家人的話就會比較注重營養，現在的話一個人想吃什麼簡單的就買回來簡單解決。”

“我買的食物他們不見得愛吃，有時候吃完以後他們兩兄弟會自己跑到便利商店去吃東西，我比較沒辦法掌控他們吃什麼，因為他們也不聽我的。”

“公司有團購我就會跟著買，像是買蛋塔跟著別人一起買，會上網看看覺得不錯，幾乎每一次都會跟著買。”

Participant C:

“黑木耳是因為有一次去菜市場看到人家賣，自己喝一喝自己來做，用了之後請我朋友喝他們覺得很好喝，請我做然後賣給他們。”

“我想到的時候也會自己做蘿蔔糕，是自己學，可能是以前小時候看過阿罵或是媽媽他們做，我們在旁邊看過怎麼做，可能自己也有點天份跟興趣所以自己做出來的。”

“之前流行優格我也買優葛的機器，但現在比較沒做了因為吃膩了，但現在夏天到了天氣變熱可能又會做，現在比較沒做了因為吃膩了，但現在夏天到了天氣變熱可能又會做。”

“我的剪貼簿也會跟家人分享，跟朋友分享，來我家就會做給他們吃看看，他們說好吃我就會告訴他們怎麼做。”

“買麵包的地方不一定，我會去很多家嘗試很多家，會慢慢知道什麼樣的麵包去哪家吃比較好吃，慢慢嘗試。”

Participant D:

“中午的話我一個人我不太會自己做，我沒辦法洗太多碗，爸爸會幫我洗碗，因為我的手有點皮膚的狀況，所以不想用太多碗來洗。”

“手的狀況大概有五六年囉，所以我的狀況是我在家裡沒有辦法洗太多東西，我就會去找好的東西，我不會隨便去亂買什麼便宜便當，我會去挑精緻的蔬菜水果或是好一點的半成品來彌補，我沒辦法就會買一些精緻東西來代替，或是買一些補充營養或是健康食品來代替。”

“我們大概吃靈芝吃快兩年，剛好在整脊的地方的病友看到我一直在打噴嚏，就推薦我吃這個牌子的靈芝。”

“之前手比較可以的時候會去生機飲食的店買一些肉啊蔬菜，買一些生的肉，現在手比較不方便就在生機店買比較精

緻一點的熟食。”

“我是家裡主要的食物決策者，我買什麼他們就吃什麼這樣。所以我是不是個 queen?都是我來決定東西。”

“爸爸都是為了他自己要吃得自己會去弄，像是南瓜他自己吃要保養。爸爸他自己會買，不大會幫我們買，我們也不會吃他買的東西，主要是不合胃口啦。”

“以前我有上過類似營養學的東西，以前吃過健康食品的會提供營養學的課程，所以比較有概念，知道吃了一些煙燻的東西之後要吃一些抗自由基的健康食品來平衡。”

“爸爸最近在吃草藥，我覺得很不可思議，我勸也沒有用，會在旁邊看他怎麼想，因為該講也講過了。爸爸的知識是同事聽來的，因為他之前攝護腺問題，我會拿她買的東西來看是哪裡做的，也不合格。”

Participant E:

“研究所同學推薦補品，買一瓶送給我，我覺得不錯，之後就和女兒持續吃到現在。”

“為了防女兒過敏，減少塵蟎，周末有空會洗被單、多曬太陽、用除濕機、窗簾和椅子盡量不買布面、平日叮嚀女兒早起喝溫開水加外套、不喝冰水不吃冰、不買絨毛玩具。”

“聽過久病成良醫嗎？平常聽她咳嗽的聲音就知道嚴不嚴重了。”

Participant F:

“爸爸不信西醫、不喜歡健康檢查、認為自己的身體狀況自己最清楚，感冒也不看醫生。”

“要組成一個家庭真的很不簡單，男主外、女主內，是真的，男人不太會整理(藥品)的那麼清楚啦。”

Participant G (Mother & Mobile family member):

“我會準備很多種口味給她們，希望讓他們每天都可以吃到不一樣的東西，方便的配飯或配麵。”

“身體是一輩子的東西，用多久沒人知道。”

“爸爸有高血壓，如果吃太油，太鹹，變胖就會唸他，但因為後來不住家裡，所以就會看不到。”

“因為擔心被媽媽罵，其實晚上都沒睡覺，但卻說有睡覺。”

“在家裡身體有狀況時會用語言或是肢體暗示媽媽，小聲的說身體狀況，怕媽媽會生氣。”

Participant H:

“我通常跟他說我不想吃藥，吃了也不一定好，覺得吃這些藥不一定是有邏輯，吃了就會好這樣，所以會去拒絕這件事情。”

“我覺得飲食多少會受家裡影響，因為從小養成的習慣很難去改變。”

“我爸媽的健康觀念都從新聞跟報紙得知，但我對新聞報紙比較處於懷疑的態度。”

Participant I:

“媽媽會刻意去看社交網站時間記錄看我有沒有太晚睡。一直叮嚀要早點睡。”

“爸爸比較大男人主義不會問直接問孩子健康方面問題，所有意見都會由媽媽轉達。”

“上次媽媽有骨折，但卻沒有說，因為媽媽怕我擔心吧。”