Facility preferences for senior housing among lifestyle segments in Taiwan

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Contents

Background

Background

The proportion of people aged 65 and over…

7%	10%	20%
1993 ageing society	2016	2025
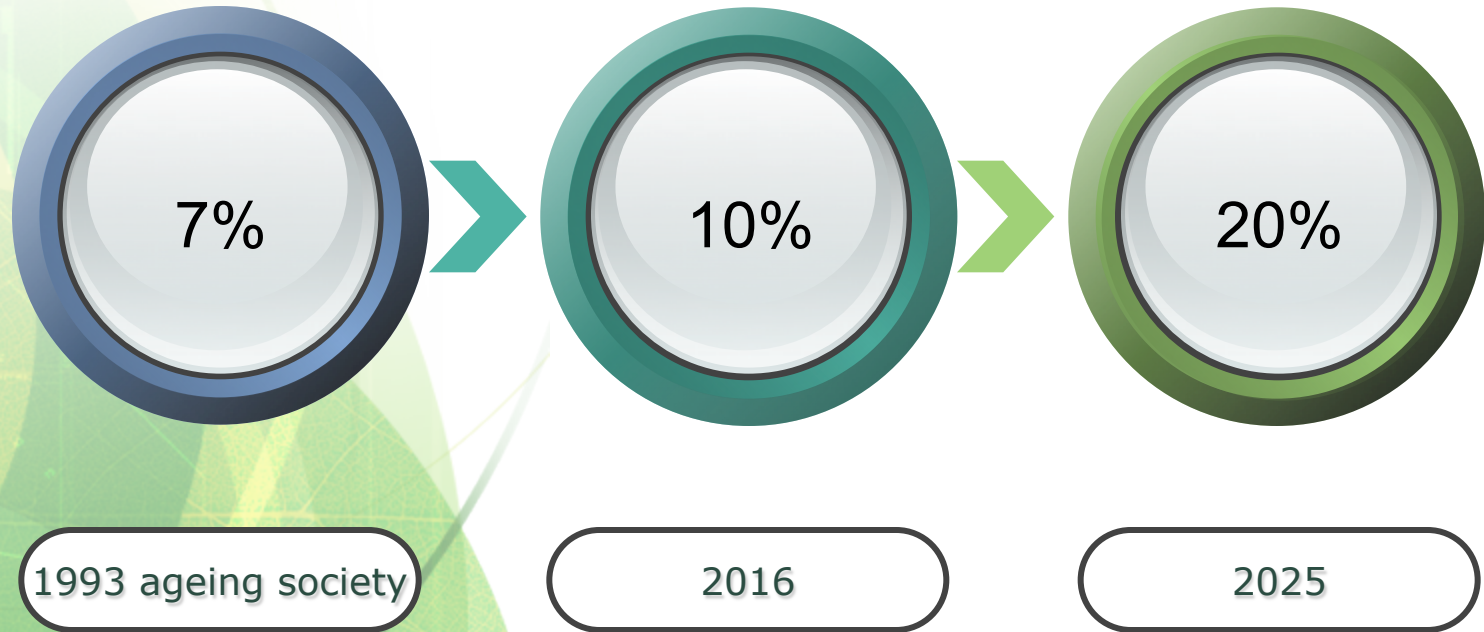
Background

Policy of Taiwan's government in the past decades …

Enhance **supply of** **budget senior housing…**

→ **High vacancy rates**

→ **The occupancy rate of high-end commercial housing is almost 90%**

Background

It raises the issue …

❖ **Why the budget senior housing did not fit consumers' demands but the high-end ones did?**

- Heterogeneous consumers
- Segmentation

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Objective

1 **Segment** senior housing market.

2 Illustrate targeted elders' **preference for facilities and services**.

Literature Review

❖ The market segmentation has been used in the studies on elders' consume or travel behaviors (Shufeldt, Oates, and Vaught, 1998; Chen and Wu, 2005)

❖ Segmentation on senior housing…

➢ Kim, Kim and Kim (2003)

➢ Moschis, Bellenger and Curasi (2005)

➢ Lin (2005)

➢ Li (2006)

