Family Solidarity and Transfers between Elderly Parents and Adult Children in Thailand

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Abstract

The main purpose of the paper was to investigate the manifest family solidarity of older persons in Thailand related to structural solidarity, associational solidarity, and functional solidari-ty and to analyze the typology of support between elderly parents and their adult children using the Latent Class Analysis (LCA). The investigation and analyses of family solidarity and types of sup-port were disaggregated by age groups comparing the young-old (aged between 60 - 69), the mid-old (aged between 70 - 79), and the oldest-old (aged 80 or over) The data from Wave 2 (2017) of the longitudinal panel household survey on Health, Aging, and Retirement in Thailand (HART) were employed for the cross-section analysis.

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Results: The study findings of the three aspects of solidarity revealed that when parents were advanced in age, the solidarity in each aspect or the interrelationship with adult children would tend to increase, in terms of co-residence with children, frequency in contact with children, or the role of sole “recipients” of resource assistance from children. The solidarity indicators had higher share with the oldest-old parents compared with the young-old and the mid-old parents. It could be interpreted that with parents’ more advanced age, the status of self-reliance would change to reliance on others especially on children in terms of economic, social, and health aspects. With the physical and mental degradation, needs of assistance and care would increase.

The analysis of LCA revealed the four types of support between elderly parents and adult children in Thailand were “Detached” “Sociable” “Tight knit” and “Normative.” Each type had the shares of the elderly parents as follows: 41%, 6%, 29%, and 24%. In addition, the types of family relationship of elderly parents in each age group were different and could be evidence of a dynam-ic process of intergenerational interaction in the course of life. Overall, the study results pointed to the social norm that filial gratitude towards parents still existed in the Thai society. But behavior might change from the old pattern of children’s assistance and support both in cash and in kind to parents to at least in regular contact with parents or to parents exchanged assistance in kind. This changing behavior reflected the adaptation to the changing society, while familial support to older persons tended to become long-term care. As the older persons might relate to many generations of family members, to close the gap between generations should be a policy suggestion.

Keywords: Family Solidarity, Intergenerational Transfers, Older Persons, Thailand

ความเข้มแข็งของครอบครัวและการเกื้อกูลกันระหว่างบิดามารดาสูงอายุ และบุตรวัยผู้ใหญ่ในประเทศไทย

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รับวันที่ 23 สิงหาคม 2565 *ส่งแก้ไขวันที่ 15 พฤศจิกายน 2565* *ตอบรับตีพิมพ์วันที่ 29 พฤศจิกายน 2565*

บทคัดย่อ

บทความนี้มีวัตถุประสงค์สำคัญในการศึกษา 2 ประการ คือ (1) เพื่อศึกษาความเป็นปึกแผ่นของครอบครัวผู้สูงอายุไทยในปัจจุบัน โดยเฉพาะด้านที่ปรากฏให้เห็นเป็นรูปธรรม ได้แก่ ด้านโครงสร้างของครอบครัว ด้านความเชื่อมโยงสัมพันธ์กัน และด้านการปฏิบัติตามหน้าที่ และ (2) เพื่อวิเคราะห์จัดประเภท (Ty-pology) ของการเกื้อกูลกันระหว่างผู้สูงอายุไทยกับบุตรวัยผู้ใหญ่จากมุมมองของผู้สูงอายุ โดยวิธี Latent Class Analysis (LCA) การศึกษาความเป็นปึกแผ่นและการวิเคราะห์ด้วย LCA จะเป็นการศึกษาเปรียบเทียบระหว่างกลุ่มอายุ ได้แก่ ผู้สูงอายุวัยต้น (อายุ 60 - 69 ปี) วัยกลาง (อายุ 70 - 79 ปี) และวัยปลาย (อายุ 80 ปีหรือสูงกว่า) สำหรับข้อมูลในการศึกษาได้นำมาจากข้อมูลจากการสำรวจระยะยาวด้วยตัวอย่างครัวเรือนซ้ำ รอบที่ 2 (2560) ของโครงการศึกษาสุขภาพ การสูงอายุ และการเกษียณในประเทศไทย เพื่อวิเคราะห์แบบข้อมูลภาคตัดขวาง

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ผลการศึกษา: ผลการศึกษาความเป็นปึกแผ่นของครอบครัวใน 3 ด้าน พบว่า ความเป็นปึกแผ่นในแต่ละด้านที่ศึกษา อันหมายถึง ความสัมพันธ์หรือการมีปฏิสัมพันธ์กับบุตรวัยผู้ใหญ่ในด้านต่าง ๆ ก็มีแนวโน้มที่จะเพิ่มมากขึ้นด้วย ไม่ว่าจะเป็นประเด็นของการพักอาศัยอยู่กับบุตร ความถี่ในการติดต่อพูดคุยกับบุตร หรือการมีบทบาทเป็น “ผู้รับ” ทรัพยากรความช่วยเหลือจากบุตรอย่างเดียว โดยตัวบ่งชี้ความเป็นปึกแผ่นเหล่านี้มีสัดส่วนที่สูงขึ้นในบิดามารดาสูงอายุวัยปลาย เมื่อเปรียบเทียบกับวัยต้น และวัยกลาง ซึ่งอาจจะตีความได้ว่าเมื่อบิดามารดามีอายุมากขึ้น สถานะของการพึ่งตนเองได้เปลี่ยนไปเป็นการพึ่งพาผู้อื่น โดยเฉพาะบุตรในแง่ของเศรษฐกิจ สังคม และสุขภาพ เนื่องจากความทรุดโทรมทางด้านร่างกายและจิตใจ จึงต้องการการเอาใจใส่ดูแลช่วยเหลือมากขึ้น

การวิเคราะห์ LAC จากมุมมองของผู้สูงอายุ ได้ผลแยกแยะการสนับสนุนระหว่างบิดามารดาสูงอายุและบุตรวัยผู้ใหญ่ ออกเป็น 4 ประเภท ได้แก่ “ห่างเหินจากลูก” “เห็นหน้าลูก” “แลกเปลี่ยนด้วยบริการ” และ “มีลูกกตัญญู” โดยสัดส่วนของผู้สูงอายุที่มีการสนับสนุนในแต่ละประเภทตามลำดับ ดังนี้ 41%, 6%, 29%, and 24% นอกจากนั้น ประเภทการสนับสนุนระหว่างบิดามารดาและบุตรในแต่ละกลุ่มอายุยังแตกต่างกัน และสามารถแสดงให้เห็นด้วยหลักฐานเชิงประจักษ์ถึงกระบวนการเปลี่ยนแปลงของปฏิสัมพันธ์ระหว่างรุ่นในช่วงชีวิตของคน โดยรวม ผลการศึกษา แสดงให้เห็นถึงบรรทัดฐานทางสังคมที่เกี่ยวข้องกับความกตัญญูต่อบุพการียังคงอยู่ในสังคมไทย แต่พฤติกรรมในการแสดงออกได้มีการเปลี่ยนแปลงจากรูปแบบเดิมที่การช่วยเหลือและสนับสนุนแก่บิดามารดาทั้งในรูปของเงินและสิ่งที่ไม่ใช่เงิน มาเป็นอย่างน้อยมีการติดต่อพูดคุยกับบิดามารดาอย่างสม่ำเสมอ หรือบิดามารดาแลกเปลี่ยนความช่วยเหลือในด้านที่ไม่ใช่เงิน ซึ่งเป็นการปรับเปลี่ยนพฤติกรรมให้เหมาะสมกับสภาพของสังคมที่เปลี่ยนไป และการเกื้อหนุนผู้สูงอายุจากครอบครัวมีแนวโน้มที่จะเป็นการดูแลที่มีระยะยาวขึ้น ผู้สูงอายุจึงอาจต้องเกี่ยวพันกับสมาชิกในครอบครัวหลายรุ่นด้วยกัน ดังนั้น ข้อเสนอแนะเชิงนโยบายที่สำคัญ คือ การป้องกันไม่ให้มีปัญหาช่องว่างระหว่างรุ่นวัยในครอบครัว

