Bakti and Sayan traditions among the Tenggerese people in East Java: the role of indigenous institutions in integrated elderly care development in Indonesia

Wiliandri, R.

CHAPTER VIII CONCLUSION

8.1 Conclusions

The research focuses on the Javanese ethno-cultural group in Indonesia, in particular the Tenggerese ethno-cultural group, with a view to understand the practice of the *bakti* and *sayan* local traditions which emphasise mutual aid in the local communities. Furthermore, the study seeks to document and study the role of *bakti* and *sayan* as local traditions to provide care of the elderly.

The research was conducted in four villages representing both the Tenggerese and Javanese people in the East Java Province of Indonesia. The two villages, Ngadas in Poncokusumo sub-district, Malang district, and Argosari in Senduro sub-district, Lumajang district represent the Tenggerese people. Both are rural areas and represent the Tenggerese people who still believe in and practise their customs to the present day. The other two villages representing the Javanese in East Java are Ditotrunan in Lumajang district, and Tlogomas in Malang district.

Furthermore, this chapter discusses the utilisation behavior of the Plural Elderly Care system among the Tenggerese people, a part of the Javanese ethno-cultural groups in East Java. The Tenggerese people live in the Tenggerese Highlands surrounded by Mount Bromo, Mount Semeru and the Tenggerese massif. They hold on to, believe in and practise their customs to the present day. This research conducted a qualitative and quantitative study which focuses on the knowledge, belief, and practice of local people, particularly the Tenggerese people, in terms of care and support services provided for the elderly towards the utilisation behaviour of elderly care institutions which consist of traditional, transitional, and modern elderly care organisations. The local people's perspective is characterised by the 'emic' view which is vital to understand the participants' knowledge, belief, and practice, and to know how the local people perceive, organise, and report the utilisation of their culture focusing on care and support behaviour for the elderly. The 'emic' view provides a deeper understanding of the target group culture and affects their decision-making processes.

Moreover, this study attempts to understand the pattern of care and support behaviour from the adult child's perspective. This will likely affect their preference for available care and support for the elderly in the traditional, transitional and modern elderly care organisations. The *bakti* and *sayan* local traditions are based on the applied-oriented knowledge, characteristic of the Tenggerese people in relation to the care of the elderly. This research focuses not only on the local people's knowledge, but also on the background of the local people in terms of their socio-economic status and culture in relation with their care of the elderly. This research also enables the provision of a contribution to culturally-appropriate and local community-based policy planning and implementation for improved care of the elderly in the research area of East Java.

This study includes the description and explanation of the significant factors influencing the local people's behavioural patterns from the four village samples in the utilisation of the traditional institutions using *bakti* and *sayan* local traditions in the family home care, in comparison with the existing transitional and modern elderly care organisations. Moreover, identifying the possible contribution to improving care and support provision for the elderly emphasises integrated care based on the Indigenous Knowledge Systems Integration Model (IKSIM) through Integrated Community-Managed Development (ICMD).

This research will attempt to give a clear understanding of care services for the elderly based on the representative dominant position of care places and providers. First, this research takes into account the institutional care services provided by the state or private. Specifically, it refers to *Panti Jompo* and *Puskesmas Santun Lansia*. Second, for the place of care in a community, this research considers community care combining service providers between state/private and family/voluntary services. Third, family care and filial piety are often used interchangeably related to the care of the elderly at home.

However, family care refers to the care provided by family or close relatives, usually a spouse or adult children including personal, social, health, and financial support, which usually occurs over a prolonged period (*cf.* HelpAge International 2013). This research regards family care and filial piety

as related to the specific moral obligation to the elderly. Since this research considers some aspects of the sociocultural contexts presented by Keith (1992), it focuses on adult children's perceptions toward providing care of the elderly based on their knowledge, beliefs, and opinions in their daily life practices.

As mentioned above, the objective of this research is to find an answer to the central research question from the user's perspective is then: *'What is the role of the bakti and sayan local traditions in the utilisation of the indigenous elderly care institutions by the community members in the Tengger Region of East Java?'*

By consequence, this study focuses on the local knowledge, practices, beliefs, and institutions in relation with patterns of utilising the plural elderly care system, in which the local traditions of *bakti* and *sayan* are playing a key role. Additionally, the research also attempts to understand the behaviour pattern of care of the elderly from the adult child's, *i.e.* the user's perspective. The care of the elderly in traditional care institutions is implemented more flexibly than in transitional and modern care organisations. There are no binding rules and the behaviour is influenced by local traditions and informal norms. Both the elderly and the younger possess the authority to carry out daily care. Furthermore, in its implementation, the care and support process covers all aspects ranging from social, health, cultural, and financial support.

The implications of the research findings are described to provide care of the elderly based on the integrated care model that focuses on service delivery through case management. Notably, the process of integrated care highlights the integration of traditional, transitional and modern elderly care organisations that focus on the important role of community in managing the care of the elderly. This study aims to document and analyse the utilisation of the plural elderly care system by the local people in research areas. In particular, the study also analyses the knowledge and practice of *bakti* and *sayan* local traditions from the 'emic' perspective among the Tenggerese people to understand the provision of care for the elderly. In addition to its general aim, this study seeks to achieve the following specific objectives:

Firstly, Chapter II presents a theoretical overview of the elderly care and support services, emphasising the management of the plural elderly care system. This research has highlighted the concept of the Plural Institutional System analysed by Slikkerveer (1990), introducing the concept of the plural medical system using traditional, transitional, and modern medical systems by various ethno-cultural groups in the Horn of Africa. In this context, the plural elderly care system relates to care for the elderly using traditional institutions, and transitional and modern elderly care organisations. The concept of institutions encompasses different social and individual formations in the community or society, created by people over generations to structure their collective rules, norms, beliefs, values, interactions, and behaviours (*cf.* Slikkerveer 2014). However, this research considers both the institutional and organisational basis focusing on care and providing services for the elderly. In this context, institutions refer to norms and behaviours of some valued purpose, while organisations refer to the structure of recognised and accepted roles in the community. This study focuses on care of the elderly, emphasising health and social care services based on the place and provider of the elderly care institutions. Traditional elderly care is the care of the elderly provided by family at home. The elderly can also get assistance or support at home not only from their family but also close relatives, usually a spouse or adult children. The role of families in providing care of the elderly at home is very important, starting from planning, implementation, and decision-making; this type of service is called family home care. Backman & Hentinen (1999) and Železnik (2007) state that home care is much less expensive than institutional care, and the elderly living at home are considered to improve their life quality. In the context of care, the elderly can handle all of their daily activities by themselves, including health or illnesses. In the model developed by Backman (Backman & Hentinen 1999), responsible self-care is defined as activity and responsibility in daily activities about health and illness. The precondition for responsible self-care is to have a positive outlook for the future and a positive ageing experience.

