

Preference Structures for Nursing Home Selection in Japan: Insights from Benefit-Based Conjoint Analysis

Makoto Suzuki

Department of Occupational Therapy, Faculty of Health Sciences, Bukkyo University, Kyoto, Japan

Abstract

Background: As Japan faces rapid demographic shifts and an aging population, the demand for nursing homes (NHs) continue to rise. Understanding the preference structures for NH selection is critical for enhancing the quality of life of future residents. This study utilized Benefit-Based Conjoint Analysis (BBCA) to examine NH preferences in Japan, incorporating both monthly residence fees and the distinctive "upfront payment system" to provide a comprehensive analysis of value formation models and individual-level heterogeneity.

Methods: A cross-sectional survey was conducted with 402 respondents aged 40–59 years to capture their families' perspectives on NH selection. Four models (one Multinomial Logit (MNL) and three BBCA) with varying benefits were compared. The MNL model demonstrated a superior fit with the highest log-marginal density and hit ratio.

Results: Key findings revealed that a reduction of ¥10,000 in monthly residence fees led to an increase in utility by 3.37 points (95% CI: -3.82 to -2.96). Lower upfront payments also significantly improved preferences (0.35 points, 95% CI: 0.12 to 0.59). Healthcare management, particularly physician-led services, was identified as a critical factor, positively influencing utility by 0.30 points (95% CI: 0.05 to 0.53), whereas minimal health checks resulted in a decrease in utility by -1.37 points (95% CI: -1.65 to -1.09). Facilities within 30 minutes of home were highly preferred, with a utility score of 0.43 points (95% CI: 0.18 to 0.69).

Conclusions: The results of this study highlight the importance of affordability, service quality, and accessibility in NH selection. Policymakers and NH operators should prioritize flexible pricing strategies and high-quality healthcare services. Future research should explore regional disparities and incorporate the preferences of older adults to provide a more holistic understanding of factors that influence NH selection.

Introduction

As individuals age, their physical and mental functions may decline, thereby increasing their need for external support. Housing is a fundamental aspect of life, and maintaining a home environment may be challenging for older adults. In these cases, transitioning to a nursing home (NH) is viable. Japan, recognized as one of the countries with the highest life expectancies globally, is experiencing rapid demographic changes [1]. Consequently, the demand for NHs is expected to significantly increase in the near future [2].

When selecting an NH, various factors such as proximity to public transportation and room size are considered [3–6]. Similarly, preferences regarding living conditions and service offerings are crucial in NH selection. Understanding the preference structures of NHs is essential for maintaining and enhancing the quality of life of residents. Previous studies have analyzed NH preferences [7,8], focusing on the importance of monthly residence fees in decision-making [9]. However, these studies failed to consider Japan's distinctive "upfront payment system," which involves refundable payments contingent on the duration of residence [10]. To comprehensively understand the NH preference structures, both monthly fees and upfront payments must be included in the analysis.

Conjoint analysis has been used in prior research [6–8] to examine NH preference structures, proving to be effective in identifying tradeoffs between attributes [11]. However, the value of a product or service is not determined solely by its attributes but also by the perceived benefits it offers to consumers [12,13].

Similarly, when analyzing NH preferences, evaluating the attributes and the underlying benefits they provide is crucial.

This study aims to conduct a detailed analysis of NH preference structures, elucidate value formation models, and examine individual-level heterogeneity. Moreover, it provides insights that contribute to improving the quality of life for future NH residents and enhancing their living environments to better address their preferences.

Materials and Methods

Study Design

This study adopted a cross-sectional design to analyze NH preference structures using benefit-based joint analysis (BBCA) [12]. Unlike traditional conjoint analysis, which evaluates utilities among attributes, BBBCA incorporates the concept of "benefits" as higher-order elements, enabling a more detailed value formation model. BBBCA uses Bayesian estimation to capture individual-level

***Corresponding Author:** Dr. Makoto Suzuki, Department of Occupational Therapy, Faculty of Health Sciences, Bukkyo University, Kyoto 604-8418, Japan, Tel: +81-75-491-2141; E-mail: m-suzuki@bukkyo-u.ac.jp

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heterogeneity and is based on the Multinomial Logit (MNL) model [14]. When no benefits are included, BBKA functions as a standard MNL model. In this study, four models were compared; three BBKA models with one to three benefits and one MNL model without any benefits. The optimal model was selected based on the model fit.