คำสำคัญ: ความเป็นปึกแผ่นของครอบครัว การเกื้อกูลระหว่างรุ่นวัย ผู้สูงอายุ ประเทศไทย

Introduction

To sustain or improve the wellbeing of older persons under the rapidly increased number and share of older population globally and in Thailand are a crucial policy challenge in the 21st Century. Related to the ageing population, the Sustainable Development Agenda of the United Na-tions with the 17 Sustainable Development Goals (SDGs) indicates that the preparing for ageing population is essential to the achievement of the integrated 2030 Agenda since ageing cutting across the goals on poverty eradication, good health, gender equality, economic growth, decent employment, and sustainable cities and communities (United Nations, 2015, 2017). In the imple-mentation of the agenda in order to achieve truly transformative, inclusive, and sustainable devel-opment outcomes, it is important to recognize older persons as the active agents of social devel-opment beyond treating them as a vulnerable group. (United Nations Development Programme, 2017).

One important recommendation for the recognition of older persons as such by the UN Ma-drid International Plan of Action on Ageing (MIPAA) for handling the issue of ageing in the 21st Century and for building a society for all ages was a solidarity of people of different generations and ages in all levels, as well as participation in sustainable development, which would form a foundation leading to the society of people of all ages and resulting in social cohesion. The inter-action and support between people of different generations must start at the family level. Likewise, the relationship both formal and informal, between older persons and their surrounding people (e.g., family members, neighbors and friends, and services providers) was one major component to ensure healthy ageing and well-being of older persons in order to achieve the UN Decade of Healthy Ageing (2020 - 2030) as viewed by the World Health Organization (WHO) (World Health Organization, 2019).

The research study on aging population and generational economy in 17 countries by Lee and Mason (2011) identified three supporting sources of capital for older persons (aged over 65 years), namely, public transfers, private transfers (family transfers), and asset-based allocations of the older persons themselves. As for Thailand, the main resource for the support of the older per-sons is family transfers, followed by asset-based allocations. The public transfers constitute little share.

Based on such reasons, it is of interest to investigate on the family support system of older persons. The strength of this type of support system was based on the foundation of close relation-ship or solidarity of the members in the same family which constituted intergenerational relation-ship. Such relationship in particular between elderly parents and adult children was complicated and multi-faceted as there were various theories used to explain the relationship. Superficially, the relationship was such that the older persons received assistance from adult children relevant to be-havior of gratefulness still prevalent in the eastern society. However, the in-depth consideration revealed that the older persons were not only "recipients" but also "givers." It was found that a large number of the older persons supported their adult children. Therefore, the paper consisted of two objectives: (1) to investigate the solidarity of the older persons' family in Thailand especially the concrete dimension such as structural solidarity, associational solidarity, and functional soli-darity and (2) to analyze the typology of support between elderly parents and their adult children in Thailand.

To accomplish the objectives, the comparison among the young-old (aged between 60 - 69 years old), the mid-old (aged between 70 - 79 years old), and the oldest-old (aged 80 years old or over) was conducted. The relationship between the children and the older persons born as the Baby Boom generation (born between 1946 to 1963 which covered the birth of the young-old (born be-tween 1947 to 1957)) and whether it was different from the older persons born before were studied. This is because recently there were more divorces and remarriages. It might result in weakening the relationship of family members in the generation of Baby Boomers compared to the generation that came before. On the other hand, due to their higher education attained and having fewer chil-dren, the parents of the Baby Boom generation should be closer to their children than the parents before them.

Solidarity model of intergenerational family members

The conceptual solidarity model in this study was based on the manifest solidarity reclassi-fied by Silverstein and Bengtson (1997) from the original six dimension of the relationship be-tween intergenerational family members of McChesney and Bengtson (1988). The manifest soli-darity was part of the behavior that involved interactions

between intergenerational family mem-bers and composed of associational solidarity, functional solidarity, and structural solidarity. **The associational solidarity** involved pattern and frequency of communication between intergenera-tional family members, while **the functional solidarity** involved assistance of both givers and re-cipients between intergenerational family members and exchange of the assistance covering cash and in kind, daily activity care, and psychological support, and **the structural solidarity** involved physical closeness or co-residence of intergenerational family members which impact the oppor-tunity of interactions between intergenerational family members. Figure 1 showed the relationship of the three aspects of solidarity (Rossi and Rossi, 1990). Functional solidarity was related to the other two aspects of solidarity because the structure and types of residence of the elderly had direct and indirect impact on the functional solidarity through the associational solidarity with other fam-ily members.

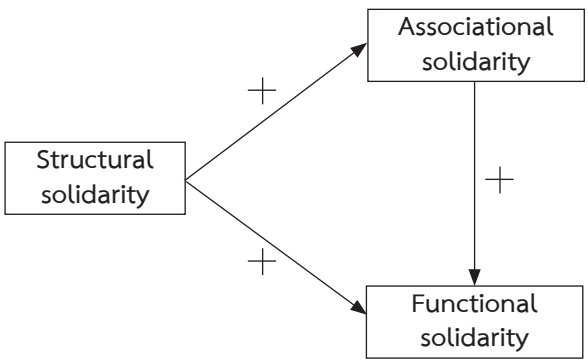


Figure 1: Relationship among the three dimensions of manifest solidarity
Source: Revisedfrom Rossi and Rossi, 1990.

Study methods

The intergenerational relationships in the family solidarity model (Figure 1) depended on the closeness of relationships in many aspects among members of different generations in the same family. The relationship was linked to the exchange of resources between younger family members and older family members. This study covered adult children aged 18 years old or over and elderly parents aged 60 years old or over. In terms of life-span developmental perspective, the exchange of resources or support between adult-elderly parent dyads could be both recipients and givers. Therefore, the support was bi-directionality and reciprocity.

To investigate the solidarity of the older persons' family in Thailand, five indicators were used to reflect two dimensions of associational solidarity and functional solidarity. Frequency of contact with children whether face-to-face meetings, telephone calls, or other communicative channels was the indicator for associational solidarity. Four indicators for functional solidarity were exchange of resources with children whether "in cash" or "in kind" and elderly parents as both "recipients" and "givers." These indicators were further used to analyze the typology of sup-port between Thai older persons and adult children using the Latent Class Analysis (LCA). The analysis was also conducted on the typology of the support of the young-old, the middle-old, and the oldest-old parents.

Data sources

The study employed the available data from Wave 2 of the longitudinal panel household survey on Health, Aging, and Retirement in Thailand (HART)[1] for the cross-section analysis. The HART project involves a bi-annual survey starting with its baseline survey in 2015. The Wave 2 data were collected in 2017 (during January to June 2017). One household member aged from 45 and over from the baseline national representative household samples of 5,616 from 6 regions of Thailand, including Bangkok and vicinity, were interviewed. In Wave 2, the number of the panel households or the total respondents interviewed was 3,708 with the response rate of 66.03% (Anan-tanasuwong, et. al., 2018).