Meanwhile, transitional elderly care is defined as care of the elderly in-between traditional care institutions *i.e.* family home care and modern care organisations. In traditional elderly care, the elderly may stay at home alone, with their spouse, or family. The elderly receive the family's care and support at home where families play an important role in the process of care of the elderly, starting from planning, implementation, and decision-making. Fan (2007) reports that the elderly prefer receiving care from family rather than care institutions for five reasons: (1) family care embodies the character of love, intimacy, sincerity, warmth, and security, (2) the elderly feel more dignified, individualised, autonomous, free, and flexible, (3) the elderly can receive more personal care suitable to their particular personalities and religious practices, (4) family care is particularly good for the elderly suffering from dementia because it is easier for them to recognise family faces and adapt to the familiar environment, and (5) family care at home is cheaper than institutional care, such as old age homes.

In Indonesia, particularly among the Javanese, kinship and family structure values are essential to influence the ways of local people providing care of the elderly. Familism emphasises kinship relationships and affiliation with larger groups such as clans, lineages, kindreds, or extended families. The underlying relationship in kinship is family relations consisting of nuclear and extended family, which depend on particular circumstances. The majority of Javanese households are composed of a nuclear family while the Tenggerese household is composed of an extended family consisting of two or more nuclear families linked together through parents, children, or siblings, and through blood, marriage, or adoption. The Tenggerese people use the term '*sedulur'* which refers to kindred consisting of one to three generations of local relatives, usually direct descendants of a person's great grandfather on the father's or mother's side. The Javanese, including the Tenggerese people, have a bilateral kinship system which refers to relationships from both parents, making children tied equally to relatives of both the mother's and father's line. It means that children have an equal opportunity to provide care of their parents from both the mother's and father's side. Living arrangements for older people will affect who plays a dominant role in providing care of the elderly.

Community-based care lies between traditional and modern elderly care organisations. The management of transitional elderly care organisations comes from local people's initiatives with other institutions' involvement from outside the community. Cantor's model (1977) as cited in Cantor & Brennan (1999) has conceptualised the social support system of the elderly as a series of concentric circles; each contains a different type of support element sub-system. In this model the elderly are at the centre with support sources based on the degree of social distance from the older person (*i.e.* nearest to the farthest) and the support element's organisation (*i.e.* informal to formal). The primary informal support is from those closest and most involved in the elderly's daily life, such as a spouse, children, children-in-law, and grandchildren. The second circles are informal support relationships from other kin such as friends and neighbours. The next circle are quasi-formal, known as mediating structures such as religious organisations, ethnic, cultural, social and neighbourhood groups, which often serve a link between the individual and society. The two outer circles are the public and voluntary service organisations, including formal support systems (*cf.* Cantor & Brennan 1999).

Three groups of kinship apply in the Tenggerese community: *sa'omah* (main family as the smallest kinship group), *sa'dulur,* and *wong Tengger.* The elderly will receive care and support services predominantly from the family living in one house (*sa'omah*); the elderly who live independently in a house would be visited by their children in the afternoon. Children take it in turns to regularly visit them to see and talk about their condition and bring them some needs such as food or another needs.

Meanwhile, the elderly who live together with their children in one house have a separate kitchen so that they can cook their own meals. The elderly in the Tengger Region do not want to burden their children as long as they can meet their needs independently. However, sometimes children still take care of their parents in other ways, such as cleaning the house, washing clothes, or accompanying them to go somewhere. Moreover, the other children will help fulfil the elderly's needs such as food, clothes, cigarettes, or basic needs (*e.g.* rice, sugar, coffee, tea), etc. The *sa'dulur* kinship system recognises other relatives such as cousins from both father and mother, cousins of the second generation from father and mother or relatives from father and mother. They will provide care of the elderly when the elderly's family needs it.

Sometimes, *sa'dulur* initiate visits to the elderly just to meet and talk. Care and support provision for the elderly is based on the local tradition of *bakti* in which the Tenggerese people believe in. Lastly, the Tenggerese people are morally obliged to provide support and care of the elderly in their communities. The local community implements the *sayan* local tradition, such as visiting the elderly and bringing food or money to those who need it. The local people pay a visit to the elderly not only when they are sick but also when they have special events such as *slametan* or other events. The local community is also visiting and chatting with each other in the afternoons.

Finally, modern care organisations are based on modern care of the elderly delivered by trained professionals. The implementation of care of the elderly in modern care institutions has binding and compelling rules for all involved. The rule requires care of the elderly to be fully managed by the modern organisations provider. Commonly, management of modern elderly care organisations is divided into two kinds: government and private management. The government manages old-age homes to provide care and support for the elderly, who are neglected or do not have families. Care of the elderly in Indonesia consist of four schemes. One example is health services provided in the *Puskesmas Santun Lansia*, the *Posyandu Lansia*, and the hospitals. As mentioned above, social care services for the elderly are provided by the the *Karang Werda* and the *Panti Jompo*.

Moreover, the elderly also receive social assistance from different governmental institutions, *e.g.* financial assistance from the Ministry of Social Affairs (ASLUT and PKH) and financial or non-material assistance from BKKBN (BKL). Several central government ministries and agencies control all those schemes. For example, health care services are controlled by the Ministry of Health, while the Ministry of Social Affairs controls social care services and some social assistance such as ASLUT and PKH. Moreover, social security for the elderly is controlled by *Badan Penyelenggara Jaminan Sosial* (BPJS) (Government Social Security Agency), while BKKBN controls the BKL programme. Care and support service provision for the elderly involves many ministries and agencies, central to the province, district, sub-district, urban village, or village. Each ministry and agency has a programme for the elderly. Unfortunately, particularly in rural areas, programme implementation for the elderly suffers from unequal distribution of available resources. There are no clear directions from central government to the various layers of health service providers in supporting the elderly's needs in Indonesia. Inadequate staff and a lack of direction from the government can reduce government programs' effectiveness. The elderly's activities such as social and health care, and the contribution of other sectors such as transport, public facilities, and telecommunications should be integrated to ensure optimal coordination and efficiency.