Conjoint profiles

The attributes for the conjoint analysis were developed based on existing studies on NH-related services [7–9], as well as reports highlighting the importance of proximity to family members [3,6,7]. Table 1 presents the attributes and their levels of impact on NH selection that form the basis for this survey.

the benefit assignment probabilities (θ) were equally distributed. The sampling results were saved every 10 iterations, yielding 15,000 samples for analysis. Data were collected through an online survey company. Respondents were informed of the study objectives, and only those who provided consent were permitted to participate. Anonymity and privacy were maintained throughout the study.

Participants and eligibility criteria

The survey targeted adults aged 40–59 years who were actively considering or were probable to consider NH options for their parents. This age group was selected because of the influence family members typically have on NH selection [3]. In particular, the role of families

Table 1: Attributes and Levels of impact for Nursing Home Preference Analysis

Item/Level	Low Level	Medium Level	High Level
Staffing (Full-Time Staff)	Caregiver	Caregiver, Nurse	Caregiver, Nurse, Rehabilitation Specialist
Health Management	Health check only	Medical care by nurse	Medical visits by physician
Lifestyle Support Service 1	Standard meals		Organic food meals
Lifestyle Support Service 2	Bathing twice a week		Bathing three times a week
Distance	More than 60 minutes	30-60 minutes	Within 30 minutes
Physical/Social Activities	Weekly exercise (rehabilitation)	"Three exercise sessions per week (rehabilitation)"	Daily exercise (rehabilitation)
Quality of Care	"Staff training once every three months"		Staff training once a month
Upfront Payment	¥100,000	¥200,000	¥300,000
Monthly Residence Fee	¥100,000	¥150,000	¥200,000

Methodology

Choice-based conjoint analysis was used in this study [15]. Although this method effectively identifies preferences, an increased number of attributes and levels can lead to a higher number of choice tasks, potentially increasing the burden on respondents [16]. To address this issue, the "support.Ces" package in R was used to derive the optimal number of choice tasks, which was determined to be 36 [17]. To minimize this issue further, the tasks were split into two blocks of 18 questions each. Each block was assigned to a different respondent, and their answers were aggregated to represent a single respondent's preference. Simulations using artificial data indicated that a sample size of at least 400 respondents was necessary for BBKA.

Bayesian estimation and data collection

Bayesian estimation was used for the BBKA with 150,000 iterations, including a burn-in of 50,000. Markov Chain Monte Carlo (MCMC) methods [18] were applied, setting the initial values for β at 0 and the benefit assignment probabilities (θ) were equally distributed. The sampling results were saved every 10 iterations, yielding 15,000 samples for analysis. Data were collected through an online survey company. Respondents were informed of the study objectives, and only those who provided consent were permitted to participate. Anonymity and privacy were maintained throughout the study.

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in decision-making is critical when choosing NHs for individuals requiring substantial care. The data collection focused on capturing preferences from the family's perspective.

Results

In total, 3,778 individuals were invited to participate in the survey, and 454 responses were collected. After excluding 52 responses owing to uniform answering patterns, 402 valid responses were analyzed. Table 2 presents the demographic characteristics of the participants. The mean age was 52.7 years (SD = 5.08); 54.2% were women and 45.8% were men. Among the participants, 70.9% had at least one living parent, and 48.0% were married.

The analysis used four models; an MNL model without benefits (MNL, $k=0$) and three BBKA models incorporating one to three benefits. As shown in Tables 3 and 4, the posterior means ($\hat{\beta}$) and standard deviations for all models did not reveal substantial differences. However, the BBKA models demonstrate a lower fit than the standard MNL models. Table 5 shows that the MNL model achieved the highest log-marginal density and hit ratio, suggesting a superior model fit.

Further analysis of the attribute utilities revealed several significant findings (Table 6). Lower monthly residence fees were highly preferred. Specifically, a reduction of ¥10,000 resulted in an increase in utility by 3.37 points (95% CI: -3.82 -2.96). Regarding upfront payments, lower upfront costs increased utility by 0.35 points (95% CI: 0.12 to 0.59). Healthcare management emerged as a critical factor, with facilities providing physician-led medical visits achieving a utility increase of