The data for analysis in the study were drawn from Part B of the HART database, "Family and Family Transfers: Wave 2 (2017)" and from the COVERSCREEN. The study focused on the data from the respondents, both males and females, aged from 60 or over and who have at least one adult children (aged from 18 or over). Thus, the data were screened down to 2,739 eligible re-spondents with 1,079 respondents (39.40%) classified as the young old aged 60 - 69, 897 (32.75%), the mid-old aged 70 - 79, and 763 (27.85%) the oldest old aged from 80 or over.

[1] The HART data are kept in a data archive and can be requested from the websites of Center for Aging Society Research (CASR) http://rc-demo.nida.ac.th/casr/ and NIDA Intelligence and Information Center (NIDA-IIC) http://iic.nida.ac.th/main/?page_id=564

Study Findings

The main personal status including gender, marital status, religion, education, work status and type of work of the sample in this study classified by age groups was shown in Table 1. From Table 1, the share of females was higher than males (approximately 9%) of the three groups in 2017. The proportion of the respondents who were married at that time decreased from 64.2% of the young-old to 52.8% and 32.6% of the mid-old and the oldest-old, respectively. On the contrary, the widowed status increased following the age groups, i.e., 19.7%, 35.3%, and 59.8%, respective-ly. As for the number of living children, the older persons in the Baby Boom generation had the average of 2.23 living children, while the mid-old and the oldest-old parents had the average of 2.85 children and 3.55 children, respectively. It was noticeable that, in terms of marital status, the shares of single persons, persons living together without marriage, and divorced or separated de-creased according to the age groups. Therefore, it could be said that the importance of family insti-tution tended to decrease, as well as the size of family.

In terms of social characteristics, slightly over 90% of the respondents in all age groups were Buddhists, followed by Muslims (i.e., 8.7%, 6.8%, and 8.8% of the young-old, the mid-old, and the oldest-old, respectively). Most of the three age groups received primary education with the following shares: 77.1% of the young-old, 80.7% of the mid-old, and 78.7% of the oldest-old. However, the share of those who received higher education than primary education tended to in-crease especially when compared with the older persons of the Baby Boom generation and the old-est-old.

For economic characteristics, 31.6% or approximately one-third of the young-old were still working and the shares of older persons who worked decreased rapidly in the mid-old, and the old-est-old (15.9% and 4.5%, respectively). However, for those still working, the pattern of the types of work were similar for the three age groups, i.e., the ratio of company employees/self-employed: business owners: family business equaled to 3: 6: 1.

Table 1: Number and percentage of the sample distinguished by the main personal status and age groups of parents (n =2,739)

Personal status	Young-old (60 - 69 years old)		Mid-old (70 - 79 yeas old)		Oldest-old (80 years old or over)	
	Number	Percentage	Number	Percentage	Number	Percentage
Gender						
Males	487	45.1	426	47.5	337	44.2
Females	592	54.9	471	52.5	426	55.8
Marital status						
Married	693	64.2	474	52.8	249	32.6
Cohabitation without	46	4.3	24	2.7	16	2.1
marriage	58	5.4	38	4.2	13	1.7
Divorced, separated	213	19.7	317	35.3	456	59.8
Widowed Single	69	6.4	44	4.9	29	3.8
Number of living children						
1	185	51.2	110	30.5	66	18.3
2	372	53.4	213	30.6	112	16.1
3	241	44.1	179	32.8	126	23.1
4	96	27.3	144	40.9	112	31.8
5	43	18.5	82	35.3	107	40.1
More than 5	25	8.8	83	29.2	176	62.0
Average number of children	2.23		2.85		3.55	
Religions						
Buddhism	975	90.9	827	92.8	684	90.2
Christianity	5	0.5	3	0.3	6	0.8
Islam	93	8.7	61	6.8	67	8.8
Others	0	0.0	0	0.0	1	0.1
Education						
Did not attend school	41	3.8	67	7.5	120	15.9
Primary education	826	77.1	718	80.7	594	78.7
Secondary education,	174	16.2	80	9.0	28	3.7
vocational certificate,						
high vocational	29	2.7	22	2.5	11	1.5
certificate						
B.A. Degree or higher	1	0.1	3	0.3	2	0.3
Others						

Table 1: Number and percentage of the sample distinguished by the main personal status and age groups of parents (n =2,739) (Continue)

Personal status	Young-old (60 - 69 years old)		Mid-old (70 - 79 yeas old)		Oldest-old (80 years old or over)	
	Number	Percentage	Number	Percentage	Number	Percentage
Work status						
Unemployed	738	68.4	754	84.1	729	95.5
Employed	341	31.6	143	15.9	34	4.5
Types of work						
Company	96	28.2	38	26.6	8	23.5
employees/	216	63.3	92	64.3	22	64.7
self-employed						
Business owners	29	8.5	12	8.4	3	8.8
Family business						
Others	0	0.0	1	0.7	1	2.9

Structural solidarity

The intergenerational solidary is defined as physical closeness or co-residence between el-derly parents and adult children. Whether the parents resided with their children or not would im-pact the opportunity of interactions and mutual support between members of the same household. The intergenerational solidarity, therefore, would benefit both elderly parents and their children.

From Table 2, more than half of the older persons co-resided with their children. This was in line with the finding from the Survey of Older Persons conducted by National Statistical Office. The Surveys also provided the trends of the co-residence between 1986 and 2011 decrease on a continuous basis (Knodel, et al., 2013). Compared to other countries in Asia, the share of older persons co-resided with their children would be more serious than that in Thailand. In 1998, 46.6% of the older persons in South Korea co-resided with their children (Park, et. al, 2005). In 2006, 48% of the older persons in Taiwan co-resided with their children (Yi and Lin, 2009). While in 2012, 37.8% of the older persons in China co-resided with their children (Zhao et. al., 2013).

However, as shown in Table 2, the share of the older persons co-residing with their children increased with advanced age. The shares of 58% of the young-old co-resided with their children whereas 59.8% and 64.7% of the mid-old and the oldest-old, respectively, co-resided with their children. Especially, the oldest-old parents who had limitations or health problems in terms of see-ing, hearing, and moving, they needed assistance from their children, grandchildren, or caregivers in their daily activities of living. This was in accordance with the type of family of the older per-sons. From Table 2, the share of the older persons living in extended family increased according to the age groups whereas the share of living in single family decreased due to the death of their spouses, so they had to co-reside with their children and grandchildren instead. As for the number of household members of the older persons whatever age groups, the average members were ap-propriately 3.5 persons. However, as the percentages of extended family tended to increase accord-ing to the older persons' more advanced age, and although the number of household members was stable, the composition or type of household members was different. This was in line with the find-ings from the Survey of Older Persons in 2014 (Knodel et al., 2015).