Methodology

Methodology

Group respondents into distinct segments

Cluster analysis

Facilities factors

Factor analysis

Market segmentation

Factor analysis

Survey

Convenience sampling
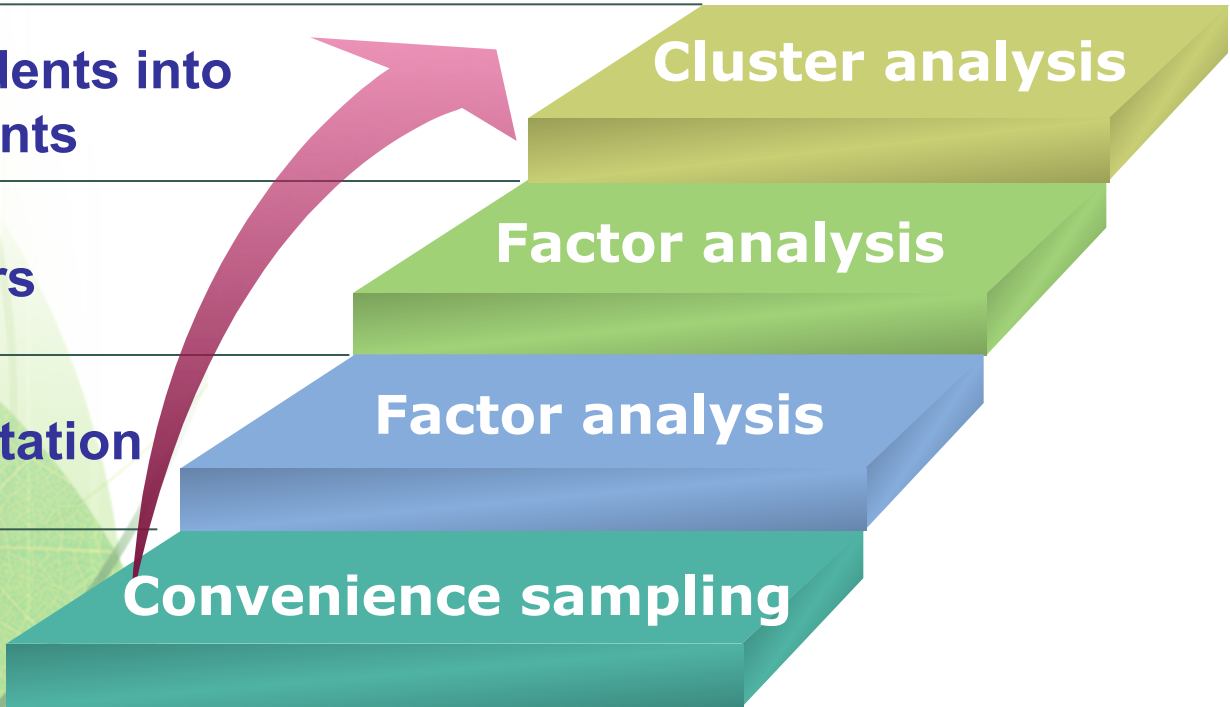
Questionnaire

382 valid respondents,
55 years of age or older living in Tainan city in 2015

1

- Socioeconomic characteristics
- Demographic characteristics
- Willingness-to-pay
- Willingness-to-move

2

- Lifestyle characteristics

3

- Attributes importance of senior housing

LOGO

Results

Descriptive statistics

Age

- 51-54
- 55-60
- 61-64
- 65 and above

Gender

- Male
- Female
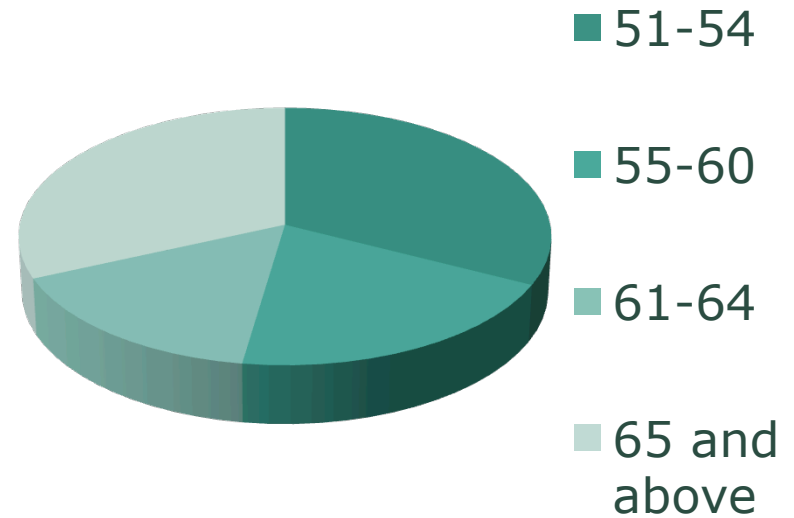
Descriptive statistics

Living Arrangement

- Live with children
- Live with spouse only
- Live alone
- Live with relatives or frineds