Table 2: Demographic Characteristics of Survey Respondents

Sex	Female, 40-49 years	54	Employment Status	Employed	295
	Female, 50-59 years	159		Unemployed	107
Age	Male, 40-49 years	51	Household Annual Income (Pre-Tax)	1-4 million yen	83
	Male, 50-59 years	138		4-8 million yen	139
	Mean ± Standard Deviation	52.7 ± 5.08		Over 8 million yen	83
Parental Status	Both parents alive	117	Nursing Home Experience	Unknown/Prefer not to answer	97
	One parent alive	285		Yes	55
Caregiving Experience	Yes	55	Financial Support for Costs	No	347
	No	347		Fully covered	101
Marital Status	Married	193	Rent Coverage	Partially covered	261
	Single	209		Not covered	40
Number of Children Living Together	0	285		Fully covered	80
	1	55		Partially covered	301
	2	50		Not covered	21
	3 or more	12			

Table 3: Model Comparison of Posterior Means and Standard Errors.

Variable	MNL (K=0)	BBC (K=1)	BBC (K=2)	BBC (K=3)
Constant Term	6.88	6.88	6.74	6.81
	(0.42)	(0.44)	(0.55)	(0.56)
Upfront Payment (Low)	0.35	0.37	0.36	0.36
	(0.12)	(0.12)	(0.12)	(0.12)
Upfront Payment (High)	0.69	-0.67	-0.64	-0.66
	(0.14)	(0.14)	(0.17)	(0.16)
Staffing Level (Low)	0.61	-0.61	-0.59	-0.62
	(0.14)	(0.13)	(0.13)	(0.13)
Staffing Level (High)	0.47	0.49	0.48	0.47
	(0.13)	(0.13)	(0.14)	(0.12)
Health Management (Low)	1.37	-1.36	-1.33	-1.35
	(0.15)	(0.15)	(0.17)	(0.18)
Health Management (High)	0.3	0.3	0.3	0.3
	(0.12)	(0.12)	(0.14)	(0.14)
Lifestyle Support Service 1	-0.03	-0.02	-0.02	-0.02
	(0.12)	(0.12)	(0.14)	(0.13)
Lifestyle Support Service 2	0.7	0.7	0.7	0.71
	(0.11)	(0.1)	(0.11)	(0.11)
Proximity to Family Members (Low)	0.27	-0.29	-0.27	-0.28
	(0.15)	(0.16)	(0.16)	(0.15)
Proximity to Family Members (High)	0.43	0.41	0.42	0.43
	(0.13)	(0.13)	(0.13)	(0.12)
Physical and Social Activity (Low)	-0.6	-0.61	-0.6	-0.59
	(0.13)	(0.13)	(0.13)	(0.14)
Physical and Social Activity (High)	0.33	0.31	0.32	0.32
	(0.11)	(0.11)	(0.12)	(0.11)
Quality of Care	0.26	0.27	0.28	0.26
	(0.11)	(0.11)	(0.11)	(0.11)
Monthly Residence Fee	-3.37	-3.37	-3.34	-3.35
	(0.22)	(0.22)	(0.25)	(0.27)
MNL: Multinomial Logit Values in parentheses indicate standard errors				

Table 4: Benefit-Based Conjoint Analysis Results Across Models.

Variable	K=1		K=2			K=3			
	Null	Group 1	Null	Group 1	Group 2	Null	Group 1	Group 2	Group 3
Upfront Payment	0.50 (0.19)	0.50 (0.19)	0.33 (0.15)	0.33 (0.14)	0.34 (0.15)	0.24 (0.12)	0.25 (0.12)	0.26 (0.12)	0.25 (0.12)
Staffing Level	0.50 (0.19)	0.50 (0.19)	0.33 (0.15)	0.34 (0.15)	0.34 (0.15)	0.24 (0.12)	0.25 (0.12)	0.25 (0.12)	0.26 (0.12)
Health Management	0.50 (0.19)	0.50 (0.19)	0.34 (0.15)	0.33 (0.146)	0.33 (0.15)	0.25 (0.12)	0.25 (0.12)	0.25 (0.12)	0.25 (0.12)
Lifestyle Support 1	0.50 (0.19)	0.50 (0.19)	0.33 (0.15)	0.33 (0.149)	0.33 (0.15)	0.25 (0.12)	0.25 (0.12)	0.25 (0.12)	0.25 (0.12)
Lifestyle Support 2	0.50 (0.19)	0.50 (0.19)	0.33 (0.15)	0.34 (0.148)	0.33 (0.15)	0.25 (0.12)	0.25 (0.12)	0.25 (0.12)	0.25 (0.12)
Proximity to Family Members	0.50 (0.19)	0.50 (0.19)	0.34 (0.15)	0.33 (0.15)	0.33 (0.15)	0.25 (0.12)	0.26 (0.12)	0.25 (0.12)	0.25 (0.12)
Physical and Social Activity	0.50 (0.19)	0.50 (0.19)	0.34 (0.15)	0.33 (0.15)	0.33 (0.15)	0.25 (0.12)	0.25 (0.12)	0.25 (0.12)	0.25 (0.12)
Quality of Care	0.50 (0.19)	0.50 (0.19)	0.33 (0.15)	0.34 (0.15)	0.33 (0.15)	0.25 (0.12)	0.25 (0.12)	0.25 (0.12)	0.25 (0.12)
Monthly Residence Fee	0.50 (0.19)	0.50 (0.19)	0.33 (0.15)	0.34 (0.15)	0.33 (0.14)	0.25 (0.12)	0.25 (0.12)	0.25 (0.12)	0.25 (0.12)
Values in parentheses indicate standard errors									