Table 2: Percentage of the elderly parents distinguished by types of residence and age groups

Types of residence	Young-old (60 - 69 years old)	Mid-old (70 - 79 yeas old)	Oldest-old (80 years old or over)
Co-residence with children			
Resided with children	58.0	59.8	64.7
Did not reside with chil-dren	42.0	40.2	35.3
Types of family			
Single family	55.0	50.5	45.1
Extended family	39.9	44.0	51.0
No family/relative	5.2	5.5	3.9
Number of household members			
1	8.3	12.7	13.2
2	26.0	26.0	24.0
3	20.3	19.1	19.3
4	16.3	17.3	17.4
5	12.5	10.7	12.7
More than 5	16.6	17.2	13.3
Average number of household members	3.7	3.4	3.5

Associational solidarity

Associational solidarity between elderly parents and adult children who did not live togeth-er was measured through the indicator of frequency in contact and communication, whether visits, telephone calls, letters, email, or others. As shown in Table 3, almost half of the elderly or 41.9%, 42.5%, and 45.9% of the young-old, the mid-old, and the oldest-old parents, respectively, had con-tact with at least one child who did not live together every day or almost every day. The frequency was determined at the level of "often" meaning contact with the children at least once a week, the level of "moderate" meaning contact with the children at least once a month, and the level of "rarely/never" meaning contact with the children less than once a month or never met. It could be seen that most elderly parents contacted at least one child who did not co-reside with them at high and moderate levels.

Table 3: Percentage of the young-old, the mid-old, and the oldest-old parents with at least one child who did not co-reside with them distinguished by the frequency of contact and locations of residence

Contact	Young-old (60 - 69 years old)	Mid-old (70 - 79 years old)	Oldest-old (80 years old or over)
Number of times of contact with children a year			
Almost every day/every day	41.9	42.5	45.9
2 - 3 times a week	11.2	10.2	8.8
Once a week	12.2	10.1	9.9
13 - 51 times	8.1	6.3	6.5
Once a month	10.3	9.7	8.5
< 12 times	12.2	14.5	12.3
Never met	4.1	6.8	8.1
Locations of children's residence (compared with parents' residence)			
In the same subdistrict	12.1	17.4	22.8
In the same district	8.9	13.2	12.8
In the same province but in different district	15.5	16.2	19.1
In the different province	56.8	48.4	42.4
Others	6.9	4.8	3.0

In terms of the distance from the parents' residence of the children who did not co-reside with them, from Table 3 it was clearly seen that the percentage of the elderly parents with at least one child who resided in the same subdistrict increased with the parents' advanced age, that is 12.1% of the young-old parents, 17.4% of the mid-old parents, and 22.8% of the oldest-old parents.

Functional solidarity

The functional solidarity could broadly mean the level of exchange of services or assistance between intergenerational family members (Robert, Richard and Bengtson, 1991). However, in this study, the functional solidarity would be specifically meant the mutual support between elderly parents and adult children. The mutual support would include both in cash and in kind, daily activi-ty care, and psychological support. Moreover, from the life cycle perspective, the oldest-old par-ents who should be "recipients" after having performed main duties as "givers" was focused.

Based on Table 4, approximately 20% of elderly parents did not have any support with their adult children. The remaining 43-53% of elderly parents had mutual assistance with the adult chil-dren. The share decreased with the parents' advanced age. Similar to the support as sole "givers" of the parents in their old age, the shares were contributed to 8%, 5%, and approximately 4% of the parents aged 60 - 69 years old, 70 - 79 years old, and 80 years old and over, respectively. On the con-trary, the parents who were sole "recipients" constituted to approximately 18%, 25%, and 30% of the parents aged 60 - 69 years old, 70 - 79 years old, and 80 years old and over, respectively. The share of the sole "recipients" would increase with the parents' advanced age.

Table 4: Percentage of the elderly parents distinguished by age groups and directions of support with children

Contact	Young-old (60 - 69 years old)	Mid-old (70 - 79 years old)	Oldest-old (80 years old or over)
One directionality	25.5	30.0	34.2
1. Parents were sole recipients	17.5	25.0	30.4
2. Parents were sole givers	8.0	5.0	3.9
Bi-directionality with parents as both recipients and givers	53.4	49.0	42.8
No support between parents and chil-dren	21.2	20.9	23.0
Total	**100.0**	**100.0**	**100.0**

The directions of support between elderly parents and adult children were distinguished by the indicators of the structural solidarity as detailed in Tables 5 - 7 for the young-old, the mid-old, and the oldest-old parents, respectively. The one directionality of the support would consider the perspective of the elderly parents, namely, “sole recipients” meaning the parents were sole recipi-ents from adult children without giving to them. The indicators of structural solidarity consisted of co-residence with children, types of family, as well as the number of living children.

For the young-old parents (Table 5), the directions of support distinguished by the number of living children revealed that the bi-directionality support between parents and children increased according to the number of the living children or increase from 51% (one child) to ap-proximately 58% (more than five children) with the exception of having four children. As for the case of no support, it revealed that the lowest share was parents with two living children or 16.6% with the increase to approximately 20% in the case of having three children and increase to ap-proximately 30% of the parents with four living children or more. The pattern of support between young-old parents and children was not vastly different between co-residence with children and without co-residence with children. Finally, with the division of types of family of the elderly resi-dents, it revealed that the share of the residents in extended family (55.8%) having the bi-directionality support with children was higher than the residents in single family (50.9%).

Table 5: Percentage of the young-old parents (60 - 69 years old) distinguished by the directions of support and structural solidarity

Indicators of structural solidarity	One directionality		Bi-directionality	No support	Total
	Sole recipients	Sole givers			
Number of living children					
1 child	14.4	10.6	51.0	24.0	100.0
2 children	19.6	10.1	53.7	16.6	100.0
3 children	17.2	6.4	56.4	20.1	100.0
4 children	21.0	3.7	45.7	29.6	100.0
5 children	7.9	5.3	55.3	31.6	100.0
More than 5 children	10.5	0.0	57.9	31.6	100.0
Co-residence with children					
Co-resided	17.7	8.3	50.6	23.4	100.0
Did not co-reside	17.4	7.8	54.9	19.9	100.0
Types of family					
Single family	18.2	8.6	50.9	22.3	100.0
Extended family	16.8	7.3	55.8	20.1	100.0
Total	**17.5**	**8.0**	**53.4**	**21.2**	**100.0**

Table 6 presented the directions of support of the midaged parents. Considering the number of living children, the bidirectionality support between parents and children tended to increase according to the number of living children, similarly to youngold parents, but increased from approximately 42% (one child) to approximately 54% (three children and over five children) except the case of four and five children. As for the sole recipients of the parents of this age group, apart from the overview where the share was higher than the young-old parents, there was also more systematic change in the number of children or approximately 27% and 30% of the mid-old parents with one child and two children, respectively, who were sole recipients and approximately 21 - 25% of the parents with three children or more who were sole recipients. As in the case of no support, it revealed that the pattern was similar to young-old parents. Approximately one-fourth of the elderly in both age groups had no support with children. The lowest share was the parents with two living

children or 17.2% or the increase to approximately 21% in the case of having three and four chil-dren. However, based on the Table, the mid-old parents with one child had the highest share of no support with their child or 26%. As for the co-residence with children, approximately 28% of the mid-old parents co-residing with their children were sole recipients whereas 23.5% of those who did not co-reside with children were sole recipients. Finally, by the types of family, the share of those residing in extended family (50.6%) and having bi-directionality support with the children was higher than those residing in single family (47.3%). On the contrary, the elderly residents in extended family would have lower share of sole recipients than those residing in single family (23.6% and 26.6%, respectively).