Have children or not

- No children
- Have child
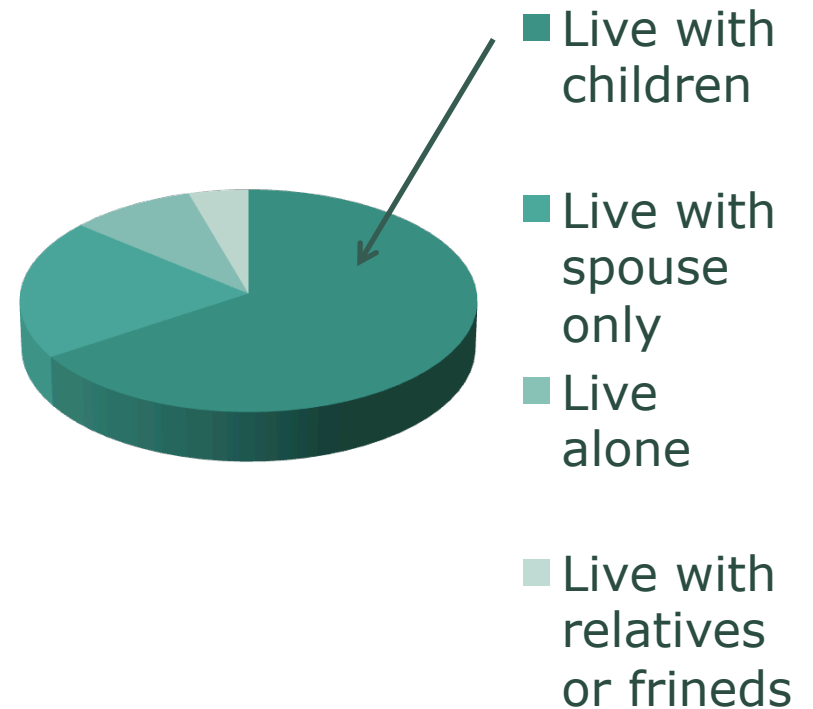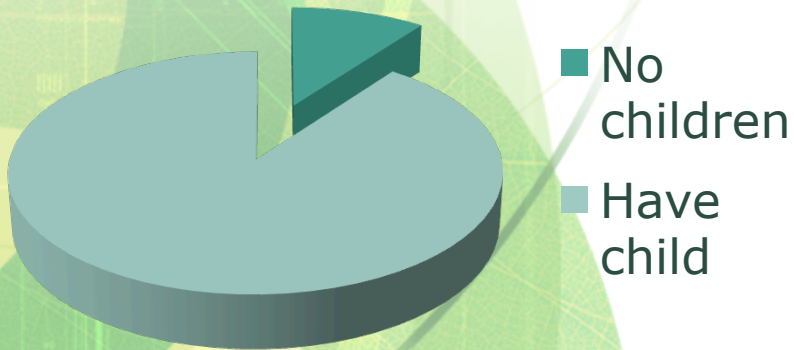
Descriptive statistics

Education

- Elementary school
- Junior high school
- Senior high school
- College degree
- Graduate school/ advanced degree