Care and support service schemes for the elderly, *i.e.* health and social care, social security and assistance, are provided by many ministries and agencies. The schemes need to be based on what the elderly need and want in the community. This study introduces integrated care at the service delivery level through case management. It provides comprehensive services for community-based older people, which focuses on two primary purposes: quality and cost of care.

Case management aims to improve health and social care coordination, which needs interventions from case managers. Case managers who are social workers are more likely to encourage cooperation among the elderly's own strengths, family, friends, and the community to make independent living possible, rather than health professionals.

Secondly, Chapter III presents the appropriate ethnoscience research methodology to utilise plural elderly care institutions using the selected analytical model. It is introduced by Slikkerveer (1990) and used in several types of research related to applied ethnoscience and development studies. The 'Leiden Ethnosystems' Approach' is chosen to better understand and explain the indigenous perceptions, practices, beliefs, values, and philosophies associated with the concept and practice of care and support service provision for the elderly. The 'Leiden Ethnosystems' Approach' follows three methodological principles: the 'Participant's View' (PV), the 'Field of Ethnological Study' (FES), and the 'Historical Dimension' (HD). In the PV context, this research studies the local people's views in the Tengger, including the Javanese, related to their perception of care of the elderly for care providers and utilisation of preferences for elderly care institutions. This research is conducted from the 'emic' view

that involves the way local people perceive themselves rather than the 'etic' view taken from the way the researcher perceives people. The FES is related to the concept of 'culture area' and refers to a geographical region where cultural features can be compared between different ethno-cultural groups in that same region. The Javanese, including the Tenggerese people, have cultural practices regarding care and support behaviour for the elderly, using *bakti* and *sayan* as the underlying local traditions. The HD concept facilitates the assessment of the cognitive and behavioural components of the community studied. It includes analysing the intricate contemporary patterns including culture, religion, agriculture, living and care arrangements, support for the elderly, and livelihood strategies to secure old age. Those aspects will influence the current user behaviour towards utilising elderly care institutions in Java, particularly in Tengger, East Java.

Moreover, data have been collected through both qualitative methods by observation and interviews, and quantitatively through household surveys. The quantitative data have been collected from the structured questionnaires following the conceptual model developed for this research. The appropriate conceptual model is then constructed on the basis of the Transcultural Utilisation Model, developed by Slikkerveer (1990) allowing the assessment of the cognitive and behavioural components of particular groups or communities as 'systems' in a rather process-oriented mode. The research uses a multidimensional approach which focuses on indigenous knowledge systems with ethno-economic and ethno-management approaches based on the significant evidence that an individual's behaviour is affected by a number of factors *i.e.* socio-demographic, psycho-social, perceived needs, enabling institutional, environmental and intervening variables. The collected data was analysed through stepwise bivariate, mutual correlations, multivariate, and multiple regression analysis.

This research focuses on the Javanese ethno-cultural group in East Java, particularly in the Tengger Region, a part of the Javanese ethno-cultural group. The Tenggerese people have certain traditions they still maintain, carry out, believe in, and practise in their daily life, including the practice of the *bakti* and *sayan* local traditions in the care of the elderly. This research was conducted in four villages representing the Tenggerese and Javanese ethno-cultural groups in East Java. The unit of analysis of this research is the adult person as the household head with parents or elderly. Another criterion is that these adults provide care of their parents or elderly. The household head is the adult child, married or unmarried, which still has parents or older people to care of. In this context, the researcher defines care of the elderly provided by an adult child into three types. The first type is the adult child and their family living in the parents' home or bringing the parents to his/her home to take care of them. The second type refers to the adult child taking care of their aged parents by living near their parents' home. The last type is the elderly who live separately from their children.

Thirdly, the general profile or sociography of the research area refers to Indonesia, and the Tenggerese and Javanese people in East Java, as discussed in Chapter IV. Java is one of the Indonesian islands which is the world's most populous island; more than half its population occupies the island. The Javanese are the predominant Indonesian majority ethno-cultural group, predominantly located in Central and East Java. This research focuses on East Java as one of the provinces with a high percentage of ageing population.

The Island of Java still holds more than half of the national economy, which means that economic activities are still concentrated in Java. Nearly half of Indonesia's elderly are still actively working with the percentage of working elderly higher in rural areas than that of urban areas; informal employment is much more available in rural areas, such as the agricultural sector which does not require special skills. Most elderly who work in the agricultural sector only have education up to elementary school level and earn income lower than other sectors such as industry, trade, and services. Many elderly live with their extended families, either with two or three generations. The Javanese ethno-cultural group also has many ethno-cultural sub-groups, such as the Tenggerese people in East Java which live in the Tenggerese Highlands surrounded by an active volcano such as Mount Bromo, Mount Semeru, and part of the Tenggerese massif. This research was conducted to understand the specific behaviour of the Tenggerese and Javanese people in East Java, related to care of the elderly. In this research, the Tenggerese and Javanese people are represented by two *tlatah* or cultural areas:

Malang as Arek *tlatah* and Lumajang as Pendalungan *tlatah*. Understanding the local people's characteristics of ethnocultural groups, kinship systems, knowledge and living arrangements in the community is important to comprehensively understand the behaviour patterns related to care of the elderly in each ethno-cultural group.

Fourthly, the description of the four villages is presented in Chapter V, which focuses on care and support service provision for the elderly in traditional, transitional, and modern elderly care organisations. This study focuses on care of the elderly, emphasising health and social care services. In this context, the health and social care services are shown based on the place and provider of the elderly care institutions. In terms of place, it can be at home, in the community, or an institution while service provision can be family, voluntary, private, or state.