Table 6: Percentage of the mid-old parents distinguished by the directions of support and structur-al solidarity

Structural solidarity	One directionality		Bi-directionality	No support	Total
	Sole recipients	Sole givers			
Number of living children					
1 child	27.4	4.1	42.5	26.0	100.0
2 children	29.9	6.3	46.6	17.2	100.0
3 children	20.6	4.2	53.9	21.2	100.0
4 children	23.8	6.3	48.4	21.4	100.0
5 children	23.7	5.3	47.4	23.7	100.0
More than 5 children	24.6	1.5	53.8	20.0	100.0
Co-residence with children					
Co-resided with chil-dren	28.1	5.4	47.3	19.2	100.0
Did not co-reside with children	23.5	4.8	49.9	21.8	100.0
Types of family					
Single family	26.6	4.7	47.3	21.3	100.0
Extended family	23.6	5.3	50.6	20.6	100.0
Total	**25.0**	**5.0**	**49.0**	**20.9**	**100.0**

From Table 7, considering the directions of support classified by the number of living chil-dren of the oldest-old parents, the trend of support of bi-directionality between parents and chil-dren decreased according to the number of living children which was contrary to the young-old and the mid-old parents. One important remark was that for 26.5% of the oldest-old parents with one child, had the bi-directionality support. The share of which was considered extremely low, whether compared with the oldest-old parents with more than one child or compared with the young-old and the mid-old parents with one child (51% and 42.5%, respectively). Moreover, for those with only one child, the no support from the child would be noticeably clear in the case of the oldest-old parents or approximately 37% of the oldest-old parents compared with 24% of the young-old par-ents and 26% of the mid-old parents. As for the sole recipients of the oldest-old parents, the trend increased with the number of living children except the case with two children. Finally, the support with children of the oldest-old parents did not depend on the co-residence with their children or the type of family because the share of the oldest-old parents with no support or one directionality support or bi-directionality support was not very different between those who co-resided with their children and those who were in single family and extended family.

Table 7: Percentage of the oldest-old parents (aged 80 years old or over) distinguished by the directions of support and structural solidarity

Indicators of structural solidarity	One directionality		Bi-directionality	No support	Total
	Sole recipients	Sole givers			
Number of living children					
1 child	28.6	8.2	26.5	36.7	100.0
2 children	21.9	3.1	50.0	25.0	100.0
3 children	28.6	4.5	46.4	20.5	100.0
4 children	39.0	4.0	41.0	16.0	100.0
5 children	33.0	4.3	41.5	21.3	100.0
More than 5 children	30.3	2.1	42.8	24.8	100.0

Table 7: Percentage of the oldest-old parents (aged 80 years old or over) distinguished by the directions of support and structural solidarity (Continue)

Indicators of structural solidarity	One directionality		Bi-directionality	No support	Total
	Sole recipients	Sole givers			
Co-residence with children					
Co-resided with chil-dren	27.6	4.9	44.2	23.3	100.0
Did not co-reside with children	31.4	3.5	42.3	22.9	100.0
Types of family					
Single family	28.3	4.7	43.7	23.2	100.0
Extended family	31.9	3.2	42.1	22.8	100.0
Total	**30.4**	**3.9**	**42.8**	**23.0**	**100.0**

The types of assistance that the elderly parents received from and gave to their adult children as shown in Table 8 revealed that whether the parents were the young-old parents, the mid-old parents, or the oldest-old parents, almost half or 45.0%, 45.1%, and 46.5%, respectively, received assistance from their adult children both in cash and in kind. The type of assistance re-ceived with lower share (14.2% - 16.9%) was in kind only, such as house cleaning, cooking, or psychological support. The lowest share (7.7% - 10.5%) was in cash only. Moreover, approximate-ly one-third of the elderly parents did not receive any assistance from their adult children during one year before the survey.

In terms of assistance that the elderly parents provided to their adult children, in the year before the survey, approximately 40% of the young-old parents did not give assistance to their adult children. This share increased to approximately 47% of the mid-old parents and approxi-mately 55% of the oldest-old parents. The parents of the three age groups gave the assistance with similar shares or 35% - 36% to their adult children in kind only, and approximately 4 - 6% in cash only. The rest provided the assistance to the children both in cash and in kind with the shares rap-idly decreasing with the parents' advanced age or approximately 20% of the young-old parents, 12.5% of the mid-old parents, and 5.4% of the oldest-old parents.

Table 8: Percentage of the elderly parents who were both "givers" and "recipients" distinguished by age groups and types of assistance

Types pf assostamce	60 - 69 years old	70 - 79 years old	80 years old or over
Parents were **"recipients"** of assistance			
In cash	10.5	9.9	7.7
In kind	14.2	16.9	16.4
Both in cash and in kind	45.0	45.1	46.5
Did not receive assistance	30.3	28.1	29.4
Total	100.0	100.0	100.0
Parents were **"givers"** of assistance			
In cash	4.3	5.7	3.7
In kind	36.0	35.1	36.1
Both in cash and in kind	19.8	12.5	5.4
Did not give assistance	39.9	46.7	54.9
Total	100.0	100.0	100.0

Types of support between elderly parents and adult children

To classify the types of support between elderly parents and adult children, the five indica-tors reflecting the two dimensions of solidarity in the elderly's family were further used to analyze the typology of support by the technique of Latent Class Analysis (LCA)[2]. The fiveindicators were measured based on dichotomous method. Therefore, there were in total 32 response patterns. Apart from the study of the overview of the types of support, the analysis was also conducted on the ty-pology of the support of the young-old, the middle-old, and the oldest-old parents.

The LCA results for the overview of the support of the Thai elderly (n = 2,739) were classi-fied into 4 types of support as shown in Table 9.

[2] The technical latent classification analysis in details in this part was presented in the Appendix.

Table 9: Results of the analysis of Latent Class Models with four Classes: Overview

Indicators	Types			
	1	2	3	4
	n = 1115 41%	n = 170 6%	n = 792 29%	n = 663 24%
Meetings				
Never/rarely	0.322	0.060	0.037	0.036
Often	***0.678***	***0.940***	***0.963***	***0.965***
Parents gave to children: in cash				
Yes	0	0.459	0.272	0.101
No	***1***	***0.541***	***0.728***	***0.899***
Parents gave to children: in kind				
Yes	0	0.483	***1***	0.186
No	***1***	0.517	0	***0.814***
Parents received from children: in cash				
Yes	0.022	0.279	***0.784***	***0.670***
No	***0.978***	***0.721***	0.216	0.330
Parents received from children: in kind				
Yes	0	0	***1***	***0.716***
No	***1***	***1***	0	0.284

Note: The Conditional probability which exceeded 0.6 were selected to represent the support of each type

Table 9 presented the Latent class probability and the Conditional probability of the Latent class models that divided the support between elderly parents and adult children into four types. The **"Latent class probability"** was similar to prevalence, meaning the share of the elderly with dis-tribution across types/classes of the support. For example, 24% of the total of 2,739 elderly per-sons had support in the first type. The **"Conditional probability"** reflected the distribution within each class similarly to the factor loading which showed the relationship between the Manifest in-dicator and the Latent class which would be given the **"Label."** The support of each type was based on this Conditional probability, by interpreting only the Conditional probability which exceeded 0.6.

The Conditional probability of the indicator of each type of support as shown in Table 9 re-flected the four classes or types of the relationship between elderly parents and adult children as summarized in Table 10.

Table 10: Types and definition of support between the elderly parents and adult children

Types of support	%	Definition of Support (Perspective of elderly parents)
1. Detached (ห่างเหินจากลูก)	41	Infrequent meetings with children, if at all. No support with children both in cash and in kind (i.e., the elderly parents were neither "givers" nor "recipients")
2. Sociable (เห็นหน้าลูก)	6	Meetings with adult children occur often. The elderly parents are "givers" in the relationship and do not receive either cash or in-kind sup-port from their children.
3. Tight-knit (แลกเปลี่ยนด้วยบริการ)	29	Meetings with adult children occur often. The role of the "recipients" of support from chil-dren both in cash and in kind; as for the role of the "givers," assistance provided in kind only.
4. Normative (มีลูกกตัญญู)	24	Meetings with adult children occur often. El-derly parents are "recipients" of support from adult children, both in cash and in-kind. They are no longer "givers" to their adult children.