Table 5: Log-Marginal Density and Hit Ratios of the Compared Models.

	LMD	HR-in	HR-out
MNL, K=0	-2687.55	0.81	0.66
BBC, K=1	-2684.48	0.52	0.46
BBC, K=2	-2701.13	0.43	0.39
BBC, K=3	-2690.75	0.38	0.36

Table 6: Summary of Utilities for Nursing Home Attributes.

Variable	Mean		Standard Deviation	2.5% Percentile	97.5% Percentile
Constant Term	6.88	*	0.42	6.1	7.74
Upfront Payment (Low)	0.35	*	0.12	0.12	0.59
Upfront Payment (High)	-0.69	*	0.14	-0.97	-0.41
Staffing Level (Low)	-0.61	*	0.14	-0.87	-0.35
Staffing Level (High)	0.47	*	0.13	0.23	0.72
Health Management (Low)	-1.37	*	0.15	-1.65	-1.09
Health Management (High)	0.3	*	0.12	0.05	0.53
Lifestyle Support Service 1	-0.03		0.12	-0.28	0.22
Lifestyle Support Service 2	0.7	*	0.11	0.48	0.9
Proximity to Family Members (Low)	-0.27		0.15	-0.56	0.03
Proximity to Family Members (High)	0.43	*	0.13	0.18	0.69
Physical and Social Activity (Low)	-0.6	*	0.13	-0.84	-0.35
Physical and Social Activity (High)	0.33	*	0.11	0.13	0.55
Quality of Care	0.26	*	0.11	0.05	0.47
Monthly Residence Fee	-3.37	*	0.22	-3.82	-2.96

Note: * indicates significance within the 95% confidence interval.

0.30 points (95% CI: 0.05 to 0.53). Conversely, minimal health checks were associated with a significant decrease in utility by -1.37 points (95% CI: -1.65 to -1.09). In terms of geographical proximity, facilities located within 30 minutes of the respondent's residence were highly preferred, achieving a utility score of 0.43 points (95% CI: 0.18 to 0.69), whereas those over 60 minutes received lower preferences.

A hierarchical Bayesian estimation revealed individual-level heterogeneity in preferences, particularly for monthly residence fees and healthcare management. Table 7 shows that middle-income households prioritized affordability, whereas higher-income households placed a greater emphasis on service quality. Furthermore, the data in Table 8 and 9 exhibits that respondents with prior caregiving experience or familiarity with NHs displayed distinct preferences, prioritizing attributes such as healthcare services and proximity to family members (Table 10).

Discussion

This study used BBCA to analyze the preference structures for NH selection in Japan. The findings revealed that monthly residence fees were the most influential factor, with a reduction of ¥10,000 leading to an increase in utility by 3.37 points (95% CI: -3.82 -2.96). When adjusted to a scale of ¥1,000 units, a reduction of ¥1,000 improved the preferences by 0.337 points. These results quantitatively demonstrate the critical influence of cost in NH selection. Additionally, high-quality healthcare management, such as physician-led medical visits, positively impacted preferences (+0.3, 95% CI: 0.05 to 0.53), whereas minimal health checks were negatively perceived (-1.37, 95% CI: -1.65 to -1.09). Proximity to family members also emerged as a significant factor, with facilities located within 30 minutes achieving the highest utility scores (+0.43, 95% CI: 0.18 0.69). These findings underscore the importance of balancing costs, service quality, and accessibility when selecting an NH.