The majority of respondents in the four villages of Argosari (19.2%, n=34), Ditotrunan (27.1%, n=48), Ngadas (22.0%, n=39), and Tlogomas (31.6%, n=56) much believe in traditional elderly care institutions. However, some respondents, particularly in Ditotrunan (50.0%, n=4) and Tlogomas (50.0%, n=4), have little belief in traditional elderly care institutions. Both Ditotrunan and Tlogomas are urban villages where social change such as modernisation and urbanisation may influence perceptions of care institutions. The majority of respondents in four villages report that they receive much financial support from traditional elderly care institutions, namely respondents in Argosari (28.1%, n=32), Ditotrunan (34.2%, n=39), Ngadas (14.0%, n=16), and Tlogomas (23.7%, n=27). This happens because many elderly live with their children or family, and rely on their household members for financial support (*cf.* Field Notes 2018). This research supports the data from BPS (2017) that the family members have a large role in financing the elderly. BPS (2017) reported that 77.82% of elderly households obtained funding from household members who work.

On the whole, the majority of respondents in the four villages of Argosari (25.8%, n=50), Ditotrunan (24.2%, n=47), Ngadas (23.2%, n=45), and Tlogomas (26.8%, n=52) report that it is easy to access the services of traditional care institutions. In this context, geographical accessibility concerns the respondents' perception of access to get care of the elderly. Many respondents find it easy to access care of the elderly because many elderly live with them. The elderly who are not living in the same house with their adult children also find it easy to access assistance from their friends or neighbours in the same community (*cf.* Field Notes 2018).

Compared to traditional eldery care, the majority of respondents in the four villages of Argosari (11.0%, n=13), Ditotrunan (29.7%, n=35), Ngadas (24.6%, n=29), and Tlogomas (34.7%, n=41) present little knowledge on transitional elderly care organisations. Many people in the community only have a little information about transitional elderly care organisations, and not many of them know about care and support services provided by these organisations.

In this context, transitional elderly care organisations refer to community-based care, such *Posyandu Lansia* and the *Karang Werda*. The majority of respondents in the four villages of Argosari (33.7%, n=83), Ditotrunan (16.7%, n=41), Ngadas (22.0%, n=54), and Tlogomas (27.6%, n=68) report that they do not receive financial support from transitional elderly care organisations. Apart from such support, the respondents reported no access to reach services in transitional care organisations. Similarly, 95 respondents also reported difficult geographical access to these services. The geographical accessibility of transitional elderly care organisations refers to the respondents' perception of access to care of the elderly. It is also related to the availability and sustainability of services in transitional elderly care organisations.

Modern elderly care organisations refer to care of the elderly delivered by trained professionals, such as *Panti Jompo*, and *Puskesmas Santun Lansia*. In fact, many respondents in rural areas, *i.e.* Argosari and Ngadas, report that they do not know about these modern services. Most respondents in rural areas have hereditary knowledge about the *bakti* local tradition to provide care for the elderly. The majority of the respondents in Argosari (22.3%, n=33), Ditotrunan (18.2%, n=27), Ngadas (31.1%, n=46), and Tlogomas (28.4%, n=42) report very little belief in modern elderly care organisations. Modern elderly care organisations primarily refer to *Panti Jompo*. Many respondents believe that their elderly prefer to stay close with their family than to stay in a modern elderly care organisations because if the elderly

stay in modern care organisations, they feel as if they are being taken away from their family and arrange to stay with other elderly in a new environment such as an old age home. It is not surprising then, that the majority of respondents of the four villages in Argosari (25.0%, n=36), Ditotrunan (18.1%, n=26), Ngadas (28.5%, n=41) and Tlogomas (28.5%, n=41) report a very negative opinion on modern elderly care organisations.

Furthermore, the qualitative research is also based on the 'emic' view, or local people's perspectives on each elderly care institution in the four villages. Some adult children and their elderly do not really believe in the government's health care services because they believe in traditional medicine or healing more than transitional and modern organisations. Some adult children in the Tenggerese people have the opinion that when they brought their elderly to such government's health care to receive treatment or medicine, many of them were not getting better. Moreover, the Tenggerese people prefer going to the *'dukun*' first to get '*suwuk*' to recover. *Suwuk* is a prayer of the *dukun* for sick people by casting a spell called *mantra* or *japa*.

Hence, the elderly who live near transitional elderly care organisations do not want to use these services to check their health. Many respondents do not get enough information about care and support services provided by transitional elderly care organisations because of the lack of human resources to distribute and share information to the community. Moreover, in some areas, the village officials and staff do not actively share information about care and support services provided for the elderly. Many respondents know transitional elderly care organisations from media such as television or newspaper. The health and social care facilities in transitional and modern organisations tend to be better-managed in urban areas than in rural areas.

In the rural areas, the medical equipment, medicine stock and personnel are lacking care and support service provision in transitional elderly care organisations. Moreover, the transitional elderly care organisations in urban areas provide more activities than those in rural areas since they have adequate resources and ease of access to get care and support services, such as health services, sport, religious, training, and economic activities for the elderly.

In Indonesia, old age homes are used as the last resort to provide care of the elderly. Old age homes that the government fully manages are generally intended for the elderly in the abandoned category who do not have family or relatives who can care of them. The government fully manages and funds these old age homes. Ironically, government old age homes are limited because of the limited budget from the government. On the contrary, private old age homes provide care of the elderly, which require the family or relatives to pay service costs. Even though the elderly have family, they choose or are forced to live in old age homes whose cost is fully managed by private old age homes.

So, the family's role in this kind of care and support service is limited, compared to the family's role in traditional elderly care (family home care). In fact, the Tenggerese people are influenced by filial piety values, and they will feel ashamed if they place the elderly in old age homes. Moreover, the community will think that their children have abandoned them and they will be sanctioned. The Tenggerese people have the responsibility to live up to their traditions for care of the elderly by living in their villages. The majority of people in rural areas have a close relationship among each other, and many of them are close kin in the same village.