From Table 9 and 10 the type 1 **"Detached"**, the highest number of the elderly or 41% was in this type. The characteristic of the parents in this type was that there were not many interactions with their adult children in terms of contact, transfer, or exchange of resources. The type 2 **"Socia-ble"** represented the lowest share or 6% of elderly parents. The parents in this type would not re-ceive assistance both in cash and in kind from their adult children. On the contrary, the opportunity to give money to adult children was

higher than the elderly parents in other types. The type 3 **"Tight-knit"** indicated the share of 29% of elderly parents with adult children. The characteristic of the relationship was that the elderly parents received assistance both in cash and in kind from their adult children and that the elderly parents provided their assistance in kind to their adult chil-dren. Finally, the type 4 **"Normative"** described the transfer of resources from adult children up-ward to elderly parents with adult children as guarantee in elderly parents' old age. This type con-stituted 24%.

The results of the Latent Class Analysis revealed that the model of the four types of support it the empirical data most. However, the types of support for each age-group of the elderly parents were different as shown in Table 11.

1) For the young-old parents, the important characteristics of the relationship between the young-old parents and their adult children in the four types were similar as found in the overall situation with the exception of the **"Sociable"** type. The young-old parents that apart from did not receive any assistance from the adult children, they had to give assis-tance both in cash and in kind to their children even if they were adults. So, this type of support was called **"children who refused to grow up."**

2) For the mid-old parents, the characteristics of the three types of support namely the sup-port of **"Detached"** type with 31%, the **"Sociable"** type with 27%, and the **"Tight-knit"** type with 42%. For the first and the last types, there were similarities in the overall aspect and in the young-old parents. As for the **"Sociable"** type in the mid-old parents, the parents would not receive assistance both in cash or in kind from children similarly to the overall situation and the young-old parents. The difference was in the **"givers"** whereby the share of the mid-old parents who did not give assistance in cash or any other assistance to their adult children was higher than in the overall situation.

3) Finally, for the oldest-old parents, the major characteristics of support revealed that there were only two types, i.e., the **"Sociable"** type (46% of the elderly parents) and the **"Tight knit"** type (54%). The percentage of the last type of support was slightly higher than the first type.

Table 11: Percentage of the elderly parents in each age-group distinguished by the types of support with adult children

Elderly groups	Types of support			
	Detached	Sociable/Children who refused to grow up	Tight-knit	Normative
Young-old	46	5	28	21
Middle-old	31	27	42	
Oldest-old		46	54	
Total (Overview)	41	6	29	24

The results of the LCA to classify the types of support by age groups in Table 11 indicated that with parents' more advanced age, the types of support would decrease from the four types of the young-old parents to the three types of the mid-old parents. The type that decreased from the young-old was the **"Normative"** type and the two types from the oldest-old parents. The type that decreased from the mid-old parents was the **"Detached"** type. Two issues were noted. Firstly, the support of the **"Normative"** type in which the elderly parents were sole **"recipients"** appeared only in the youngest-old parents or 21% of them received support. Compared with the mid-old and the oldest-old parents, the youngest-old parents should have fewer needs than other ages. Finally, the **"Detached"** type with no mutual support between the elderly parents and adult children existed in the current Thai society, or almost half of the young-old parents and approximately one-third of the mid-old parents. As for the oldest-old parents, although without the **"Detached"** type, the **"So-ciable"** type that the parents were **"givers"** in the relationship without receiving either cash or in-kind support from their children was similar. Only the latter **"Tight-knit"** type constituted more contact with the children.

Conclusion and Discussions

The study used the information from the HART project collected at the end of 2016 to the mid 2017 to analyze the structural solidarity, associational solidarity, and functional solidarity of the Thai older persons' families, as well as analysis of the types of the support

between elderly parents and adult children by using the statistical technique of Latent Class Analysis. This analysis divided the sample into 2,739 parents into three age groups namely 1,079 young-old parents aged between 60-69 years old, 897 middle-old parents aged between 70 - 79 years old, and 763 oldest-old parents aged 80 years old or over.

The study findings of the three aspects of solidarity as mentioned above revealed that when more parents were advanced in age, the solidarity in each studied aspect would tend to increase as well, including the issue of co-residence with children, frequency in contact with children, or the role of sole **"recipients"** of resource assistance from children. It could be seen that the indicators of these aspects of solidarity had higher share with the oldest-old parents compared with the young-old and the mid-old parents. It could be interpreted that with parents' more advanced age, the status of self-reliance would change to reliance on others especially on children in terms of economic, social, and health aspects. With the physical and mental degradation, needs of assis-tance and care would increase.

However, from the studies of demographers, it was found that the fertility rate in Thailand continuously and rapidly declined after the government's policy of birth control promotion in 1970. So, there might be argument that the oldest-old parents were in reproductive age before the period when the fertility level declined. Therefore, the Total Fertility Rate (TFR) meant the num-ber of children that a woman had during her reproductive age (TFR ≥6 persons) would be higher than the young-old (TFR ≤3 persons) and the mid-old (TFR 4 - 6 persons) (Pramote and Pattama, 2005). Therefore, it resulted in higher interaction or support with children due to the higher turno-ver rate of children. But in considering the directions of support between elderly parents and adult children namely one directionality, bi-directionality, and no support and by comparing between the elderly parents of the three age groups with the same number of living adult children (see Table 12), it was found as follows.

1) With the same number of the living children and with the parents' more advanced age, the parents' sole status of **"recipients"** tended to increase and the support of the **"Bi-directionality"** tended to decrease.

2) As for the overview of all age groups of elderly parents, the tendency of the parents' sole status of **"recipients"** did not increase according to the number of living children. The av-erage share of the sole **"recipients"** was between

22 - 24% except the case of four living children. Similarly, the trend of the support of the type **"Bi-directionality"** did not increase or decrease according to the number of living children. The average share would narrowly swing between 48 - 52% except the case of one living child (40% which was the lowest share) and four children (45% which was the second lowest share from one living child)

3) As in the case of **"no support"** between elderly parents and adult children, if there was only one living child, the share of the parents with no support with children tended to increase with their advanced age. Moreover, it was also found that for elderly parents with only one living adult child, there was higher risk that there would be no support with the child than elderly parents with more than one living adult child and

4) Finally, it involved the case of **"no support"** similarly to 3). For the case of elderly parents with more than one living adult child, it was additionally found that the share of elderly parents with **"no support"** with adult children increased following the number of the living children.