The importance of affordability in NH selection aligns with previous studies emphasizing cost as a decisive factor [7,8]. Similar to the participants of previous studies, those in this study demonstrated a strong preference for lower monthly residence fees, particularly for NHs with a monthly fee below ¥10,000. However, this study extends prior research by incorporating an upfront payment system, distinctive to Japan, revealing its significant impact on preferences. The results also support previous findings that highlight the

Table 8: Preference Differences Based on Sex and Parental Nursing Home Experience.

	Sex	Experience with Paid Nursing Home		
	Male	Female	Yes	No
Constant Term	130 (68.78)	128 (60.09)	33 (60.00)	225 (64.84)
Upfront Payment (Low)				
Positive	16 (8.47)	13 (6.10)	8 (14.55)	21 (6.05)
Negative	0 (0.00)	2 (0.94)	1 (1.82)	1 (0.29)
Upfront Payment (High)	3 (1.59)	2 (0.94)	1 (1.82)	4 (1.15)
Staffing Level (Low)	6 (3.17)	8 (3.76)	0 (0.00)	14 (4.03)
Staffing Level (High)	0 (0.00)	1 (0.47)	1 (1.82)	0 (0.00)
Health Management (Low)	36 (19.05)	63 (29.58)	11 (20.00)	88 (25.36)
Health Management (High)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Lifestyle Support Service 1	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Lifestyle Support Service 2	6 (3.17)	11 (5.16)	2 (3.64)	15 (4.32)
Proximity to Family Members (Low)	1 (0.53)	9 (4.23)	1 (1.82)	9 (2.59)
Proximity to Family Members (High)	1 (0.53)	4 (1.88)	0 (0.00)	5 (1.44)
Physical/Social Activity (Low)	2 (1.06)	9 (4.23)	2 (3.64)	9 (2.59)
Physical/Social Activity (High)	1 (0.53)	1 (0.47)	1 (1.82)	1 (0.29)
Quality of Care	1 (0.53)	2 (0.94)	0 (0.00)	3 (0.86)
Monthly Residence Fee	103 (54.50)	102 (47.89)	30 (54.55)	175 (50.43)
Note: The values in parentheses represent the percentage of significant cases relative to the total number in each category				

Table 9: Preference Variations by Financial Capability for Upfront Payments and Monthly Fees.

	Upfront Payment Capability			Monthly Residence Fee Capability		
	¥200,000 or more	¥100,000 or more but less than ¥200,000	Less than ¥100,000	¥150,000 or more per month	¥100,000 or more but less than ¥150,000 per month	Less than ¥100,000 per month
Constant Term	106 (61.27)	66 (66.67)	60 (66.67)	10 (31.25)	53 (58.89)	181 (69.88)
Upfront Payment (Low)						
Positive	8 (4.62)	6 (6.06)	10 (11.11)	2 (6.25)	10 (11.11)	16 (6.18)
Negative	2 (1.16)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	2 (0.77)
Upfront Payment (High)	1 (0.58)	2 (2.02)	1 (1.11)	0 (0.00)	2 (2.22)	3 (1.16)
Staffing Level (Low)	7 (4.05)	2 (2.02)	4 (4.44)	1 (3.13)	3 (3.33)	9 (3.47)
Staffing Level (High)	0 (0.00)	1 (1.01)	0 (0.00)	0 (0.00)	1 (1.11)	0 (0.00)
Health Management (Low)	51 (29.48)	20 (20.20)	20 (22.22)	8 (25.00)	17 (18.89)	64 (24.71)
Health Management (High)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Lifestyle Support Service 1	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Lifestyle Support Service 2	9 (5.20)	5 (5.05)	2 (2.22)	1 (3.13)	5 (5.56)	11 (4.25)
Proximity to Family Members (Low)	5 (2.89)	3 (3.03)	1 (1.11)	3 (9.38)	2 (2.22)	4 (1.54)
Proximity to Family Members (High)	2 (1.16)	1 (1.01)	2 (2.22)	0 (0.00)	1 (1.11)	4 (1.54)
Physical/Social Activity (Low)	9 (5.20)	1 (1.01)	1 (1.11)	2 (6.25)	2 (2.22)	5 (1.93)
Physical/Social Activity (High)	1 (0.58)	1 (1.01)	0 (0.00)	0 (0.00)	2 (2.22)	0 (0.00)
Quality of Care	2 (1.16)	0 (0.00)	1 (1.11)	1 (3.13)	0 (0.00)	3 (1.16)
Monthly Residence Fee	80 (46.24)	49 (49.49)	50 (55.56)	6 (18.75)	35 (38.89)	154 (59)
Note: The values in parentheses represent the percentage of significant cases relative to the total number in each category						

Table 10: Preference Patterns by Annual Household Income.