Fifthly, since this research in the field of ethno-economics, ethno-medicine and ethno-management, is based on the socio-cultural analysis of elderly care management, Chapter VI describes the Tenggerese culture, history, and belief system, including their cosmology and way of life. The Tenggerese community strongly clings to their traditions and the noble values of their culture. The devotion to local traditions is reflected from traditional ceremonies and *selamatan* that their ancestors pass over generations. The *Adat* ceremonies in the Tenggerese community are described in Chapter VI, which is categorised into three kinds: the *adat* ceremony representing social life, the life cycle of a person, and the agricultural cycle, house building, and natural phenomena. In this context, the cosmology concept refers to indigenous knowledge, beliefs, and cultural practices related to care and support provision for the elderly. The Tenggerese people believe in *Catur Guru Bakti* which means practising devotion and obedience to gain wisdom, spiritual discipline, and enlightenment.

The Tenggerese people show respect and filial piety to four *guru* known as *bekti marang guru papat.* There are four traditional principles whom people should pay respect to: *Guru Swadhyaya*, *Guru Rupaka*, *Guru Waktra*, and *Guru Wisesa*. The meaning of *Guru Swadhyaya* is God, and it fits the Tenggerese community's beliefs of the god named *Sang Hyang Widhi*, while *Guru Rupaka* is a person playing a role as parents.

Moreover, *Guru Waktra* is a person playing a teaching role, and *Guru Wisesa* means the government who is responsible for making rules to improve the people's welfare. This research focuses on the parents as *Guru Rupaka*. It means that the children should pay respect to, guard, and take care of their parents in their old age because their parents raise them until they can live independently. The parents will do anything to make their children happy and independent such as sending them to school, providing money for their marriage and housing, and even looking after their grandchildren. For that reason, children need to *balas budi* ('return the favour') to their parents by looking after them in their old age. This responsibility is based on *bakti* which has been a part of their culture to take care of the elderly. However, filial piety is not only practised between parents and children, but also towards the elderly or older relatives. The Tenggerese people believe that when children are not taking care of their parents, *karma yang buruk* ('bad *karma*') may happen in their life.

The Tenggerese people, where the majority of respondents are Hindu and Buddhist, describe '*karma*' as the force produced by a person's actions in their life, which may influence what happens in their future lives. It means that respondents who ignore and do not take care of their elderly will be unlucky in their future lives. Moreover, the Tenggerese community will judge children who cannot take care of their elderly as *anak durhaka* ('rebellious') and even socially sanction them. The Tenggerese people believe that children who take care of their parents or older relatives will be happy, lucky, prosperous, and proud to have taken care of their parents in their life.

The Tenggerese communities practice kinship as care and support providers for the elderly. The elderly can live and stay with their children in one house (*sa'omah*) or live in a separate house from their children. The kinship system of *sa'dulur* recognises other relatives such as cousins from both father and mother, cousins of the second generation from father and mother, or relatives from father and mother. The biggest kinship group is *wong* Tengger. Care and support provision for the elderly in Tenggerese people are given personally by their families and groups through mutual cooperation or assistance. The care and support provided for the elderly are personally based on the *bakti* local tradition which the Tenggerese people believe in. Meanwhile, *sayan* refers to a local tradition of mutual aid where community members in the Tengger Region are morally obliged to provide care and support to the elderly in their communities.

Interestingly, couples who do not have children can adopt a child from their relatives. The term is known as '*anak angkat*.' In fact, couples in the Tengger Region adopt children under an unwritten agreement between the two families. The adoption process must be known, agreed to, and without compulsion between two families. Couples in Tenggerese are not ashamed to say that they adopted a child and they will and raise adopted children as their biological children. Meanwhile, children adopted by relatives still respect and take care of both their biological and new parents.

It is the reason that most Tenggerese people have a close relationship with each other. 'Having children' is important for the Tenggerese people to perceive themselves as secure and comfortable in their old age. Moreover, the majority of Tenggerese people are farmers who depend on working on farmland which is owned by heirs from inheritance. The Tenggerese people who have farmland will share inheritance equally among their heirs; parents will divide their inheritance equally among sons and daughters. The children help cultivate their parents' agricultural land and therefore inherit the land. When parents cannot manage their own property, they may allow an adult child to run their farm or business in exchange for providing support for them. The children who receive an additional inheritance from the parents are called *sendenan tuwo*. In Tengger, the additional inheritance from the parents to the children who take care of them until they die is known as '*Tanah Gantung* or *Gantungan*'.

Sixthly, the results of the stepwise bivariate, mutual correlations, multivariate and multiple regression analysis of the quantitative data from the household surveys are presented in Chapter VII. The analysis shows and explains the relationship between the independent and intervening variables and their role in determining the utilisation behaviour of the traditional elderly care institutions in the four village samples compared with the transitional and modern organisations. The results confirm the theory which states that the 312 local respondents of the village samples prefer to utilise traditional elderly care institutions (70.8%), in comparison with transitional (19.2%) and modern elderly care organisations (9.9%). The results reveal the various levels of significance of the correlation between the independent and intervening variables concerning the dependent variables. The determinants which emerge from the stepwise quantitative analysis in Chapter VII can be summarised as follows:

Independent Variables:

Block 1 Predisposing Socio-Demographic Variables:
- Relationship of household head with elderly
- Age
- Education
- Place of birth
- Ethno-cultural affiliation
- Religious affiliation
- Marital status
- Occupation
- Employment in family business/farm

Block 2 Predisposing Psycho-Social Variables:
- Knowledge of transitional elderly care
- Knowledge of modern elderly care
- Belief in traditional elderly care
- Belief in transitional elderly care
- Belief in modern elderly care
- Opinion on transitional elderly care
- Opinion on modern elderly care

Block 3 Perceived Needs Variables:
- Perceived needs for using elderly care

Block 4 Enabling Variables:
- Monthly income of the household head
- Monthly income of the household members
- Socio-Economic Status (SES)

Block 5 Institutional Variables:
- Accessibility cost of modern elderly care
- Geographical accessibility of transitional elderly care
- Geographical accessibility of modern elderly care
- Financial support availability from traditional elderly care
- Financial support availability from modern elderly care

Block 6 Environmental Variables:
- Type of residence

Intervening Variables:

Block 7 Government or Private Programme Variables:
- Impact of government regulation on traditional elderly care
- Impact of government regulation on transitional elderly care
- Impact of government regulation on modern elderly care
- Impact of private promotion on traditional elderly care
- Impact of private promotion on transitional elderly care
- Impact of private promotion on modern elderly care

The subsequent mutual correlations analysis shows the dominating influence of the block of socio-demographic variables (9) on the dependent variables, followed by the block of psycho-social variables (7), intervening variables (6), institutional variables (5), enabling variables (3), perceived needs variables (1), and environmental variables (1).