Table 12: Percentage of the young-old, the mid-old, and the oldest-old parents distinguished by the directions of support and the number of living children

Number of living chil-dren	One directionality		Bi-directionality	No support	Total
	Sole recipi-ents	Sole givers			
1. child	14.4 27.4 28.6	10.6 4.1 8.2	51.0 42.5 26.5	24.0 26.0 36.7	100.0
2. children	19.6 29.9 21.9	10.1 6.3 3.1	53.7 46.6 50.0	16.6 17.2 25.0	100.0
3. children	17.2 20.6 28.6	6.4 4.2 4.5	56.4 53.9 46.4	20.1 21.2 20.5	100.0

Table 12: Percentage of the young-old, the mid-old, and the oldest-old parents distinguished by the directions of support and the number of living children (Continue)

Number of living chil-dren	One directionality		Bi-directionality	No support	Total
	Sole recipi-ents	Sole givers			
4. children	21.0 23.8 39.0	3.7 6.3 4.0	45.7 48.4 41.0	29.6 21.4 16.0	100.0
5. children	7.9 23.7 33.0	5.3 5.3 4.3	55.3 47.4 41.5	31.6 23.7 21.3	100.0
More than 5 children	10.5 24.6 30.3	0.0 1.5 2.1	57.9 53.8 42.8	31.6 20.0 24.8	100.0
Total	17.5 25.0 30.4	8.0 5.0 3.9	53.4 49.0 42.8	21.2 20.9 23.0	100.0

Note: In each cell, the figures on the first row showed the young-old parents, the following row the mid-old parents, and the last row the oldest-old parents.

Therefore, it could be said that parents had more interactions with adult children with their advanced age. Mostly it derived from the parents' physical necessity and/or economic reasons more than the fact that oldest-old parents had more children than mid-old parents or mid-old par-ents had more children than young-old parents. Moreover, the information from HART project in Wave 2 pointed out that considering the support that parents were sole **"recipients"** or in the case of both givers and recipients of **"Bi-directionality"** support, the number of two living children or more did not make any difference in the guarantee of security to the parents in their old age. On the contrary, if there was one living child, the security in old age would reduce. There was also higher risk of no support with the child than the parents with more than one child. However, this study covered the familial solidarity only in physical and concrete aspects namely Associational solidarity and Functional solidarity.

As for the results of the analysis of LCA, it revealed that the four types of support between elderly parents and adult children in Thailand ranked from low to high quality of intergenerational relationship between parents and children reflected the quality of children as well namely **"De-tached" "Sociable" "Tight knit"** and finally **"Normative."** Each type had the shares of the elderly parents as follows: 41%, 6%, 29%, and 24%. When compared with the results of the information of adult children with living fathers and/or mothers in 48 states in US by Silverstein and Bengtson (1997), the indicators were used to show intergenerational solidarity between parents and adult children in five aspects namely Associational solidarity, Functional solidarity (assistance only in kind), Structural solidarity, Affectual solidarity, and Consensual solidarity. It revealed that there were five aspects namely (1) Tight-knit: Adult children had close relationship with parents in all studied aspects (2) Sociable: Similar to the first type except performing duties, meaning no giving to parents or receiving assistance from them in kind (3) Obligatory: Adult children regularly met with their parents but no close emotions or feelings. As for performing duties, approximately one-third of adult children both gave to and received assistance from parents (Parents givers and re-ceivers, only in-kind assistance) (4) Intimate but distant: Adult children were spiritually close but other relationships were little and (5) Detached: Contrary to the first type, low level of relationship in all studied aspects. The study of Yi and Lin (2009) conducted in Taiwan showed five types of support similarly to the study of Silverstein and Bengtson. But the indicators used to analyze the LCA of the study in Taiwan were different as follows: Firstly, the indicator of solidary on social norm was added. Secondly, performing duties covered both in cash and in kind. So, the third type was called Normative replacing Obligatory. The other types were similarly called due to their sim-ilar characteristics.

There were two differences between this study and the two studies mentioned earlier. First-ly, this study used the less indicators that covered solidarity, but the two aspects covered by this study were particularly important and the behavior could be objectively measured. Secondly, the division of the types of support in this study was conducted in the perspective of the elderly par-ents. But the two studies were conducted in the perspective of the adult children. However, when comparing the types of familial

relationship or support between elderly parents and adult children, similarity could be seen, especially in Taiwan. The comparison could be conducted as follows: Tight-knit (i.e., binding relationship by exchanging services), Sociable (i.e., amicable relation-ship), Normative (i.e., filial relationship from children), and Detached (i.e., aloof relationship). Although 'Intimate but distant' was an important characteristic due to spiritual closeness, this study did not have the indicator in this aspect.

Moreover, this study made additional findings that the types of family relationship of elder-ly parents in each age group were different. This finding was an important proof that in the course of our life, the intergenerational interaction was a dynamic process, depending on resources of children and needs of parents which were different in each age group of the interactive pair, as well as external limitations. These factors were determinants of the transfer of resources between each other. For example, when parents entered the young-old age, children were still at working age with income while parents did not have much need as they could still rely on themselves. The spouses were also alive so they could depend on each other. Therefore, the types of intergenera-tional interaction or support were various. But if the parents were the oldest-old and the children started to become the young-old who were mostly retired with no income and must depend on their own children as well, therefore they lacked potential (of resources) to support their own parents whereas the parents had more needs as most entered the phase of complete dependence on others. Due to the conditions in terms of children's resources and parents' needs, the intergenerational re-lationship between the oldest-old parents and children (the young-old) was limited to only two types namely **"Sociable"** and **"Tight-knit."** What was noticeable was that the support of the oldest-old did not have the type of **"Detached."** The reason might be because most of the oldest-old were widowed and could not help themselves and so had to live with their children and grandchildren. So heavy burden might rest on the grandchild (child of child) who had to take care of at least two elderly people of two generations, those of parents and grandparents. In the future, the characteris-tics of the Thai family would increasingly be the Bean pole (Many generations living in the same household and family would extend vertically more than horizontally).

It is forecast that for the Thai population between 2010-2040, the number and share of the oldest-old per the elderly aged 60 years old and over would increase from approximately 1 million or 13% of the total elderly popu-lation in 2010 to almost 4 million or 19% in 2040 (Office of the National Economic and Social Development Board, 2015). At the same time, the Thais would live longer (individual level) with increased numbers (macro level) of dependency resulting in the need of long-term care. Therefore, the intergenerational relationship or support in family should be considered in a wider perspective, not only between parents and children but also support between grandparents and grandchildren.

Overall, the study results pointed to the social norm that filial gratitude towards parents still existed in the Thai society. But behavior might change from the old pattern of children's as-sistance and support both in cash and in kind to parents to at least in regular contact with parents or parents exchanged assistance in kind. This constituted the changing behavior appropriate to the changing society and familial support to the elderly tended to become long-term care. As the elder-ly might relate to many generations of family members, prevention should be made to close the gap between generations.

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Appendix: Goodness-of-fit statistics of the Laten Class Models and LCA

To analyze the typology of support between the Thai elderly and their adult children, the study used the technique of Latent Class Analysis (LCA). The five indicators were measured based on dichotomous method. Therefore, there were in total 32 response patterns. Apart the overview of the types of support, the analysis was also conducted on the typology of the support distinguished by the age-group, the young-old, the mid-old, and the oldest-old parents.

The Goodness-of-fit statistics of the model which distinguished the support into three, four, and five types, respectively, i.e., χ^2 and the Bayesian information criterion (BIC), were tested to identify the best fit model for the typology of the overview of the support of the Thai older persons (all age-groups, n = 2,739) and that of each age group (the young-old, n = 1,079; the mid-old, n = 897; and the oldest-old, n = 763).

In considering both Goodness-of-fit statistics, χ^2 and BIC, of the Latent Class models with various classes for overview in Table a1, it revealed that the model of four types fit the empirical data the most as χ^2= 13.06, df. = 8, p-value = 0.11, and BIC = 12695.54 which was the lowest val-ue.