Willingness to move in

- Yes 22%
- Under consideration 34.6%
- No
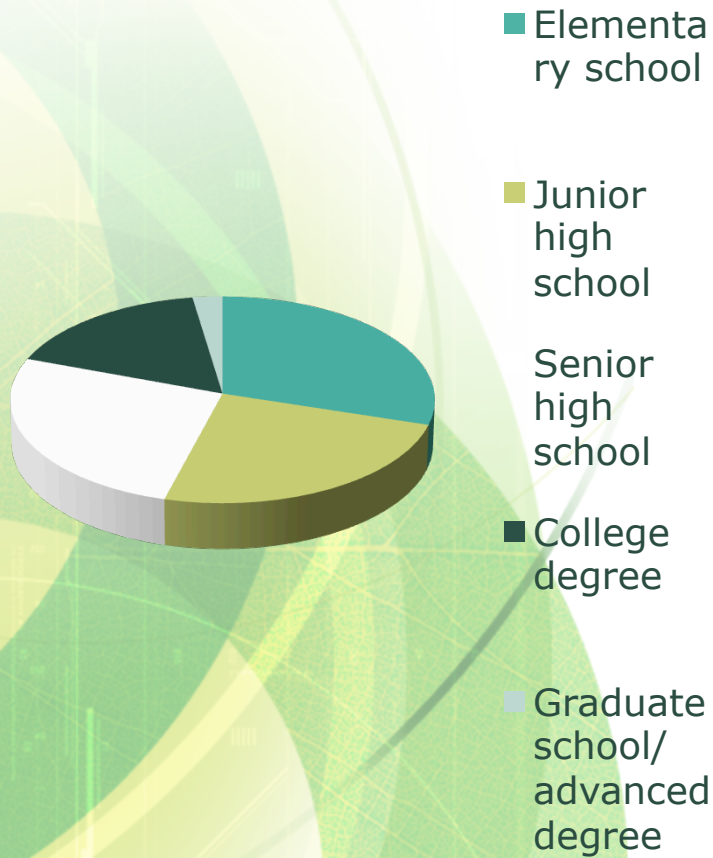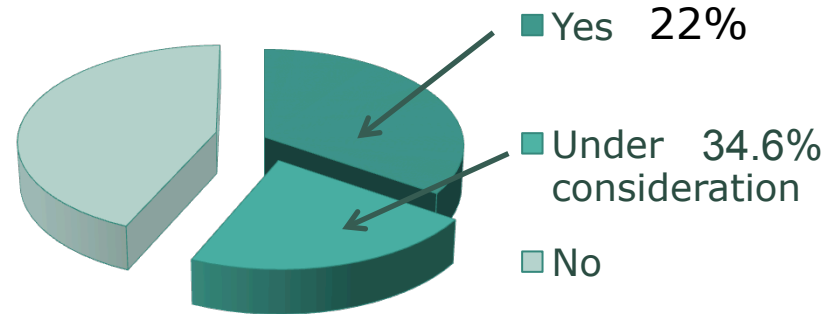
Descriptive statistics

Willingness to pay

- $9999 or less
- $10000-$19999
- Over $20000

Factor analysis

Table2. Factor analysis of elders' lifestyle variables.

Factor	Lifestyle variables	Factor loading
Factor 1. Leisure activities oriented	Enjoy social activities	0.801
	Enjoy travelling and visiting	0.756
	Enjoy spending money for leisure	0.718
	Enjoy purchasing new items	0.505
Factor 2. Family oriented	Place importance on family	0.854
	Enjoy eating dinner with family	0.790
	Enjoy living in big cities	0.692
Factor 3. Fashion oriented	Like trendy and novel items	0.668
	Trust product advertisement for purchasing	0.658
	Being optimistic about cancer treatment in the feature	0.456
	Prefer imported products more than domestic ones	0.393
Factor 4. Self-reliant	Fully knowing product before purchasing	0.683
	Care health-related information	0.587
	My poor health might increase burden on children	0.571
Factor 5. Learning oriented	Enjoy Chinese culture related activities such as Chinese calligraphy or painting	0.680
	Often read newspapers or magazines	0.647
	Well arranging retirement life	0.608
Factor 6. Adaptive	I think I am healthier than others of the same age	0.779
	I can adapt well to new conditions	0.754
Factor 7. Social oriented	I go to church or temple often	0.698
	I participate volunteering often	0.686

Table3. Factor analysis of housing facility attributes.

Factor	The preferred attributes of senior housing facilities	Factor loading
Factor 1. Responsiveness	Adequate service from staff	0.821
	Staff can respond to emergency	0.770
	Ambulance offering	0.740
	There are calling bells in bedrooms	0.732
	Barrier-free environment	0.717
	Disaster-free environment	0.643
	Shuttle bus offering	0.639
	Health care institution in neighborhood	0.619
	Public security	0.572
	Collaboration with hospital	0.566
	Install surveillance cameras in entrances	0.481
Factor 2. Empathy	Provide meal services for visitors	0.707
	Cleaning service for bedrooms	0.686
	Provide guest rooms for visitors	0.671
	Adequate daily services	0.614
	Special bus for medical care	0.570
	Room services	0.544
	Shopping tour weekly	0.468
Factor 3. Interior Tangibles	Attractive interior design	0.893
	Attractive buildings' appearance	0.887
	Diversified room types	0.630
Factor 4. Outdoor Tangibles	There are parks near by	0.719
	There are walking paths near by	0.657
Factor 5. Assurance	Special diet service	0.765
	Clinic services regularly	0.508
	Religion-related facilities	0.472