The results of multiple regression analysis on the blocks of variables shows that the blocks of socio-demographic variables and psycho-social variables have highly correlated coefficient results with some independent variables. The high correlation is shown between the block of socio-demographic variables and psycho-social variables (r= .720), between the block of socio-demographic variables and institutional variables (r= .704), as well as between the block of socio-demographic variables and the block of intervening variables (r= .830). Moreover, a very high correlation is shown between the block of socio-demographic variables and the block of environmental variables (r= .968). Meanwhile, a high correlation is shown between the block of psycho-social variables and the block of institutional variables (r= .862). A very high correlation is also shown between the block of psycho-social variables and the block of intervening variables (r= .938), while, the block of psycho-social variables shows high correlation with all blocks of dependent variables. This means that the block of psycho-social variables is important to determine respondents' behavioural patterns.

The Tenggerese people still believe in and practice their traditions related to the care of the elderly. Most people who utilise modern elderly care organisations come from Tlogomas representing the urban (23.3%, n=20 respondents) and Ditotrunan representing urban villages (15.9%, n=11 respondents). Moreover, the respondents from Tlogomas (27.9%, n=24 respondents) also utilise transitional elderly care organisations. In general, respondents prefer to utilise traditional elderly care institutions as their first prefers; the majority of respondents still show preference to take care of and support the elderly by themselves with their family.

Socio-demographic variables, as mentioned in Table 7.2 show the most strongly significant correlation between the relationship of the household head with the elderly to the respondent's behaviour in the utilisation of elderly care institutions (χ^2 = .000). In line with these results, Cramer's V (V= .423) value shows that the variables are extremely strong. Respondents who live with their parents (77.2%, n=139) or parents-in-law (75.0%, n=69) utilise the traditional elderly care institutions more frequently than average (70.8%). Meanwhile, only 17.6% (n=3) of respondents living with other kin (*e.g.* uncle/aunt) use care and support services from traditional elderly care institutions less frequently than average.

Meanwhile, cross-tabulation of 'socio-economic status' and the dependent variables shows a very strongly significant relationship (χ^2 = .007) that is weakly associated with Cramer's V value of .184. Respondents categorised with poor socio-economic status (81.4%, n=48) prefer traditional elderly care institutions more frequently than average (70.8%). Meanwhile, respondents categorised with average socio-economic status (54.7%, n=29) report the utilisation of traditional elderly care institutions less frequently than average. Furthermore, 22.5% of respondents categorised with rich socio-economic status prefer transitional elderly care organisatios more frequently than average (9.9%). Hence, the relationships among the variables of 'monthly income of the household head,' 'monthly income of the household members,' and 'socio-economic status' with utilisation of elderly care institutions show a significant result for each variable. This means that those variables can be used to determine the behaviour patterns towards preference for elderly care institutions.

This study also conducted a multivariate analysis after the bivariate analysis. The multivariate analysis is implemented with the Non-Linear Generalized Canonical Correlation Analysis, which is known as OVERALS. The OVERALS procedure is part of the SPSS, allowing variables to have different measurement levels: nominal, ordinal, or interval, within the same analysis. The approach enables combining phenomena that cannot be measured under the same level; some variables are in categories that reflect a rank or classification, with intrinsic or semantic differences, typical for ethnoscience research (*cf.* De Bekker 2020). Similar studies also use OVERALS, *e.g.* Slikkerveer (1990), Agung (2005), Ibui (2007), Leurs (2010), Djen Amar (2010), Ambaretnani (2012), Chirangi (2013), Aiglsperger (2014); Saefullah (2019), De Bekker (2020), and Febriyanti (2021).

In this study the multiple regression and canonical correlation analyses are conducted, while at the same time OVERALS is also applied to indicate the relationship among sets of independent variables. Seven blocks of independent variables, including one intervening variable, are used to analyse its influence on three dependent variables of the behavior patterns of utilisation of the plural elderly care system. In addition to assessing the correlation among the sets of variables, OVERALS evaluates the correlations between the canonical variates and the original variables, known as 'canonical' or 'component' loadings. Component loadings indicate to which extent each variable contributes to the canonical variate variance and whether they can estimate each variable's significance in the overall model. In general, the higher the component loading of the single variable, the more significant the variable's contribution to the overall model in the utilisation of elderly care systems. The majority of people in the villages under study prefer to utilise traditional elderly care institutions, compared to transitional and modern ones.

The multivariate analysis shows the correlations of local people's preferences to utilise elderly care institutions, which is influenced by the six blocks of independent variables and one block of intervening variables. It shows how each variable correlates to another block of variables, including the dependent variables. The higher the correlation coefficient, the higher the strength of its correlation among the block of variables.

The psycho-social variables have a strong correlation in the utilisation of the plural elderly care system: r= .778 for the traditional, r= .756 for the transitional, and r= .784 for the modern elderly care organisations. Moreover, the socio-demographic variables have a strong correlation in the utilisation of traditional (r= .524), and modern (r= .758) elderly care organisations. Additionally, the socio-demographic variables have a moderate correlation in the utilisation of transitional elderly care organisations, with a correlation coefficient of .330.

8.2 Implications

8.2.1 Theoretical and Methodological Implications

The present research adopts an 'emic' perspective and applies the concept of Indigenous Knowledge Systems (IKS). The study on the IKS connects with the cognitive aspect of investigating local systems of knowledge, practice, and belief in the behavioural components of the development process and changes within the community. The IKS is used to deepen the understanding of local systems of the knowledge, practice and belief of local people regarding the behaviour patterns of care and support for the elderly in Tengger, a part of the Javanese ethno-cultural groups in East Java.