	Annual Income: Less than ¥4 million	¥4 million to less than ¥8 million	¥9 million to less than ¥20 million	¥20 million or more	Don't know/ Prefer not to answer
Constant Term	56 (67.47)	98 (70.50)	49 (59.76)	1 (100.00)	54 (55.67)
Upfront Payment (Low)					
Positive	7 (8.43)	10 (7.19)	5 (6.10)	0 (0.00)	7 (7.22)
Negative	0 (0.00)	0 (0.00)	2 (2.44)	0 (0.00)	0 (0.00)
Upfront Payment (High)	0 (0.00)	1 (0.72)	2 (2.44)	0 (0.00)	2 (2.06)
Staffing Level (Low)	7 (8.43)	2 (1.44)	3 (3.66)	1 (100.00)	0 (0.00)
Staffing Level (High)	0 (0.00)	0 (0.00)	1 (1.22)	0 (0.00)	0 (0.00)
Health Management (Low)	15 (18.07)	42 (30.22)	20 (24.39)	0 (0.00)	22 (22.68)
Health Management (High)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Lifestyle Support Service 1	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Lifestyle Support Service 2	2 (2.41)	7 (5.04)	3 (3.66)	0 (0.00)	5 (5.15)
Distance (Low)	3 (3.61)	1 (0.72)	2 (2.44)	0 (0.00)	4 (4.12)
Distance (High)	1 (1.20)	1 (0.72)	1 (1.22)	0 (0.00)	2 (2.06)
Physical/Social Activity (Low)	5 (6.02)	2 (1.44)	3 (3.66)	0 (0.00)	1 (1.03)
Physical/Social Activity (High)	1 (1.20)	1 (0.72)	0 (0.00)	0 (0.00)	0 (0.00)
Quality of Care	0 (0.00)	1 (0.72)	0 (0.00)	0 (0.00)	2 (2.06)
Monthly Residence Fee	48 (57.83)	71 (51.08)	40 (48.78)	0 (0.00)	46 (47.42)
Note: The values in parentheses represent the percentage of significant cases relative to the total number in each category.					

importance of healthcare quality [19,20], particularly in facilities offering frequent medical services. The impact of proximity to family members, identified as a key determinant in previous studies [5,6], was further corroborated, with shorter distances to NHs leading to higher preference scores.

Although the BBKA models provide additional flexibility, the simpler MNL model outperforms them in terms of fit indices. This observation suggests that NH preference structures in Japan may be relatively straightforward and strongly influenced by costs and fundamental service attributes rather than complex trade-offs among higher-order benefits[21].

The strong emphasis on affordability, particularly among middle-income households, suggests that NH pricing strategies should prioritize cost effectiveness. This finding highlights the need for NH operators to offer flexible pricing models that accommodate diverse economic scenarios. Moreover, the positive influence of physician-led healthcare underscores the growing demand for high-quality medical services in NHs. Policymakers should consider these preferences when formulating guidelines for NH services to ensure accessibility and affordability. The results also suggest that regional disparities in NH preferences warrant further exploration, as rural and urban participants may have differing priorities.

Study Limitations

This study had several limitations. First, the focus on adults aged 40–59 years may not fully capture the preferences of older adults, who are the primary users of NH services. Second, the sample was drawn primarily from urban areas, which potentially limits the generalizability of the findings to rural populations. Third, although the MNL model achieved the highest fit, it may not fully capture complex decision-making processes involving emotional or cultural factors.

Conclusions

This study identified the key determinants of NH preferences in Japan, including affordability, healthcare management, and accessibility. The findings emphasize the need for NH operators and policymakers to balance costs with service quality and ensure proximity to families and communities. By aligning NH offerings with user preferences, these insights can enhance older adults’ quality of life. Future research should explore regional differences and include a broader demographic group to provide a more comprehensive understanding of NH preferences.

Conflict of Interest

The author declares no conflict of interest.

Authors Contributions

The author was solely responsible for the conception and design of the study, data acquisition, analysis and interpretation, drafting the manuscript, and approving the final version for publication.

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