Cluster analysis

Cluster analysis

❖ **Hierarchal cluster analysis**

❖ **K-means**

- ■ Seen lifestyle factors are selected to perform the market segmentation

❖ **Five-cluster solution**

- ➢ **S1**: 95 observations
- ➢ **S2**: 36 observations
- ➢ **S3**: 55 observations
- ➢ **S4**: 54 observations
- ➢ **S5**: 84 observations

Table4: Segment members' mean lifestyle factor scores

Lifestyle factors	S1 (N=95)	S2 (N=36)	S3 (N=55)	S4 (N=54)	S5 (N=84)	F-test
Leisure activities oriented	0.4320	-1.4032	-0.4313	-0.3016	0.3485	43.864***
Family oriented	0.2628	0.6352	0.7084	-1.4983	-0.0415	76.065***
Fashion oriented	-0.7955	-0.4601	0.1382	0.0793	0.5651	40.489***
Self-reliant	0.5802	0.8239	-1.1580	-0.2721	-0.0450	51.411***
Learning oriented	-0.1175	0.3070	-0.9624	-0.1180	0.4183	25.553***
Active	0.4140	-0.8261	0.2857	0.3430	-0.3087	19.466***
Social oriented	0.2379	-0.6934	0.01392	-0.7742	0.3056	20.595***

Table 5. crosstab analysis results

Demographic variables	Level	Segment S1 (N=95)	S2 (N=36)	S3 (N=55)	S4 (N=54)	S5 (N=84)
Willingness to move in (***)	Yes	42.1%	22.2%	54.5%	38.9%	23.2%
	Under consideration	43.2%	52.8%	20.0%	38.9%	52.1%
	No	14.7%	25.0%	25.5%	22.2%	24.6%
Willingness to pay (***)	Below 9999	51.6%	36.1%	63.6%	48.1%	39.4%
	10000-14999	24.2%	52.8%	29.1%	31.5%	35.2%
	15000-19999	13.7%	8.3%	3.6%	18.5%	17.6%
	20000-24999	10.5%	2.8%	0.0%	1.9%	4.2%
	25000 and above	0.0%	0.0%	3.6%	0.0%	3.5%
Age (***)	50-54	30.5%	30.6%	10.9%	24.1%	45.8%
	55-59	15.8%	36.1%	9.1%	22.2%	21.8%
	60-64	17.9%	16.7%	16.4%	24.1%	11.3%
	65 and older	35.8%	16.7%	63.6%	29.6%	21.1%
Existing living arrangement (***)	Live with children	67.4%	72.2%	63.6%	51.9%	69.0%
	Live with spouse only	18.9%	22.2%	16.4%	20.4%	22.5%
	Live alone	10.5%	2.8%	10.9%	25.9%	3.5%
	Live with relatives or friends	3.2%	2.8%	9.1%	1.9%	4.9%
Education (***)	Elementary school	25.3%	25.0%	60.0%	31.5%	17.6%%
	Junior high school	23.2%	38.9%	18.2%	14.8%	27.5%
	Senior high school	33.7%	22.2%	12.7%	31.5%	28.9%
	College degree	16.8%	13.9%	9.1%	22.2%	20.4%
	Graduate school/ advanced degree	1.1%	0.0%	0.0%	0.0%	5.6%

Table6. Segment members' mean facilities factor scores.

facilities factors	S1 (N=95)	S2 (N=36)	S3 (N=55)	S4 (N=54)	S5 (N=84)	F-test
Responsiveness	0.2229	0.2882	0.0859	-0.1270	-0.2072	3.885***
Empathy	0.0034	0.1434	0.1680	-0.5370	0.1005	5.029***
Interior Tangibles	-0.1464	-0.3768	-0.1430	-0.1187	0.2940	5.583***
Outdoor Tangibles	0.0983	-0.2185	0.1186	-0.0835	-0.0246	0.968
Assurance	0.1235	-0.5573	0.0150	-0.1761	0.1198	4.228***

Table7.
Frequencies of reason for under consideration / no willing to move in.

Reason	Under consideration	No willing
Have bad impression on senior housing	2	5
Worry about the unfitted facilities of senior housing	3	3
Worry about the unfamiliar environment	4	3
Worry about their affordability of senior housing	4	3
Have been satisfied with existing place	7	2
Prefer to live with their children	5	4

Table7.
Frequencies of reason for under consideration / no willing to move in.