Moreover, the studies of Slikkerveer & Dechering (1995), Warren, Slikkerveer, & Brokensha (1995), as well as Slikkerveer, Baourakis, & Saefullah (2019) conclude that it is important to incorporate cultures into development which underscores the approach of sustainable development. Culture is a particular example of how an 'emic' view differs from one community to another. In this research, the 'emic' view refers to how adult children perceive care of the elderly and their preferences to utilise elderly care institutions. Those perceptions can be understood and evaluated in terms of cultural contexts, where adult children utilise care of their elderly. Olson *et al.* (2011) and Keith (1992) state that cultural norms influence the way people practice their daily life within the community. For example, cultural norms influence concepts of lineage, which is important to determine particular kinship groups, residence, and inheritance patterns.

The Leiden Ethnosystem and Development Programme (LEAD) also designed the IKS-based Integration Model (IKSIM) which embarks on integration and interaction with local and global systems of knowledge, practices, and institutions towards Integrated Community-Managed Development (ICMD) (*cf.* Slikkerveer, Baourakis, & Saefullah 2019). IKSIM of ICMD encompasses the three interrelated worlds as the foundation: indigenous knowledge systems, institutions, and cosmology, focusing on the decision-making processes of the community members and developing the vertical 'bottom-up' approach towards sustainable community development (*cf.* Slikkerveer 2019a).

This means that the position of indigenous institutions is important to develop a strategy process to implement ICMD. Indigenous institutions involve the perspectives of local people on their culture and life. In Indonesia, the indigenous institutions have existed for many generations with local values such as cooperation, mutual aid, and neighbourhood support at the community level, *e.g. gotong royong*.

One of the implications of the study of *bakti* and *sayan* local traditions among the Tenggerese people in East Java is the support of the IKSIM model through ICMD for case management of care of the elderly. As this study argues, that local people's knowledge and beliefs are important, particularly in relation with the care and support for the elderly.

In Indonesia, community-based activities originate from the concept of *gotong royong*, representing the local principle connected to the indigenous knowledge systems and cosmologies at the community level, which enable a 'bottom-up' approach to achieve sustainable development. The ICMD approach is also used to achieve sustainable elderly care development in East Java, in order to improve their well-being and health in the communities.

In this context, the plural elderly care system is related to several existing institutions that focus on providing care and support services to maintain the elderly's well-being. This research supports the concept of the Plural Medical System by Slikkerveer (1990), which enables the classification in this research into three types: (1) 'traditional institution,' (2) 'transitional organisation,' and (3) 'modern organisation.' The concept of the plural systems has also successfully been applied to ethnoscience research in Indonesia (*cf.* Agung 2005; Leurs 2010, Djen Amar 2010, Amberatnani 2012, Erwina 2019, Saefullah 2019, Febriyanti 2021; in Kenya Ibui 2007; in Greece Aiglsperger 2014; and Tanzania Chirangi 2013 and De Bekker 2020). In this research, the concept of the plural elderly care system is applied to East Java, particularly to the Tengger Region.

This research also supports the model of Cantor's (1977) as cited in Cantor & Brennan (1999) for social support for the elderly. Cantor has conceptualised the social support system of the elderly as a series of concentric circles, each containing a different type of support element or sub-system (*cf.* Cantor & Brennan 1999). The older person is at the centre and the source of support radiates outward from the older person based on the degree of social distance (*i.e.* nearest to the farthest) and the support element's organisation (*i.e.* informal to formal). The inner two circles contain informal support systems such as kin, friends, and neighbours. Meanwhile, the two outer circles include other players in society, namely mediating structures such as the community and formal sources of social support (*cf.* Cantor & Brennan 1999). Commonly, the elderly receive care and support services from kin, friends, and neighbours who live near the elderly. This kind of support is known as an informal support relationship.

The methodological implications of this study prove that the 'Leiden Ethnosystems' Approach' introduced by Slikkerveer (1990; 1999) and Warren, Slikkerveer, & Brokensha (1995) provides a detailed analysis of local systems of knowledge, belief, and practice to assess past and present patterns of behaviour with regard to the object of study in the community in a particular research area. Moreover, this study shows that the combined research methods, both qualitative and quantitative, involving the 'Participant's View' (PV), 'Field of Ethnological Study' (FES), and 'Historical Dimension' (HD), can describe and support understanding of all the relevant factors which play a role in local people's utilisation of the plural elderly care system in Tengger, East Java. This study also supports the importance of using mixed methodologies in research combining subjective conclusions through an in-depth study of the field and objective generalisations through household surveys in the research area.

In a nutshell, the ICMD should be considered as an advanced approach to the development of a new strategy towards the design of the envisaged integrated elderly care systems, with special attention for the provision of care for the elderly in indigenous institutions. As this research has shown, the 'Leiden Ethnosystems' Approach' can be used to analyse local systems of knowledge, belief, and practice in indigenous communities.

8.2.2 Practical Implications and Recommendations

The practical implications of the study include factor identification which strongly contributes to the utilisation of elderly care institutions from the local people's perspective. The results of this study show that traditional institutions play an important role in the process of care of the elderly. Local people prefer to utilise traditional elderly care institutions as their first preference, transitional ones as the second, and modern ones as the last. It means that the majority of local people still prefer to provide care and support for the elderly in their home (family home care).
In addition, local people prefer to utilise transitional elderly care organisations, combining care and support from family and community. This means that the community plays a role to help each family to take care of and support the elderly in their community.

The integration of the *bakti* and *sayan* local traditions of the Tenggerese people provides culturally appropriate care of the elderly, pertaining to their improved health and well-being. An important implication of the study refers not only to the local people's practices of both local traditions, but also to their cosmovision which influences not only their daily life but also their practice of the provision of care of their elderly. The Tenggerese people believe in *Catur Guru Bakti* which means practicing devotion and obedience to their beloved *Guru* to seek wisdom, spiritual discipline, and enlightenment, as such supporting Sutarto (2008) who argues that the Tenggerese people show respect and filial piety to four *Guru* known as *Bekti Marang Guru Papat*.