After the best fit model was identified, the four classes or types of the relationship between elderly parents and adult children were determined by the Latent class probability and the Condi-tional probability. The "Latent class probability" was similar to prevalence, meaning the share of the elderly with distribution across types/classes of the support. For example, 24% of the total of 2,739 elderly persons had support in the first type. The "Conditional probability" reflected the dis-tribution within each class similarly to the factor loading which showed the relationship between the Manifest indicator and the Latent class which would be given the "Label." The support of each type was based on this Conditional probability, by interpreting only the Conditional probability which exceeded 0.6.

The Conditional probability of the indicator of each type of support as shown in Table a2 reflected the four classes or types of the relationship between elderly parents and adult children as summarized in Table a3. The type 1 **"Detached"**, the highest number of the elderly was in this type or 41%. The characteristic of the parents in this type was that there were not many interactions with their adult children in terms of contact, transfer, or exchange of resources. The type 2 **"Socia-ble"**, 6% of elderly parents with adult children which was the lowest share. The parents in this type would not receive assistance both in cash and in kind from their adult children. On the contrary, the opportunity to give money to adult children was higher than the elderly parents in other types. The type 3 **"Tight-knit"** with the share of 29% of elderly parents with adult children. The charac-teristic of the relationship was that the elderly parents received assistance both in cash and in kind from their adult children and that the elderly parents provided assistant in kind to their adult chil-dren. Finally, the type 4 **"Normative"** with the transfer of resources from children upward to par-ents with children as guarantee in parents' old age. The type constituted 24%.

Apart from the overview analysis of the types of support between the elderly parents and adult children as explained above, the same logical method of analysis was also conducted sepa-rately on the types of support for the young-old (Tables b1 and b2), the mid-old (Tables c1 and c2), and the oldest-old parents (Tables d1 and d2). The results of the analysis were presented as fol-lows:

Table a1: Goodness-of-fit statistics of the Latent Class Models with various Classes: Overview

Number of Latent Classes	χ^2	df	p-value	BIC
1	4224.80	26	0.000	15616.01
2	187.47	20	0.000	12762.90
3	71.68	14	0.000	12706.55
4	13.06	8	0.110	12695.54
5	8.67	2	0.013	12738.04

Table a2: Results of the analysis of Latent Class Models with four Classes: Overview

Indicators	Types			
	1 n = 1115 41%	2 n = 170 6%	3 n = 792 29%	4 n = 663 24%
Meetings				
Never/rarely	0.322	0.060	0.037	0.036
Often	***0.678***	***0.940***	***0.963***	***0.965***
Parents gave to children: in cash				
Yes	0	0.459	0.272	0.101
No	***1***	0.541	***0.728***	***0.899***
Parents gave to children: in kind				
Yes	0	***0.483***	***1***	0.186
No	***1***	0.517	0	***0.814***
Parents received from children: in cash				
Yes	0.022	0.279	***0.784***	***0.670***
No	***0.978***	***0.721***	0.216	0.330
Parents received from children: in kind				
Yes	0	0	***1***	***0.716***
No	***1***	***1***	0	0.284

Table a3: Types and definition of support between the elderly parents and adult children

Types of support	%	Definition of Support (Perspective of elderly parents)
1. Detached (ห่างเหินจากลูก)	41	Infrequent meetings with children, if at all. No support with children both in cash and in kind (i.e., the elderly parents were neither "givers" nor "recipients")
2. Sociable (เห็นหน้าลูก)	6	Meetings with adult children occur often. The elderly parents are "givers" in the relationship and do not receive either cash or in-kind sup-port from their children.
3. Tight-knit (แลกเปลี่ยนด้วยบริการ)	29	Meetings with adult children occur often. The role of the "recipients" of support from chil-dren both in cash and in kind; as for the role of the "givers," assistance provided in kind only.
4. Normative (มีลูกกตัญญู)	24	Meetings with adult children occur often. El-derly parents are "recipients" of support from adult children, both in cash and in-kind. They are no longer "givers" to their adult children.

Table b1: Goodness-of-fit statistics of Latent Class Models with different Classes: Young-old parents (n = 1,079)

Number of Latent Classes	χ^2	df	p-value	BIC
1	1959.86	26	0.000	6326.85
2	123.89	20	0.000	5063.73
3	40.06	14	0.000	5046.44
4	18.64	8	0.017	5061.30
5	8.42	2	0.015	5094.58

Table b2: Results of the analysis of the Latent Class Models with four Classes: Young-Old Parents (n = 1,079)

Indicators	Types			
	Detached n = 497 46%	Children who re-fused to grow up n = 55 5%	Tight-knit n = 303 28%	Norma-tive n = 225 21%
Meetings				
Never/rarely	0.312	0.078	0.048	0.038
Often	***0.688***	***0.922***	***0.952***	***0.962***
Parents gave to children : in cash				
Yes	0	0.701	0.357	0.150
No	***1***	***0.230***	***0.643***	***0.850***
Parents gave to children : in kind				
Yes	0	***0.745***	***1***	0.321
No	***1***	0.255	0	***0.679***
Parents received from children : in cash				
Yes	0.026	0.162	***0.786***	***0.691***
No	***0.974***	***0.838***	0.214	0.309
Parents received from children : in kind				
Yes	0	0	***1***	***0.636***
No	***1***	***1***	0	0.364

Table c1: Goodness-of-fit statistics of Latent Class Models with various Classes: Mid-old parents (n = 897)

Number of Latent Classes	χ^2	df	p-value	BIC
1	1458.23	26	0.000	5198.56
2	61.74	20	0.000	4282.30
3	26.70	14	0.021	4272.79
4	19.63	8	0.012	4303.58
5	7.40	2	0.025	4339.66

Table c2: Results of Latent Class Models with three Classes: Mid-old parents (n = 897)

Indicators	Types		
	Detached n = 281 31%	Sociable n = 244 27%	Tight-knit n = 372 42%
Contact			
Never/rarely	0.424	0.022	0.040
Often	***0.556***	***0.978***	***0.960***
Parents gave to children : in cash			
Yes	0.006	0.132	0.247
No	***0.994***	***0.868***	***0.753***
Parents gave to children : in kind			
Yes	0	0.131	***0.796***
No	***1***	***0.869***	0.204
Parents received from children : in cash			
Yes	0.015	0.332	***0.794***
No	***0.985***	***0.668***	0.206
Parents received from children : in kind			
Yes	0	0.261	***0.982***
No	***1***	***0.739***	0.018

Table d1: Goodness-of-fit statistics of Latent Class Models with the number of various Classes: oldest-old parents (n = 763)

Number of Latent Classes	χ^2	df	p-value	BIC
1	920.73	26	0.000	4072.63
2	24.61	20	0.217	3411.66
3	14.89	14	0.386	3437.22
4	6.42	8	0.600	3469.81
5	2.69	2	0.261	3506.67

Table d2: Results of the analysis of Latent Class Models with two Classes: Oldest-old parents (n = 763)

Indicators	Types	
	Sociable n = 351 46%	Tight-knit n = 412 54%
Contact		
Never/rarely	0.242	0.022
Often	***0.758***	***0.978***
Parents gave to children: in cash		
Yes	0.026	0.109
No	***0.974***	***0.891***
Parents gave to children: in kind		
Yes	0.016	***0.605***
No	***0.984***	0.395
Parents received assistance from children: in cash		
Yes	0.088	***0.758***
No	***0.912***	0.242
Parents received assistance from children: in kind		
Yes	0.034	***0.927***
No	***0.966***	0.073