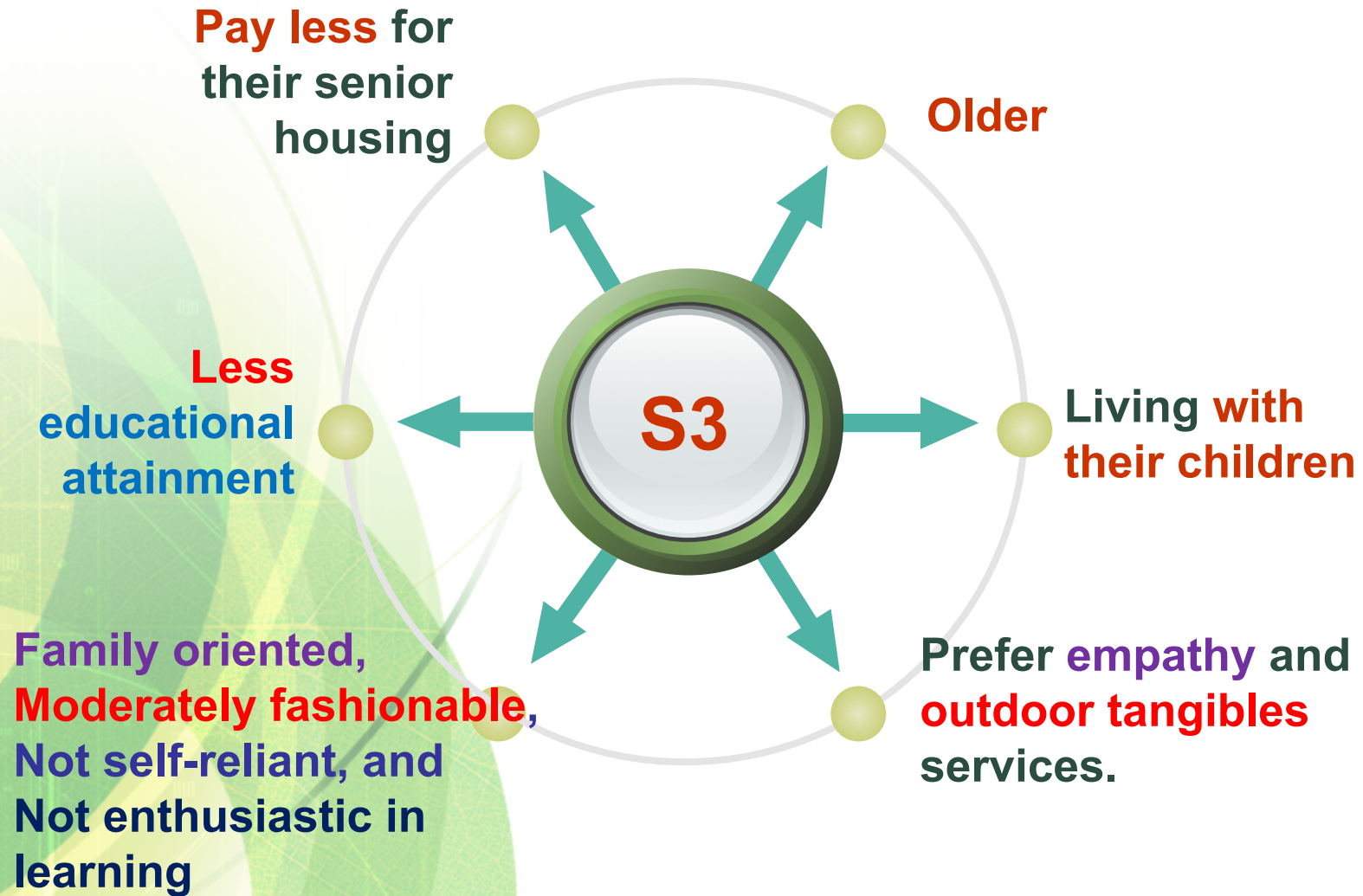| Reason	Under consideration	No willing
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Conclusions and implications

Targeted segment:
Traditional retirees

Pay less for their senior housing

Older

Less educational attainment

S3

Living with their children

Family oriented, Moderately fashionable, Not self-reliant, and Not enthusiastic in learning

Prefer empathy and outdoor tangibles services.

Managerial implications

- ❖ **Senior housing provider should create empathic and low-price product to fulfill targeted elders' need.**
- ❖ **STP should be taken to increase occupancy rate of senior housing..**

Limitation

❖However...

- ▪ Constraints of convenience sampling.

Thank You !