In this context, the research also underscores the notion that the Tenggerese people regard their parents as *Guru Rupaka* whom they should pay respect to, guard, and take care of. *Bakti* as a local tradition, is not only practiced between parents and children, but also towards the elderly or older relatives. Moreover, the *sayan* local tradition is practiced to provide care of the elderly in groups through mutual aid in local communities. The practical implications of the *sayan* local tradition have a positive function among the Tenggerese people regarding the provision of care of the elderly. The local community implements the *sayan* local tradition, such as visiting the elderly and bringing them food or money. Local people pay a visit to the elderly not only when they are sick, but also when they have special events, such as *slametan* or other events. The Tenggerese people practice *sayan* as a form of respect for each other, shown by attending an invitation to a particular event where *bakti* also plays a role (*cf.* Haryanto 2014).

The present study also proposes integration between the traditional elderly care institutions and the transitional and modern elderly care organisations. The practical contribution of the study is that the integration has to be implemented by a 'bottom-up' approach in which due attention is paid to the user's perspective described above. The transitional elderly care organisation provides care of the elderly in the community. The management of transitional elderly care organisations comes from local people's initiatives with the involvement of other organisations from outside of the community. Therefore, management of care activities of the elderly has to be fully accepted and implemented by the local community members with local government support.

Meanwhile, modern elderly care organisations are based on care delivered by trained professionals. Care of the elderly in modern care organisations implement binding and compelling rules to all involved. The management of care of the elderly is fully managed by the modern organisations provider. However, to implement the programs for the elderly, the organisations suffer from unequal distribution of available resources, particularly in rural areas. Some challenges and obstacles in providing care of the elderly may come from other aspects. For example, on the one hand, the local people need more knowledge and information about the care of the elderly in both the transitional and modern care organisations. It is important to make local people understand the benefits of those organisations. On the other hand, the government also needs to provide adequate resources and good management to meet the elderly's needs in the community.

The results of this study, specifically on the availability of the elderly care system in the research area and the various behavior patterns towards elderly care institutions as reported by local people, have a predictive value for elderly care planning purposes. Moreover, the behavior patterns in the utilisation of elderly care institutions are analysed from the respondent's view rather than the care

provider's. Furthermore, this study introduces integrated care at the service delivery level through case management. It provides comprehensive services for community-based care of the elderly which encourage the elderly to be able to live independently, feel happy, and stay healthy in their environment. Thus, the knowledge, belief and practice of the local people to provide care of the elderly need to be considered in programme implementation, particularly in transitional and modern elderly care organisations. Integration between the local traditions of *bakti* and *sayan* of the traditional elderly care institutions and the transitional and modern elderly care organisations will support and improve the care of the elderly in their health and well-being, particularly at the community level.

In conclusion, it is important for the Government of Indonesia to promote not only modern care organisations but also to integrate other types of elderly care. The government should provide support for policy planning and implementation of the the integration of the traditional elderly care institutions with the transitional and modern elderly care organisations in order to ensure a more culturally appropriate plural elderly care system. Such an integrated elderly care system, combining its three components of institutions and organisations may assist the government in providing improved protection and care for the elderly throughout Indonesia in a sustainable way in the near future.

Integrated care based on the Indigenous Knowledge Systems Integration Model (IKSIM) is used to make recommendations based on the Integrated Community-Managed Development (ICMD) approach to provide care for the elderly to enhance their well-being. The ICMD approach aims at achieving sustainable development by integrating local and global systems of knowledge and technology in all community sectors through capacity building and local people's participation. Integrated care at the service delivery level through case management, particularly for the elderly, involves an approach that considers specific needs, preferences, and challenges of the elderly care. The integrated care brings together inputs, delivery, management, and organisation of services related to diagnosis, treatment, care, rehabilitation, and health promotion. Therefore, integrated care aims to provide comprehensive services in access, quality, user satisfaction, and efficiency for the elderly.

The care and support services schemes for the elderly above, (*e.g.* health, social care, and security) are provided by many ministries and agencies, and these need to be managed on the basis of the elderly's necessity in the community. Case management aims to improve the coordination of modern health and social care that needs interventions from case managers *i.e.* health professionals or social workers. Professional case managers and social workers should be familiar with the community's resources to make an effective link between the elderly needs and existing resources. On one hand, it is important to create a multidisciplinary team consisting of health care professionals, social workers, psychologists, nutritionists, and other relevant experts. On the other hand, those teams need to collaborate with local community organisations, NGOs, and government organisations in elderly care. *Karang Werda* and *Posyandu Lansia* are forms of community organisations that provide health and social care for the elderly. Moreover, *Puskesmas Santun Lansia* is a form of government organisation that focuses on health care services. Also, management of integrated care for the elderly is conducted by case managers is also important since the implementation of integrated care of the elderly needs some step-by-step activities.

Elderly need to be identified based on their own illnesses, disabilities, or those who live alone which includes an assessment of their physical, emotional, social, and mental health needs, as well as their living conditions and their social support systems. After identifying and assessing them, the team needs to make care plans for each elderly that should address their medical and social needs, psychological well-being, and functional abilities. To make the elderly care produce effective outcome, the team needs not only to communicate and discuss the plans, goals, and outcomes of the care plan with the elderly themself and their family but also to incorporate the elderly's cultural norms, backgrounds, beliefs, socio-economic, and preferences in utilise elderly care institutions and organisations. The process of elderly care involves family members including educating them about the elderly's condition and training them on how to provide proper care, support, and assistance. The role of the community is also important in creating support networks and social activities for the elderly. Moreover, the team can also collaborate with community organisations to provide additional resources, activities, and services.

Last but not least, effective communication channels among team members, elderly individuals, family, and community are important to ensure the elderly care plan is updated on the progress of each case. Using technology, such as communication platforms and electronic health records, it is easier to monitor the elderly's health, and overall well-being, and to assess the progress of each care. Evaluation of the effectiveness of the integrated care approach is conducted through feedback from the elderly and their families, and all the agencies participating in the elderly care and support services provision. The evaluation result can be used to improve and refine the case management process. Additionally, collaboration with government agencies and stakeholders can be developed to ensure adequate resources, knowledge, skills, accessibility, and support for integrated care programs, particularly for the elderly. In a nutshell, implementing integrated care through case management for the elderly requires collaboration, effective communication, a person-centered approach based on the emic view, and bottom-up approach. Physical, emotional, social, and cultural aspects are important to consider to enhance overall elderly well-being and sustainability for all aspects of life.